National Aeronautics and
Space Administration

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October 3, 2024

Reply to Attn of: RE-24-140

Mr. JohnDavid Nance, Bureau Chief
New Mexico Environment Department
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Santa Fe, NM 87505

Subject: Well Completion Report (WCR) for NASA White Sands Test Facility (WSTF) 300-002-GSV

NASA submitted the *Response to Disapproval of the 300 Area Abbreviated Drilling Work Plan* on July 14, 2021, which was approved by NMED on May 2, 2023. Field activities to install the first of two multiport soil vapor and groundwater monitoring (MSVGM) wells (300-002-GSV) commenced on April 9, 2024. NASA subsequently submitted a *Request for Extension of Time for Submittal of Three Well Completion Reports (WCRs) for NASA WSTF Wells 300-001-GSV, 300-002-GSV, and 400-001-GW* on April 18, 2024. In accordance with the NMED-approved Work Plan, NASA requested the WCR for well 300-002-GW be provided to NMED 180 days following equipment mobilization to the 300 Area and no later than October 4, 2024. NMED approved the request on May 6, 2024.

The 300-002-GSV borehole was completed to a total depth of 250 feet (ft) below ground surface (bgs) on April 22, 2024. This depth is greater than the depth anticipated in the drilling work plan, and incorporated a supplemental bedrock matrix diffusion investigation that was described in the Expanded Scope Proposed for the 300 Area Supplemental Abbreviated Drilling Work Plan submitted to NMED on September 13, 2023. The expanded scope was approved by NMED on November 1, 2023. The matrix diffusion study is described, and the results presented in Appendix E of the WCR.

The initial set of soil vapor samples from well 300-002-GSV was shipped on September 9, 2024. However, the analytical laboratory determined that the soil vapor samples did not meet final canister pressure requirements. Replacement soil vapor samples must be collected following reconfiguration of the soil vapor connectors in the wellhead by the drilling subcontractor. The soil vapor results required to complete Appendix G will be provided immediately following connector replacement, soil vapor re-sampling, and the receipt and processing of laboratory analytical data.

This submittal includes a printed WCR for 300-002-GSV up to Appendix C as Enclosure 1, and a CD-ROM with an electronic copy of the entire WCR as Enclosure 2.

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

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

Timothy Davis

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Timothy J. Davis
Chief, Environmental Office

2 Enclosures

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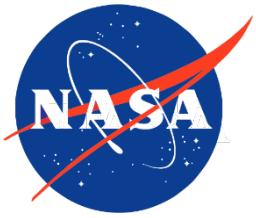
National Aeronautics and Space Administration



300-002-GSV Well Completion Report

October 2024

NM8800019434

NASA Johnson Space Center White Sands Test Facility

300-002-GSV Well Completion Report

October 2024

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

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List of Acronyms

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

WCR	Well Completion Report
WSTF	Johnson Space Center White Sands Test Facility
YJD	Yellow Jacket Drilling Services

1.0 Introduction and Purpose

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

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

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

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

This Well Completion Report (WCR; report) provides a summary of field activities associated with the drilling and installation of WSTF groundwater and soil vapor monitoring well 300-002-GSV, located within the southwestern closure pond. Under the supervision of the WSTF Environmental Contactor, Navarro Research and Engineering Inc. (Navarro), multiple subcontractors performed activities in relation to this project: drilling activities were performed by Yellow Jacket Drilling Services (YJD), matrix diffusion sample collections and preparation by Sanborn Head and Associates (Sanborn Head), and matrix diffusion laboratory services by Pace Environmental (Pace). Initial drilling activities were conducted between April 9, 2024 and April 22, 2024. Geophysical logging was completed on April 24, 2024. Additional reaming of the borehole was performed in accordance with the well completion protocol presented in the NMED-approved 300 Area Supplemental Abbreviated Drilling Work Plan (ADWP;

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

NASA, 2021b, p 3; NMED, 2023b) between April 24 and May 3, 2024. Well construction began on May 4, 2024 and was completed on May 7, 2024. Final well development was performed on June 26 and June 27, 2024.

2.0 Location and Description

2.1 Facility

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

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

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

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

2.2 300-002-GSV Well Location

The location of the 300 Area relative to other WSTF areas is shown in Figure 2.2 and the location of well 300-002-GSV relative to other infrastructure in the 300 Area is shown in Figure 2.3. MSVGM well 300-002-GSV was installed within the southwestern closure pond located southwest of the main 300 Area testing facility and immediately adjacent to the primary ephemeral drainage in the area referred to as the 300/400 Area Arroyo.

3.0 Regulatory Timeline

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

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

4.0 Drilling of Well 300-002-GSV

The approved New Mexico Office of the State Engineer (NMOSE) Permit for drilling well 300-002-GSV is provided in Appendix A. Drilling at the well 300-002-GSV location (Figure 2.3) began on April 9, 2024, and the borehole was completed to a total depth of 250 feet (ft) below ground surface (bgs) on April 22, 2024. This total depth incorporated additional matrix diffusion work performed at this location that was described in the *Expanded Scope Proposed for the 300 Area Supplemental Abbreviated Drilling Work Plan* submitted to NMED on September 13, 2023 (NASA, 2023a). The expanded scope, approved by NMED on November 1, 2023 (NMED, 2023d), consisted of a bedrock matrix diffusion study. The matrix diffusion study is described, and the results presented within this WCR. There were no issues or problems encountered during drilling activities.

4.1 Drilling Methods Utilized

YJD of Rancho Cucamonga, California was subcontracted to perform drilling services at WSTF for the 300-002-GSV location. The borehole was drilled in accordance with the NMED-approved ADWP using the rotary sonic method of drilling through the alluvium section and air rotary with coring after contacting bedrock. These drilling methods have been used successfully to install many source area monitoring wells at WSTF. The diameter of the cased sonic borehole in the upper alluvial section was 6 in. to a depth of approximately 80 ft bgs. A cemented conglomerate unit was observed at approximately 67 ft bgs. Coring in the borehole commenced at 80 ft bgs within the cemented conglomerate and then continued to the total depth of the borehole at 250 ft bgs. The cored borehole was installed using HQ-sized tooling, which resulted in a 3 3/4-in. diameter borehole, with 2.5-in. diameter cores collected in 5-ft length core barrels. Following geophysical logging and the selection of the groundwater screened zone, the upper borehole was reamed to a diameter of 9-in. and depth of 165 ft bgs to accommodate emplacement of MSVGM well 300-002-GSV and annular materials. The total amount of water used during drilling at the 300-002-GSV location was approximately 14,000 gallons (Table 4.1).

4.2 Sampling During Drilling

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

4.3 Lithology Description

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

Drilling operations at 300-002-GSV encountered alluvium for the first 67 ft. The alluvium primarily consisted of a sequence of silty to sandy gravels deposited in a sequence of stacked alluvial fans. Gravel

clasts ranged from 2 mm to greater than 4-in. diameter. Beneath the unconsolidated alluvium, a layer of cemented conglomerate composed of strongly indurated alluvium (lithified primarily with calcite cement) was present. Andesite bedrock was encountered at 82 ft (Appendix B).

The underlying andesitic bedrock consisted of greenish black aphanitic andesite with irregular dispersed calcite veinlets. Veinlets ranged from reddish brown to bluish grey in color and were generally less than 1 mm in thickness. At 215 ft, Limestone was encountered. The limestone unit is micritic with a deep purple to black color. A shale horizon was encountered within the limestone between 213 and 215 ft bgs. Rhyolite was intercepted at approximately 234 ft. The rhyolitic lithology is younger in age than the andesite and limestone units and may represent a sill.

4.4 Matrix Diffusion Evaluation

Sanborn Head and Pace performed the matrix diffusion evaluation under the supervision of the WSTF Environmental Contractor (Navarro) to support a program of rock core sampling within the 300-002-GSV borehole. The work was performed between April 17 and April 22, 2024 to assess potential distribution of chlorinated volatile organic compounds (VOCs) and semi volatile organic compounds (SVOCs) within the bedrock matrix below the 300 Area closures.

The CORE Discrete Fracture Network Approach ($CORE^{DFN}$) bedrock VOC sampling approach is a comprehensive fractured rock sampling method developed by Dr. Beth Parker and Dr. Gorecki at the University of Guelph and University of Waterloo, respectively. This method has been previously applied to bedrock within the WSTF 200 Area (NASA, 2015, pp 22-28). The $CORE^{DFN}$ method includes detailed logging of bedrock core including fractures, field preparation and crushing of bedrock samples to increase the surface area of the sample, field preservation of crushed samples in methanol, and laboratory extraction and analysis of the samples. The unconsolidated portion of the 300-002-GSV borehole was cased to 86 ft bgs to stabilize the borehole for coring operations. Rock was cored over the interval between 86 to 250 ft bgs.

4.5 Geophysical Logging

Geophysical logging was conducted at 300-002-GSV by Jet West Geophysical Services, LLC on April 23 and 24, 2024. Downhole geophysical logs included 16-in. resistivity, 64-in. resistivity, single point resistance, gamma, temperature, heat pulse flowmeter, and 3-arm caliper. The logger's total depth recorded was 252 ft bgs. The geophysical logs (Appendix C) were used in conjunction with the lithologic log (Appendix B) to confirm changes in lithology, identify the bedrock contact, and to evaluate borehole integrity depths favorable for the placement of the well screen. Final placement of the well screen also required evaluation of the location of the potentiometric surface, hydraulic conditions within the aquifer, and a review of adjacent monitoring wells in the vicinity of the 300 Area closure (Figure 2.3).

5.0 Well Construction

5.1 Planned Well Design

In the NMED-approved ADWP (NASA, 2021, pp 5-6), MSVGM well 300-002-GSV was proposed as a single groundwater monitoring zone in conjunction with four soil vapor ports to monitor vapor in the alluvial and bedrock portion of the vadose zone. The 300-002-GSV Well Completion Diagram (WCD; Figure 5.1) was designed accordingly, considering information acquired from lithological logs, geophysical logs (most significantly caliper, heat pulse flow, gamma, neutron, and resistivity), aquifer conditions (unconfined), and adjacent monitoring wells in the area.

The screened interval was placed from 140 to 155 ft bgs below the current static water level at approximately 117 ft bgs. The screen extended over 15-ft in order to account for the limited number of producing fractures identified within the lithologic and geophysical logs. Four soil vapor ports to monitor the vertical delineation of soil vapor in the vadose zone were placed at 10, 40, 80, and 100 ft bgs. Casing was cut to 2.45 ft above ground surface. Specific details of the well's construction are illustrated in the WCD (Figure 5.1).

5.2 Well Completion Casing

MSVGM well 300-002-GSV well casing installation was performed on May 4, 2024. Casing materials comprised conventional 4-in. nominal Schedule 80 polyvinyl chloride (PVC) flush joint casing with one 15 ft x 0.020-in. slotted screen with a 5-ft sump and a PVC end cap installed to a total well depth of 160 ft. The screen was set from 140 to 155 ft bgs (Figure 5.1). Steel centralizers were installed on the casing above and below the screened interval, and at 50 ft intervals along the length of the casing to prevent the casing and screen from contacting the borehole walls and ensure a uniform thickness of the annular materials.

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

5.3 Annular Materials Installation

Annular materials installation for 300-002-GSV began May 5, 2024 and was completed May 7, 2024 (Figure 5.1). Annular completion materials were installed as follows:

- 2 x 50 lbs bags of bentonite pellets to backfill the borehole from 160-165 ft bgs and to provide a lower seal
- 1 x 50 lbs bag of 20/40 sand from 158-160 ft bgs
- 14 x 50 lbs bags of 10/20 sand from 137-158 ft bgs
- 1 x 50 lbs bag of 20/40 sand from 135-137 ft bgs
- 4.5 x 50 lbs bags of bentonite chips (3/8") from 103-135 ft bgs
- 2 x 50 lbs bags of 20/40 sand from 97.5-103 ft bgs
- 4.5 x 50 lbs buckets of bentonite pellets from 82.5-97.5 ft bgs
- 3 x 50 lbs bags 20/40 sand from 77.5-82.5 ft bgs
- 3.5 x 50 lbs buckets of bentonite pellets from 67.5-77.5 ft bgs
- 6 x 50 lbs bags of cement from 55-67.5 ft bgs
- 8 x 50 lbs bags of bentonite pellets from 42.5-55 ft bgs
- 6 x 50 lbs bags of 20/40 sand from 37.5-42.5 ft bgs
- 9 x 50 lbs bags of bentonite chips (3/8") 27.5-37.5 ft bgs
- 3 x 50 lbs bags of cement from 22.5-27.5 ft bgs
- 8 x 50 lbs bags of bentonite chips (3/8") from 12.5-22.5 ft bgs
- 6 x 50 lbs bags of 20/40 sand from 7.5-12.5 ft bgs
- 8 x 50 lbs bags of bentonite pellets from 1-7.5 ft bgs
- 3 x 50 lbs bags Portland neat cement for top surface seal at 0-1 ft bgs

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

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

6.0 Hydraulic Conditions

The initial groundwater level was identified within the 300-002-GSV borehole during drilling at approximately 83 ft bgs on April 18, 2024. The groundwater level was subsequently measured in the borehole at 103 ft bgs after the borehole stabilized overnight on April 19, 2024. During geophysical logging performed on April 23, 2024, groundwater was reported at a depth of 114 ft bgs. Prior to development activities on June 25, 2024, the static water level and total depth of well 300-002-GSV were measured at 114.2 and 160.0 ft below the top of casing, respectively. Following development and prior to the initial groundwater sampling event on August 15, 2024, the static water level was measured at 116.74 ft below top of casing (113.74 ft bgs). Based on the overall decline in water level over the period of borehole and well installation, coupled with information from the lithologic log, geophysical logs, and adjacent wells, the aquifer is defined as unconfined.

7.0 Well Development

YJD performed the development of well 300-002-GSV on June 25, 2024 (Table 7.1). The well casing was bailed and swabbed to remove mud from the well casing and develop the well in preparation for sampling. During development activities, WSTF Environmental Contractor personnel monitored discharged development water for parameters including pH, specific conductivity, temperature, and turbidity. Well development is considered complete when measured water quality parameters are relatively stable (vary less than 10%) and turbidity is below 5 nephelometric turbidity units (NTUs).

The well was bailed with a decontaminated 2-in. steel bailer initially, then switched to a decontaminated low-flow submersible pump for efficiency as the well was recharging relatively quickly compared to other wells screened in fractured bedrock within this area. The sustainable pumping rate during development activities was approximately 2.5 gallons per minute (gpm). During development, levels of pH varied from 7.20 to 7.47, temperature varied from 24.2 to 25.8 degrees Celsius (°C), and specific conductivity varied from 1,159 to 1,185 microsiemens per centimeter (µS/cm).

A total of 500 gallons were removed during well development. Groundwater quality parameters stabilized with the final results: pH = 7.3; temperature = 25.1 °C; and specific conductivity = 1,184 µS/cm. The final turbidity was reported at 2.96 NTU.

8.0 Sampling

8.1 Soil Sampling

Soil samples were collected from the 300-002-GSV borehole from three locations in the alluvial vadose zone at 10, 40, 80 ft bgs as specified in the 300 Area ADWP (NASA, 2021, pp 5-6) between April 8 and April 9, 2024. The subsurface soil borings were drilled and sampled by YJD under WSTF Environmental Department supervision. Soil sampling locations were selected to provide soil analytical data to determine whether there are VOCs or SVOCs present in the vadose zone below the southwest cell of the 300 Area closure. The soil sample locations were selected to provide vertical delineation of the vadose zone and

approximate the location of soil vapor sample ports subsequently installed in MSVGM well 300-002-GSV. Sufficient soil sample recovery volume was reported from the 5-ft core barrels used to collect the samples at all three locations.

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

Soil chemical samples from the 300-002-GSV borehole were analyzed for the list of COPC and their analytical methods provided in the NMED-approved 300 Area ADWP (NASA, 2021, pp 18-21). Standardized analytical methods were used to analyze for the COPC that were determined based on the historic site activities and known results from previous soil borings installed in the 300 Area. Chemical analytical results for soil samples included VOC (SW-846 8260B), SVOC (SW-846-8270D), Total metals (SW-846-6010C), cyanide (SW-846 Method 9012), perchlorate (Environmental Protection Agency [EPA] Method 6850), polychlorinated biphenyls (SW-846 8082), NDMA (EPA Method 607), hydrazines (SW-846 Method 8315), dioxins/furans (SW-846 Method 8290A), hexavalent chromium (SW-846 Method 7196A), Nitrate/Nitrite (SW-846 9056A), and per- and polyfluoroalkyl substances (PFAS; EPA Method 1633). There were no data quality exceptions that negatively impacted analytical data quality or project objectives. The soil analytical results and chain of custody (CoC) forms are provided in Appendix D.

8.2 Matrix Diffusion Sampling

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

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

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

description of method below). Samples were kept on ice in coolers on-site by Sanborn Head until being shipped to the Green Bay Pace laboratory on ice by Sanborn Head and analyzed for VOCs and SVOCs.

Specific to the 300-002-GSV borehole, CORE^{DFN} sampling activities were performed between April 17 and April 22, 2024. A total of 72 VOC/SVOC samples, 4 VOC/SVOC duplicates, 4 MS/MSD samples, and 8 physical property samples were collected and processed from the interval between 86 ft bgs and 247.5 ft bgs. The analytical laboratory (Pace) noted that small detections of methylene chloride were reported in a sequence of samples between 165 and 242 ft bgs. These detections are flagged to indicate that the results are lower than the reporting limit but above the detection limit and questionable. Methylene chloride can be a laboratory contaminant. A description of the CORE^{DFN} drilling and core collection, VOC and SVOC sample collection and processing, physical property sample collection, laboratory analysis and VOC extraction, and analytical results is provided within the Data Report for Rock Core Sampling and Analysis (Appendix E).

8.3 Groundwater Sampling

An initial set of groundwater samples for laboratory chemical analysis was collected and managed in accordance with the NMED-approved WSTF Groundwater Monitoring Plan (NASA, 2023b; NMED, 2023e) on August 15, 2024 from MSVGM well 300-002-GSV. Water quality field parameters (temperature; specific conductivity; pH; and turbidity) were monitored during the purging process prior to sampling to ensure sufficient purging had been performed and demonstrate that all groundwater within the well and gravel pack surrounding the screened zone had been removed. Groundwater characterization samples were collected for the analysis of VOCs by the current revision of SW-846 Method 8260D, SVOCs by the current revision of SW-846 Method 8270C, NDMA by Modified EPA Method 607M, and a variety of metals by the most effective laboratory-selected analytical method. The groundwater analytical results and CoC forms are provided in Appendix F.

8.4 Soil Vapor Sampling

Following well development and sampling system installation, an initial set of soil vapor samples was collected on September 9, 2024 from each of the four soil vapor sampling ports in MSVGM well 300-002-GSV located at 10, 40, 80, and 100 ft bgs (Figure 5.1). All four soil vapor ports (300-002-GSV-10, 300-002-GSV-40, 300-002-GSV-80, and 300-002-GSV-100) were located above the potentiometric surface in the well located at depth of approximately 117 ft bgs and were not blocked.

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

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

8.5 Survey

During surface completion of the wells, a brass cap was permanently installed in the northwest corner of the cement well pad. The cap was installed to serve as a survey point to represent the location of the well. The location and elevation of well 300-002-GSV was surveyed by experienced NASA WSTF GPS personnel. The New Mexico State Plane Central Zone North American Datum 83 coordinate system in U.S. survey feet above mean sea level (amsl) were utilized for the field survey and input into project documentation. The lithologic log and well completion diagram contained in Appendix B and Figure 5.1, respectively, include the survey data.

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

9.0 Investigation Work Plan Deviations – Well Construction

The following are deviations from the NMED-approved 300 Area ADWP (NASA, 2021) for the installation of well 300-002-GSV dated July 14, 2021.

- In the **Well Completion** section, it was stated that Colorado Silica sand (10/20 mesh) will be emplaced in the bottom of the boring using a tremie pipe to approximately 2 1/2 ft above the deepest soil vapor monitoring zone, covering the screen emplacement of the groundwater monitoring well and lowermost soil vapor sampling port. The soil vapor port was placed at 100 ft rather than 120 ft, to obtain representative samples and limit the sampling zone, a bentonite seal was placed between the groundwater screen and lower soil vapor port.

- In the **Well Completion** section, it was stated that Colorado Silica sand (10/20 mesh) will be emplaced in the bottom of the boring using a tremie pipe to approximately 2 1/2 ft above the deepest soil vapor monitoring zone, covering the screen emplacement of the groundwater monitoring well and lowermost soil vapor sampling port. A 2-ft zone of Colorado Silica sand (20/40 mesh) was emplaced above and below the 10/20 mesh Colorado Silica sand covering the screened zone.

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

10.0 Investigation-Derived Waste Management, Characterization, and Disposal

Waste characterization as indicated in the 300 Area ADWP was conducted in accordance with Section 4.3.10 (Collection and Management of Investigation-Derived Waste) of the RCRA Permit (NMED, 2023a, pp 59). All waste was properly managed and disposed of in accordance with NASA procedures and state and federal regulations. The waste streams that were generated during drilling and installation of MSVGM well 300-002-GSV included:

- **Drill cuttings.** Unsaturated drill cuttings are defined as soil cuttings or rock fragments generated from the vadose zone that have not come into contact with groundwater. Unsaturated cuttings are characterized as non-hazardous solid waste. Saturated drill cuttings are defined as soil cuttings or rock fragments generated from below the water table that may have come into contact with potentially contaminated groundwater. This environmental media potentially contains listed hazardous waste constituents from the WSTF groundwater plume and was initially characterized as hazardous waste.

- **Drilling fluids.** Non-chlorinated water was introduced into the circulated material during rotary sonic drilling, as necessary. Drilling fluid generated above the water table was characterized as non-hazardous solid waste. Drilling fluid generated below the water table potentially contain listed hazardous waste constituents that are present in the WSTF groundwater plume and was characterized initially as hazardous waste.

- **Groundwater.** Groundwater produced from within the WSTF groundwater plume during well drilling and development was characterized as environmental media containing listed hazardous waste with the F001 and F002 hazardous waste codes.

- **Decontamination fluids.** Decontamination fluids such as water and soap solutions used to wash and decontaminate equipment generated during drilling above the water table were characterized as non-hazardous solid waste. Decontamination fluids generated by cleaning equipment that has contacted potentially contaminated soil, cuttings, or fluids generated when drilling below the water table were characterized as hazardous waste.

- **Contact waste.** Contact waste, or debris, such as used disposable sampling equipment, personal protective equipment, plastic sheeting, and other debris generated during drilling above the water table was non-hazardous solid waste. Contact debris contaminated with soil, cuttings, or fluids that were generated when drilling below the water table were characterized as hazardous waste.

- **Petroleum Contaminated Debris.** Debris such as rags and plastic sheeting contaminated with petroleum products during routine drilling equipment maintenance and operation. The petroleum contaminated debris and environmental media was be characterized as hazardous waste with the D018 hazardous waste code.

Historical data from groundwater monitoring at the proposed location of well 300-002-GSV indicate that environmental media unearthed from zones containing regional groundwater during drilling operations may contain hazardous constituents at concentrations exceeding regulatory limits. The contaminants of concern include VOCs such as trichloroethene, tetrachloroethene, trichlorofluoromethane, dichlorofluoromethane, 1,1,2-trichloro- l,2,2-trifluoroethane, and semi-volatile VOCs such as NDMA. For this reason, generated waste that encountered groundwater during drilling operations were initially labeled as hazardous waste with EPA waste codes F001 and F002 following the application of the EPA's "contained-in" policy (EPA, 1998). This waste stream was then managed in a central accumulation area in accordance with state (20.4.1.300 NMAC) and federal (40 CFR 262.17) regulations. Any free-standing water was decanted from this waste stream and transferred to the Mid-plume Interception and Treatment System for treatment and discharge in accordance with Discharge Permit (DP)-1255 (NMED, 2023c).

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

11.0 References

Adoption of 40 CFR Part 262, Environmental Improvement Board, 20.4.1.300 NMAC (12-1-18).

ASTM International. ASTM Standard D2488, (2017). *Standard Practice for Description and Identification of Soils*. West Conshohocken, PA. DOI: 10.1520/D2488-00. Retrieved from astm.org.

Department of Defense. (1982, February 24*). Agreement Between the Department of Defense and the National Aeronautics and Space Administration Operation of the NASA White Sands Test Facility White Sands Missile Range, New Mexico*, Las Cruces, NM.

Environmental Protection Agency. (1998, November 30). *Contained-In Policy for Soil and Debris Contaminated with Hazardous Waste.* Washington, DC.

NASA Johnson Space Center White Sands Test Facility. (1989, August). *300 Area Closure Report and Certification of Closure, 300 Area*. Las Cruces, NM.

NASA Johnson Space Center White Sands Test Facility. (2015, June 29). *NASA WSTF 200 Area Phase II Investigation Report*. Las Cruces, NM.

NASA Johnson Space Center White Sands Test Facility. (2019, May 30). *300 Area Supplemental Abbreviated Drilling Work Plan*. Las Cruces, NM.

NASA Johnson Space Center White Sands Test Facility. (2021, July 14). *Response to Disapproval of 300 Area Supplemental Abbreviated Drilling Work Plan*. Las Cruces, NM.

NASA Johnson Space Center White Sands Test Facility. (2023a, September 13). *Expanded Scope Proposed for the 300 Area Supplemental Abbreviated Drilling Work Plan (ADWP)*. Las Cruces, NM.

NASA Johnson Space Center White Sands Test Facility. (2023b, December 8). *Response to Approval with Modifications of NASA WSTF Groundwater Monitoring Plan Update for 2023*. Las Cruces, NM.

NASA Johnson Space Center White Sands Test Facility. (2024a, April 18). *Request for Extension of Time for Submittal of Three Well Completion Reports (WCRs) for NASA White Sands Test Facility (WSTF) Wells 300-001-SVG, 300-002-SVG, and 400-001-GW*. Las Cruces, NM.

NASA Johnson Space Center White Sands Test Facility. (2024b, July 11). *Request for a "No Longer Contained-in" Determination for Drilling Mud and Cuttings Associated with the Expanded Scope Proposed for the 300 Area Supplemental Abbreviated Drilling Work Plan.* Las Cruces, NM.

NMED. Hazardous Waste Bureau Correspondence. (1989, November 1). *200, 300, 400, 600 Area Closure*. Santa Fe, NM 8800019434.

NMED Hazardous Waste Bureau. (2021a, March 19). *Disapproval 300 Area Supplemental Abbreviated Drilling Work Plan*. Santa Fe, NM.

NMED Hazardous Waste Bureau. (2021b, November 15). *Approval with Modifications White Sands Test Facility Groundwater Monitoring Plan.* Santa Fe, NM.

NMED Hazardous Waste Bureau. (2023a, March 28). *RCRA Permit EPA ID # NM8800019434*. Santa Fe, NM.

NMED Hazardous Waste Bureau. (2023b, May 2). *Approval 300 Area Supplemental Abbreviated Drilling Work Plan*. Santa Fe, NM.

NMED Ground Water Quality Bureau. (2023c, May 17). *Discharge Permit Renewal and Invoice, DP-1255, NASA White Sands Test Facility, Plume Front Treatment System (PFTS) and Mid-plume Interception and Treatment System (MPITS)*. Santa Fe, NM.

NMED Hazardous Waste Bureau. (2023d, November 1). *Approval of the Expanded Scope Proposed for the 300 Area Supplemental Abbreviated Drilling Work Plan*. Santa Fe, NM.

NMED Hazardous Waste Bureau. (2023e, November 1). *Approval with Modifications White Sands Test Facility Groundwater Monitoring Plan*. Santa Fe, NM.

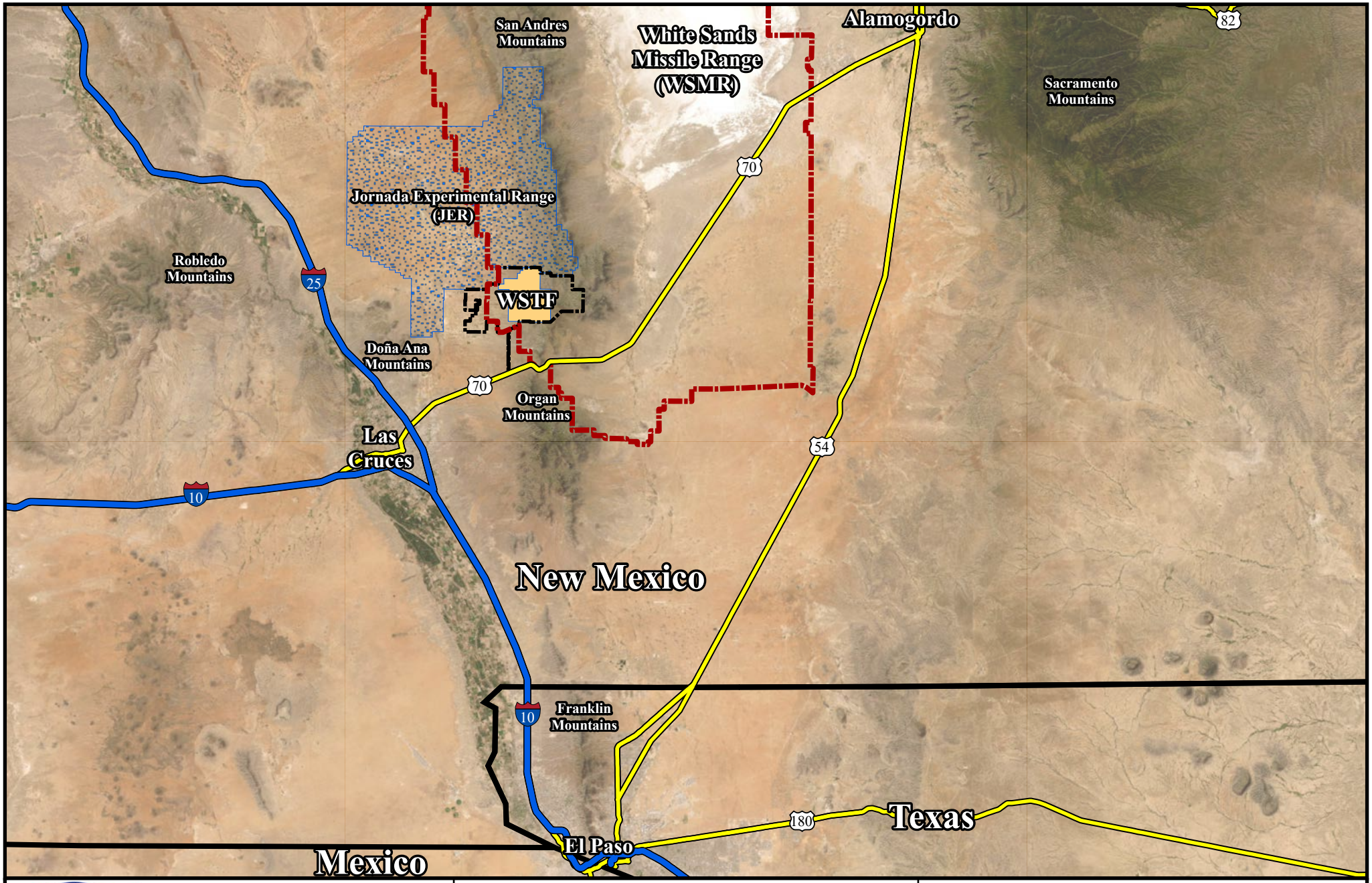
NMED Hazardous Waste Bureau. (2024a, May 6). *Approval Request for Extension of Time for Submittal of Three Well Completion Reports for Wells 300-001-SVG, 300-002-SVG, and 400-001-GW*. Santa Fe, NM.

NMED Hazardous Waste Bureau. (2024b, July 24). *Approval Request for a "No Longer Contained-in" Determination for Drilling Mud and Cuttings Associated with 300 Area Supplemental Investigation Work Plan.* Sante Fe, NM.

Figures

Figure 2.1 **WSTF Location Map**

(SEE NEXT PAGE)



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October 2024
Edited by: srees

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

WSTF Location Map

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

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

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

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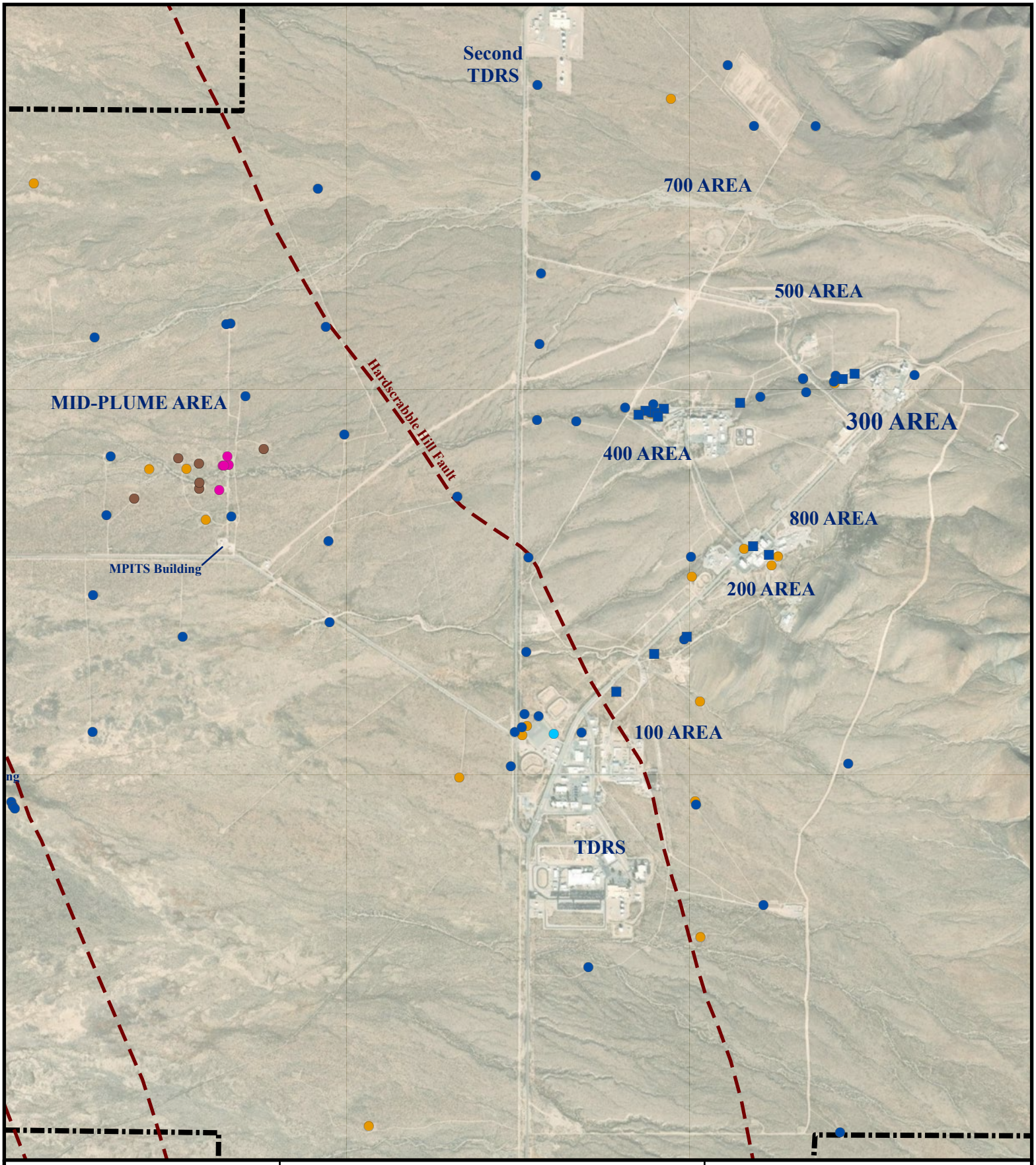

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October 2024

Feet
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Prepared by: srees

- Multiport Well
- Conventional Well
- Perched Well
- MSVGM Well
- Extraction Well
- Exploration Well
- Fault
- WSTF Boundary

White Sands Test Facility
300 Area Location

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

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

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Figure 2.3 **Well 300-002-GSV Location Map**

(SEE NEXT PAGE)



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October 2024

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Prepared by: srees

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

Monitoring Well 300-002-GSV Location

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

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

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Figure 5.1 **Well 300-002-GSV Well Completion Diagram**

(SEE NEXT PAGE)

WELL COMPLETION DIAGRAM

MULTI-PORT SOIL GAS & GROUNDWATER MONITORING WELL

Well ID: **300-002-GSV**

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

Township and Range: **SW 1/4 SW 1/4 NW 1/4 Sec. 36, T20 S, R3E**
Site Coordinates (NAD 83) (ft): **555,409.859 N, 1,533787.736 E**
Elevation (Brass Cap): **4,926.838 ft amsl**
Elevation (Top of Casing): **4929.28 ft amsl**
Drilling Contractor: **Yellow Jacket Drilling**
Driller: **J. Mungala**
Drilling Method: **Rotary-Sonic/Drive Casing, Mud Rotary**
Total Depth of Borehole (bgs): **170 ft**
Borehole Diameter: **6-in 0-75 ft, 3.77-in 75-252 ft, Reamed to 9-in. 0-165 ft**
Depth to Bedrock (bgs): **82 ft (Andesite)**
Depth to Groundwater (bgs): **116.74 ft (8/15/24)**
Total Depth Surface Casing (bgs): **NA**
Diameter and Type Surface Casing: **NA**

Dates of Drilling: **4/9 - 5/3/24**
Dates Well Installed: **5/4 - 5/7/24**
Dates Well Developed: **6/26 - 6/27/24**
Field Representative(s): **J. Austin, S. Rees, K. Williams, P. Bolen**
Total Depth Well Casing (bgs): **160 ft**
Type of Casing: **Schedule 80 PVC**
Diameter Well Casing: **4.5-in. OD 3.786-in. ID**
Soil Vapor Port Depth (bgs): **10, 40, 80, and 100 ft**
Groundwater Screened Zone Depth (bgs): **140-155 ft**
Comments: **Borehole Cored from 75-252 ft bgs, Backfilled to 165 ft bgs**
Note: Sampling System Currently NOT Installed

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

Materials Explanation:

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

Well Screen
4.5-in. OD 3.786-in. ID
0.020" Slots

0.25 ft Schedule 80 PVC

Water Level

1/4" Stainless Steel Tubing

Soil Vapor Port

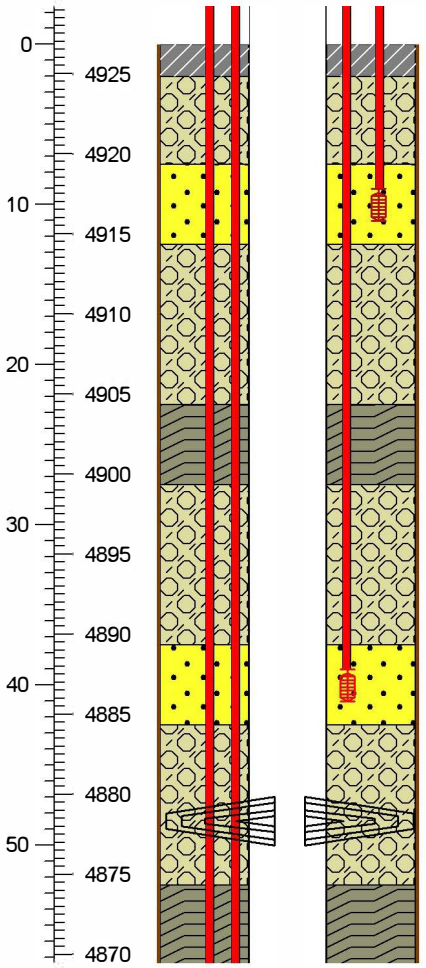
Neat Cement

Cement with 5% Bentonite

Bentonite Chip Seal

20/40 Filter Pack Sand

10/20 Filter Pack Sand



Depth ft bgs / ft amsl	Borehole/Well Description All depths listed are bgs	Annular Materials Description All depths listed are bgs
	Stick-Up = 2.45 ft above brass cap Surface Completion - 4-ft diameter, sloping concrete well apron, with steel well protector and locking cap installed over the completion casing and soil vapor sample tubing.	0-1 ft - Top of Surface Seal Portland II Neat Cement (3x 50 lbs bags) 1-7.5- ft - 3/8-in Bentonite Chips (8x 50 lbs bags)
	@10 ft - 12-in. AMS soil vapor implants with ¼-in. Swagelok fitting (AMS part #21014), 0.011-in. screen attached to ¼-in. diameter stainless steel tubing.	7.5-12.5 ft - 20/40 Sand (6x 50 lbs bags)
		12.5-22.5 ft - 3/8-in Bentonite Chips (8x 50 lbs bags)
	3 ft above ground surface to 160 ft - 4.5-in. OD 3.786-in. ID Schedule 80 PVC casing, flush joint, threaded.	22.5-27.5 ft - Cement with 5% Bentonite (3x 50 lbs bags) 27.5-37.5 ft - 3/8-in. Bentonite Chips. (9x 50 lbs bags)
	@40 ft - Soil Vapor Sample Port.	37.5-42.5 ft - 20/40 Sand (6x 50 lbs bags)
	Three steel cage centralizers bolted together around casing at 50 ft.	42.5-55 ft - 1/4-in. Bentonite Pelllets (8x 50 lbs buckets)

WELL COMPLETION DIAGRAM

MULTI-PORT SOIL GAS & GROUNDWATER MONITORING WELL

Well ID: **300-002-GSV**

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

Township and Range: **SW 1/4 SW 1/4 NW 1/4 Sec. 36, T20 S, R3E**
Site Coordinates (NAD 83) (ft): **555,409.859 N, 1,533787.736 E**
Elevation (Brass Cap): **4,926.838 ft amsl**
Elevation (Top of Casing): **4929.28 ft amsl**
Drilling Contractor: **Yellow Jacket Drilling**
Driller: **J. Mungala**
Drilling Method: **Rotary-Sonic/Drive Casing, Mud Rotary**
Total Depth of Borehole (bgs):
Borehole Diameter: **6-in 0-75 ft, 3.77-in 75-252 ft, Reamed to 9-in. 0-165 ft**
Depth to Bedrock (bgs): **82 ft (Andesite)**
Depth to Groundwater (bgs): **116.74 ft (8/15/24)**
Total Depth Surface Casing (bgs): **NA**
Diameter and Type Surface Casing: **NA**

Dates of Drilling: **4/9 - 5/3/24**
Dates Well Installed: **5/4 - 5/7/24**
Dates Well Developed: **6/26 - 6/27/24**
Field Representative(s): **J. Austin, S. Rees, K. Williams, P. Bolen**
Total Depth Well Casing (bgs): **160 ft**
Type of Casing: **Schedule 80 PVC**
Diameter Well Casing: **4.5-in. OD 3.786-in. ID**
Soil Vapor Port Depth (bgs): **10, 40, 80, and 100 ft**
Groundwater Screened Zone Depth (bgs): **140-155 ft**
Comments: **Borehole Cored from 75-252 ft bgs, Backfilled to 165 ft bgs**
Note: Sampling System Currently NOT Installed

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

Materials Explanation:

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

Well Screen
4.5-in. OD 3.786-in. ID
0.020" Slots

0.25 ft Schedule 80 PVC

Water Level

1/4" Stainless Steel Tubing

Soil Vapor Port

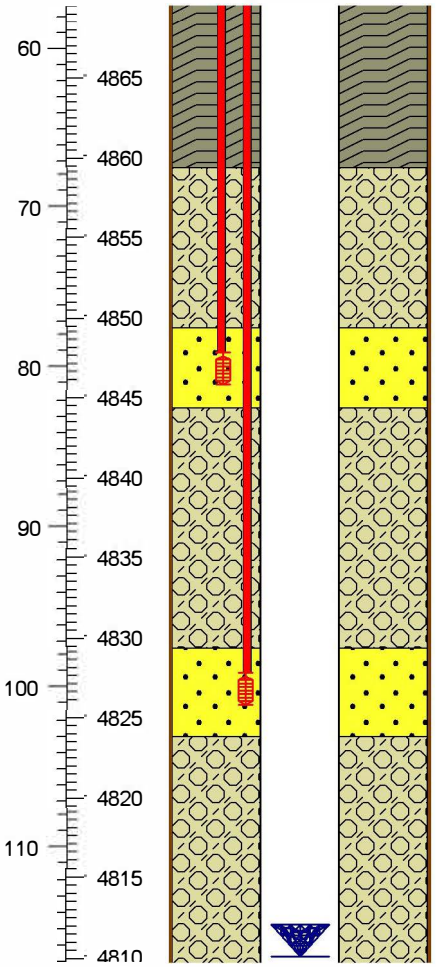
Neat Cement

Cement with 5% Bentonite

Bentonite Chip Seal

20/40 Filter Pack Sand

10/20 Filter Pack Sand



Depth ft bgs / ft amsl	Borehole/Well Description All depths listed are bgs	Annular Materials Description All depths listed are bgs
		55-67.5 ft - Cement with 5% Bentonite (6x 50 lbs bags)
	@67 ft - Bedrock (Cemented Conglomerate)	
		67.5-77.5 ft - 1/4-in Bentonite Pellets (1x 50 lbs bucket) and 3/8-in Bentonite Chips (3.5x 50 lbs bags)
	@80 ft - Soil Vapor Sample Port.	77.5-82.5 ft - 20/40 Sand. (3x 50 lbs bags)
	@82 ft - Orejon Andesite	
		82.5-97.5 ft - 1/4-in Bentonite Pellets (4.5x 50 lbs buckets)
	@100 ft - Soil Vapor Sample Port.	97.5-103 ft - 20/40 Sand (2x 50 lbs bags)

WELL COMPLETION DIAGRAM

MULTI-PORT SOIL GAS & GROUNDWATER MONITORING WELL

Well ID: **300-002-GSV**

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

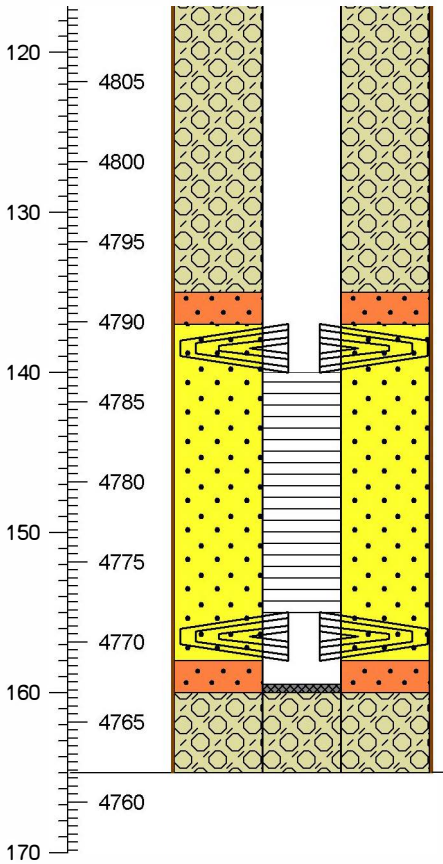
Township and Range: **SW 1/4 SW 1/4 NW 1/4 Sec. 36, T20 S, R3E**
Site Coordinates (NAD 83) (ft): **555,409.859 N, 1,533787.736 E**
Elevation (Brass Cap): **4,926.838 ft amsl**
Elevation (Top of Casing): **4929.28 ft amsl**
Drilling Contractor: **Yellow Jacket Drilling**
Driller: **J. Mungala**
Drilling Method: **Rotary-Sonic/Drive Casing, Mud Rotary**
Total Depth of Borehole (bgs):
Borehole Diameter: **6-in 0-75 ft, 3.77-in 75-252 ft, Reamed to 9-in. 0-165 ft**
Depth to Bedrock (bgs): **67 ft (Cemented Conglomerate), 82 ft (Andesite)**
Depth to Groundwater (bgs): **116.74 ft (8/15/24)**
Total Depth Surface Casing (bgs): **NA**
Diameter and Type Surface Casing: **NA**

Dates of Drilling: **4/9 - 5/3/24**
Dates Well Installed: **5/4 - 5/7/24**
Dates Well Developed: **6/26 - 6/27/24**
Field Representative(s): **J. Austin, S. Rees, K. Williams, P. Bolen**
Total Depth Well Casing (bgs): **160 ft**
Type of Casing: **Schedule 80 PVC**
Diameter Well Casing: **4.5-in. OD 3.786-in. ID**
Soil Vapor Port Depth (bgs): **10, 40, 80, and 100 ft**
Groundwater Screened Zone Depth (bgs): **140-155 ft**
Comments: **Borehole Cored from 75-252 ft bgs, Backfilled to 165 ft bgs**
Note: Sampling System Currently NOT Installed

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

Materials Explanation:

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



Depth ft bgs / ft amsl	Borehole/Well Description All depths listed are bgs	Annular Materials Description All depths listed are bgs
	Water Level 116.74 ft (8/15/24)	103-135 ft - 1/4-in Bentonite pellets (4.5x 50 lbs buckets)
		135-137 ft - 20/40 Sand (1x 50 lbs bag)
	Three steel cage centralizers bolted together around casing at 140 ft.	
	140 - 155 ft - 4.5-in. OD 3.786-in. ID Schedule 80 PVC Screen with 0.020-in. slots.	137-158 ft - 10/20 Filter Pack Sand. (14x 50 lbs bags)
	Three steel cage centralizers bolted together around casing at 155 ft.	
	5 ft Sump with 4.5-in. OD 3.786-in. ID Schedule 80 PVC End Cap.	
	Borehole was drilled 0-82 ft by rotary sonic, cored to a 3.77-in diameter using the mud rotary method 82-250 ft, then backfilled and reamed to 9-in. to a total depth of 165 ft.	158-160 ft - 20/40 Sand. (1x 50 lbs bags)
		160-165 ft - 3/8-in. Bentonite pellets. 2x 50 lbs bags)
	Borehole TD = 165 ft.	

Tables

Table 4.1 Water Usage Log

Drilling and Well Construction		
Date	**Water (gal.)**	**Cumulative Water (gal.)**
04/08/24	1000	1000
04/17/24	1000	2000
04/18/24	1000	3000
04/20/24	1000	4000
04/21/24	5000	9000
04/22/24	3000	12000
05/03/24	1000	13000
05/06/24	1000	14000
Combined Total Volume (gal.):		14000

Table 7.1 Well Development Log
Well Name and Zone: 300-002-GSV Screen 140 - 155 ft bgs

DTW Pre-Development on 6/25/24 (ft btoc): 114.2/DTW Post-Development on 8/15/24 (ft btoc): 116.74/Casing Stickup = 3.00

Date	Time	Method	Purge Rate (gpm)	Delta Volume (gals)	Total Volume (gals)	pH	Temp (°C)	Conductivity (µMhos/cm)	Turbidity NTUs	Initials	Comments
06/25/24	1010	Bail	~0.5	14.5	14.5					PB	Turbidity too high for parameters
06/25/24	1100	Bail	~0.5	14.5	29					PB	Turbidity too high for parameters
06/25/24	1205	Pump	2.5	54.28	83.28					PB	Turbidity too high for parameters
06/25/24	1245	Pump	2.5	36.72	120	7.47	24.2	1185	98.6	PB	Pump intake at 151 ft toc
06/25/24	1315	Pump	2.5	60	180	7.2	24.4	1180	36.6	PB	
06/25/24	1345	Pump	2.5	100	280	7.2	25.8	1183	6.12	PB	
06/25/24	1415	Pump	2.5	60	340	7.21	24.8	1159	7.02	PB	
06/25/24	1430	Pump	2.5	60	400	7.3	25.2	1181	4.28	PB	
06/25/24	1445	Pump	2.25	50	450	7.2	24.7	1168	5.5	PB	
06/25/24	1500	Pump	2.25	50	500	7.3	25.1	1184	2.96	PB	

Notes:
ft btoc = feet below top of casing.

Appendix A NMOSE Permit

Mike A. Hamman, P.E.
STATE ENGINEER

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

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER

Trn Nbr: 754302
File Nbr: LRG 16197

Dec. 20, 2023

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

Greetings:

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

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

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

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

Sincerely,

Cheryl Thacker
Water Resource Manager
(575)524-6161

Enclosure
explore

File No. LRG-16197

4-26310469

NEW MEXICO OFFICE OF THE STATE ENGINEER

WR-07 APPLICATION FOR PERMIT TO DRILL

A WELL WITH NO WATER RIGHT

(check applicable box):

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

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DEC 19 2023
STATE ENGINEER OFFICE
LAS CRUCES, NM

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

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

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

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

Plugging Plan of Operations Submitted? ☐ Yes ☐ No

1. APPLICANT(S)

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

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

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

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

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

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

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

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

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

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STATE ENGINEER OFFICE
LAS CRUCES, NM

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

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

Refer to enclosed map

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

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

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

3. ADDITIONAL STATEMENTS OR EXPLANATIONS

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

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

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

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

ACKNOWLEDGEMENT

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

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

RECEIVED
DEC 19 2023
STATE ENGINEER OFFICE
LAS CRUCES, NM

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

Applicant Signature

ACTION OF THE STATE ENGINEER

This application is:

☑ approved ☐ partially approved ☐ denied

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

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

STATE OF NEW MEXICO STATE ENGINEER

Mike A. Hamman, P.E, STATE ENGINEER

By: S BY Cheryl Thacker
Water Resource Manager

Title Plus

_____, State Engineer

_____ Print

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

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

NEW MEXICO STATE ENGINEER OFFICE
PERMIT TO EXPLORE

SPECIFIC CONDITIONS OF APPROVAL

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

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

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

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

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

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

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

NEW MEXICO STATE ENGINEER OFFICE
PERMIT TO EXPLORE

SPECIFIC CONDITIONS OF APPROVAL (Continued)

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

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

ACTION OF STATE ENGINEER

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

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

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

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

By: Cheryl Thacker

STATE OF NEW MEXICO STATE ENGINEER

Trn Desc: LRG 16197 POD16-18

File Number: LRG 16197
Trn Number: 754302

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

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

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

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

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

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

A. Ground Water Filing Fees

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

B. Surface Water Filing Fees

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

All fees are non-refundable.

C. Well Driller Fees

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

D. Reproduction of Documents

___ @ 0.25¢ $_____

___ Map(s) $_____

E. Certification $_____

F. *Credit Card Convenience Fee $_____

G. Other_____ $_____

Comments:

_____

_____

_____

_____

_____

_____

_____

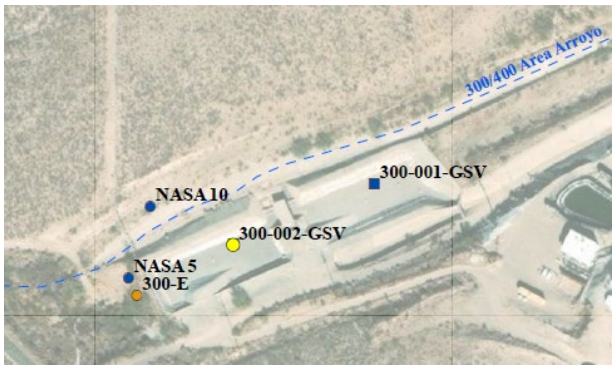
_____

_____

Appendix B Lithologic Log

SOIL BORING LITHOLOGIC LOG
300-002-GSV

LOCATION MAP:



SITE ID: NASA-WSTF **BOREHOLE ID:** 300-002-GSV
SITE COORDINATES (ft.) N: 555409.859 E: 1533787.736
GROUND ELEVATION (ft. MSL): 4926.84
STATE: New Mexico **COUNTY:** Doña Ana
DRILLING METHOD: Sonic/Air rotary
SAMPLING METHOD: Grab from cores
DRILLING CONTR./DRILLER: Yellow Jacket – California/ J. Mungala
DATE STARTED: 4/8/24 **DATE COMPLETED:** 5/7/24
FIELD REPS.: J. Austin, P. Bolen, S. Rees, K. Williams
TOTAL DEPTH: 250', plugged back to 170 ft
COMMENTS: Soil Vapor and Ground water Monitoring well

DEPTH (ft. bgs)	PID (ppm)	TEMP (F)	SOIL SAMPLE Sample Depth (ft) From	To	% Core Rec.	TYPE (Soil Grab, Soil Gas, Soil Chemical, Soil Geotechnical, Hex. Chrom.)	WSTF 10-DIGIT SAMPLE NUMBER(S) (yrmmddtttt)	USCS Group	Color, sorting/grading, consistency/density, grain size proportions (%), rounding/shape, consolidation/cementation, moisture content, distinguishing features
10	0.4	84	8	10	100	Grab Sample Chem Sample @ 10 ft	2404091330-2404091335	GM	Gravel, large ls clasts > 2" diameter, some silt , yellow tan
20	0.6 1.6	67 101	10 19	12 20	100	Grab Sample		GM SM	Gravelly Silt, red brown, smaller amount of clasts Silt w/ Sand to Gravel (90%), tan, silt chips from 1-2 mm
30	1.4	100	29	30	100	Grab Sample		GM	Same as above w/ larger diameter clasts. Clasts are igneous (andesite)
40	1.6	145	38	40	100	Grab Sample Chem Sample @ 40 ft	2404100910 - 2404100915	GM	Same as above
50	1.6	105	49	50	100	Grab Sample		GM	Same as above, less igneous clasts with more prevelant limestone clasts

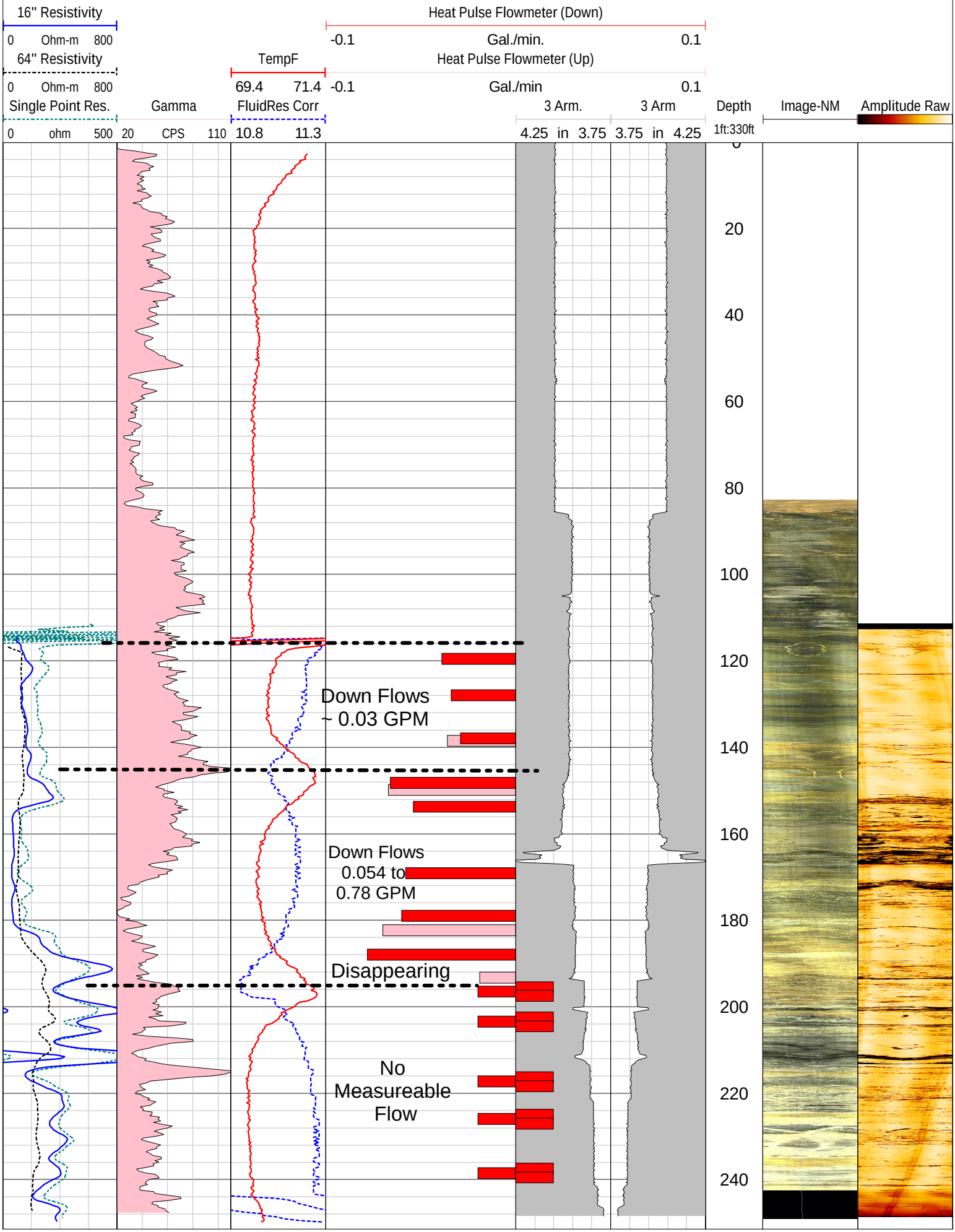
DEPTH (ft. bgs)	PID (ppm)	TEMP (F)	SOIL SAMPLE			LITHOLOGIC DESCRIPTION			
			Sample Depth (ft) From	To	% Core Rec.	TYPE (Soil Grab, Soil Gas, Soil Chemical, Soil Geotechnical, Hex. Chrom.)	WSTF 10-DIGIT SAMPLE NUMBER(S) (yrmmddtttt)	USCS Group	Color, sorting/grading, consistency/density, grain size proportions (%), rounding/shape, consolidation/cementation, moisture content, distinguishing features
60	0.0	89	59	60	100	Grab Sample		ML	Silt w/ small limestone clasts < 1' diameter , yellow tan, smaller percentage of clasts **67 ft - Cemented Conglomerate**
70	0.1	100			100	Grab Sample Chem sample			Cemented conglomerate. Clast size increase > 2" diameter Some fines interbedded
80	0.1	110	79	80	100	Grab Sample Chem sample@ 80' Duplicate Chem Sample	2404101320-2404101325 and 2404101330-2404101335		Same as above @ approx. 80' switch to coring operation
90	0.1	116	81 82	82 90	100	Continuous Core Collected 80' - TD	Matrix diffusion in COREDFN Report Results to TD		Same as above, clasts ~ 4" diameter and larger **Andesite** bedrock encountered @ 82' Andesite, green w/ reddish brown vein (quartz or calcilte), large fracture @ 87.7'
100		115	90	100	100	Continuous Core			93 ft - Same as above, fractures filled with lighter quartz or calcilte 98 ft – Noticeable iron staining
110		105	100	110	100	Continuous Core			Andesite. Healed fractures
120		100	110	120	100	Continuous Core			118 ft- Andesite, open and healed fractures, fine grained matrix w/ secondary calcite and iron staining on open fractures
130		95	120	130	100	Continuous Core			123 ft - Andesite 10% - Iron staining open fractures extends 1-3" into competent bedrock. 128 ft - Density of open fractures decreasing.

DEPTH (ft. bgs)	PID (ppm)	TEMP (F)	SOIL SAMPLE			LITHOLOGIC DESCRIPTION			
			Sample Depth (ft) From	To	% Core Rec.	TYPE (Soil Grab, Soil Gas, Soil Chemical, Soil Geotechnical, Hex. Chrom.)	WSTF 10-DIGIT SAMPLE NUMBER(S) (yrmmddtttt)	USCS Group	Color, sorting/grading, consistency/density, grain size proportions (%), rounding/shape, consolidation/cementation, moisture content, distinguishing features
140		78	130	140	100	Continuous Core			Andesite with Iron Staining
150		80	140	150	100	Continuous Core			143 ft - highly fractured with iron staining
160		102	150	160	100	Continuous Core			Green black Andesite, highly fractured, major iron staining with calcite filled fractures running both horizontal and vertical, color turns to blueish gray @ 152-153’
170		95	160	170	100	Continuous Core			163 ft - Same as above, highly fractured with iron staining . Increased weathering. Lost approximately 450 gal water 168 ft - More consolidated, lesser amount of fractures and iron staining, black to greenblack in color
180		120	170	180	100	Continuous Core			173 ft - fractures appear to be filled w/ mud 174 ft - large calcite vein running through a fracture
190		90	180	190	100	Continuous Core			181 ft -vein with calcite (brown to bluish gray) 183.5 - some chunks of gravelly material
200		80	190	200	100	Continuous Core			Andesite highly fractured w/ iron staining. Fractures are both open and healed. Opened fractures are generally 1 per every 2’ depth. Quartz and calcite minerlization in healed fractures

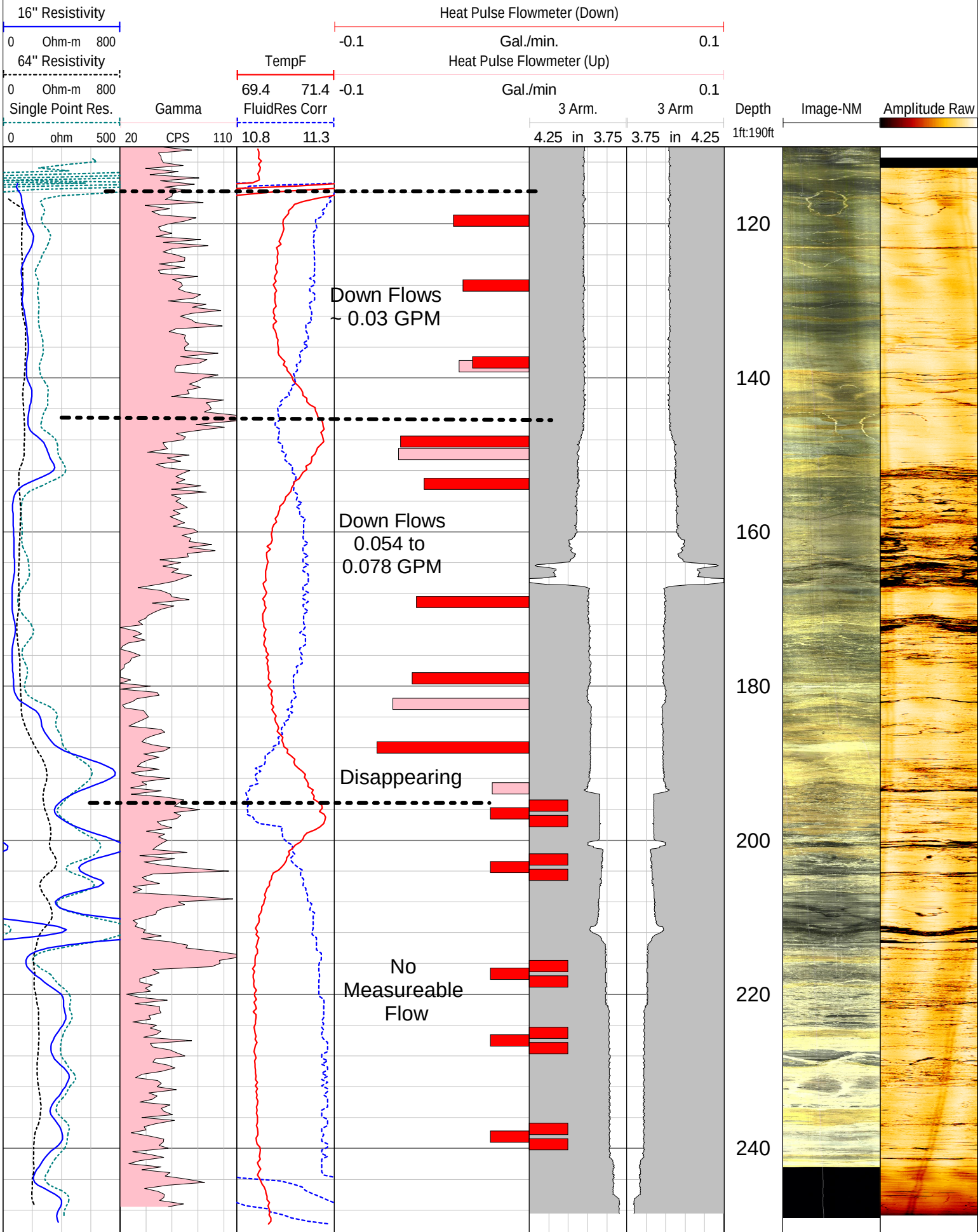
DEPTH (ft. bgs)	PID (ppm)	TEMP (F)	SOIL SAMPLE			LITHOLOGIC DESCRIPTION			
			Sample Depth (ft) From	To	% Core Rec.	TYPE (Soil Grab, Soil Gas, Soil Chemical, Soil Geotechnical, Hex. Chrom.)	WSTF 10-DIGIT SAMPLE NUMBER(S) (yrmmddtttt)	USCS Group	Color, sorting/grading, consistency/density, grain size proportions (%), rounding/shape, consolidation/cementation, moisture content, distinguishing features
210		75	200	210	100	Continuous Core			203 ft - Three open fractures, healed and highly mineralized **Limestone Contact @207.9** Strong HCL reaction. Black to deep purple in color.
220		75	210	218	80	Continuous Core			211-213 ft – no return 213 ft - dark charcoal color w/microcrystaline inclusions **213 – 215 ft – Shale**. Change in bedrock type. poorly to moderately consildated, dark gray to black Lost interval 218 ft – 220 ft Some brecciated material recoverd
230			220	230	100	Continuous Core			218 – 223 ft - Brecciated material andesite and paleozoic sediments 223 – 225 ft - Transitional zone with what appears to be float material 225 – 228 ft -Iron staining causing pinkish color Highly fractured, most healed with calcite includions 230 ft - Open fracture
240			230 234 238	231 237 240	60	Continuous Core			230 ft – Conglomerate - appears sedimentary with rhyolitic ground mass. Cemented and Competent with clasts of some limestone and andesite. Subangular to angular clasts. Lost interval 231 – 233 ft **Rhyolite Contact @ ~234 ft** Orange/pink color with small weathered phenocrysts. Pyrolusite alterations. Lost interval 237 – 238 ft 238 – 239 ft –Brecciated Rhyolite. Clasts up to 4”. Groundmass appears rhyolitic with inclusions of andesite, rhyolite and limestone.
250			240	250	100	Continuous Core			239 – 243 ft Clast size increase, up to 12” in diameter. 243 ft – Rhyolite Contact 248 ft - Rhyolite with secondary leach discoloration – pink to gray TD @ 250’

Appendix C Geophysical Logs

NASA / WSTF - 002-GSV - Composite



NASA / WSTF - 002-GSV - Composite Flow Zoom



JET WEST
GEOPHYSICAL SERVICES, LLC.

COMPANY	Navarro Research & Engineering
WELL ID	002-GSV
FIELD	NASA/WSTF
COUNTY	Dona Ana STATE New Mexico

NAD: Northing: Easting:

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

LOCATION: SEC TWP RGE

OTHER SERVICES
Devitation
Electrics

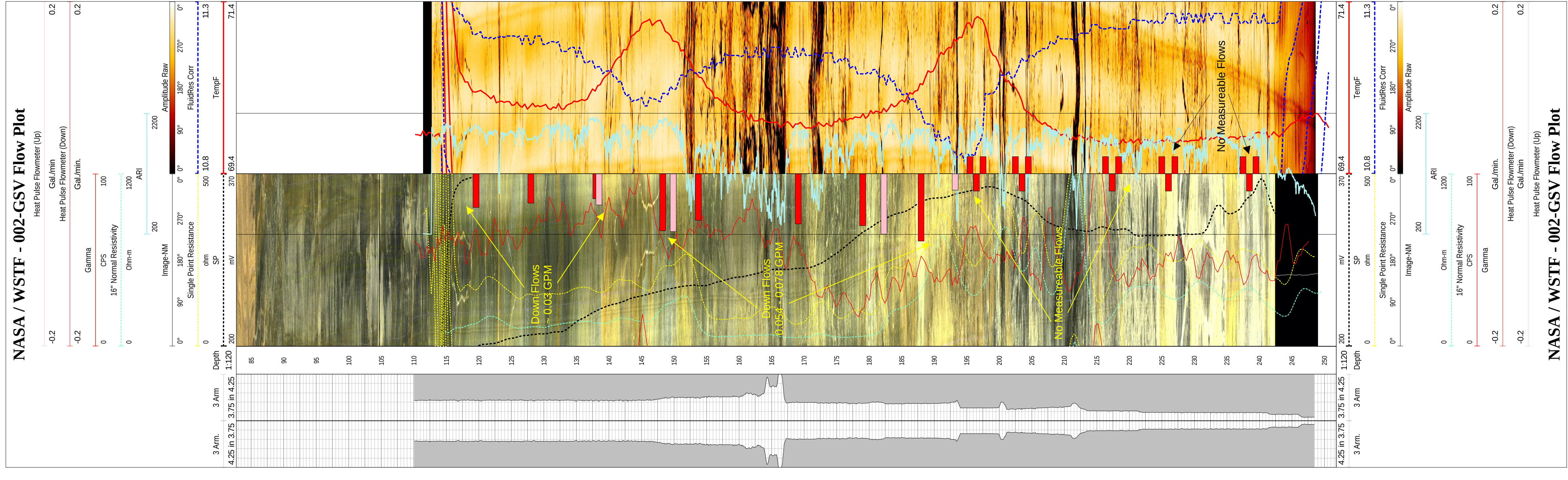
API No.

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

DATE	04-23-2024	TYPE FLUID IN HOLE	water
RUN No.	three, four	SALINITY	
TYPE LOG	Heat Pulse	DENSITY	
DEPTH-DRILLER	250 ft.	LEVEL	114 ft.
DEPTH-LOGGER	250 ft.	MAX. REG. TEMP	
BTM LOGGED INTERVAL	250 ft.	DIGITIZE INTERVAL	0.4 - 0.1 - 0.01 ft.
TOP LOGGED INTERVAL		OPERATING RIG TIME	
DRILLER - RIG	Yellow Jacket	DRILLER	Jose
RECORDED BY	T.Staatz		
WITNESSED BY	S. Reese	FIRM	Navarro

RUN NO.	BOREHOLE RECORD BIT	FROM	TO	CASING RECORD SIZE		FROM	TO
1				4 in. I.D.	Steel	-4 ft.	82 ft.
2	3.77 in.	82 ft.	250 ft.				
3							

REMARKS:



Appendix D Soil Analytical Data

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

LABORATORY REPORT FORM

ORANGE COAST ANALYTICAL, INC.

3002 Dow Suite 532 Tustin, CA 92780

(714) 832-0064

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

Laboratory Director's Name:
Mark Noorani

Client:	Navarro Research and Engineering
Laboratory Reference:	NRE 28770
Project Name:	Nasa White Sands Test Facility
Project Number:	23EEHWMU.0007
Date Received:	4/19/2024
Date Reported:	5/14/2024
Chain of Custody Received:	☑
Analytical Method:	9014, 7196A,

Mark Noorani, Laboratory Director

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Rev1.0

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

Lab Reference # NRE 28770
Project Name: Nasa White Sands Test Facility
Project #: 23EEHWMU.0007

Case Narrative

Sample Receipt:

All samples on the Chain of Custody were received by OCA at 11ºC, on ice.

Holding Times:

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

Analytical Methods:

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

Data Qualifiers:

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

Definition of Terms:

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

Comments:

None

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

Lab Reference # NRE 28770
Project Name: Nasa White Sands Test Facility
Project #: 23EEHWMU.0007

Client Sample Summary

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
2404091334	28770-001	4/19/2024	4/9/2024	Soil
2404100914	28770-002	4/19/2024	4/10/2024	Soil
2404100915	28770-003	4/19/2024	4/10/2024	Soil
2404101324	28770-004	4/19/2024	4/10/2024	Soil
2404101325	28770-005	4/19/2024	4/10/2024	Soil
2404101334	28770-006	4/19/2024	4/10/2024	Soil
2404101335	28770-007	4/19/2024	4/10/2024	Soil
2404091335	28770-008	4/19/2024	4/9/2024	Soil

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

Lab Reference # NRE 28770
Project Name: Nasa White Sands Test Facility
Project #: 23EEHWMU.0007

Inorganics

Client Sample ID	Lab Sample Number	Date Received		Date Sampled		Matrix
2404091334	28770-001	4/19/2024	8:00	4/9/2024	13:34	Soil

ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
Cyanide, Total	9014	<1.0	mg/kg	04/22/24 12:00	04/22/24 18:00	--	1

Client Sample ID	Lab Sample Number	Date Received		Date Sampled		Matrix
2404100914	28770-002	4/19/2024	8:00	4/10/2024	9:14	Soil

ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
Cyanide, Total	9014	<1.0	mg/kg	04/22/24 12:00	04/22/24 18:00	--	1

Client Sample ID	Lab Sample Number	Date Received		Date Sampled		Matrix
2404100915	28770-003	4/19/2024	8:00	4/10/2024	9:15	Soil

ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
Chromium(VI)	7196A	<1.0	mg/kg	04/19/24 17:30	04/23/24 11:30	--	1

Client Sample ID	Lab Sample Number	Date Received		Date Sampled		Matrix
2404101324	28770-004	4/19/2024	8:00	4/10/2024	13:24	Soil

ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
Cyanide, Total	9014	<1.0	mg/kg	04/22/24 12:00	04/22/24 18:00	--	1

Client Sample ID	Lab Sample Number	Date Received		Date Sampled		Matrix
2404101325	28770-005	4/19/2024	8:00	4/10/2024	13:25	Soil

ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
Chromium(VI)	7196A	<1.0	mg/kg	04/19/24 17:30	04/23/24 11:30	--	1

Client Sample ID	Lab Sample Number	Date Received		Date Sampled		Matrix
2404101334	28770-006	4/19/2024	8:00	4/10/2024	13:34	Soil

ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
Cyanide, Total	9014	<1.0	mg/kg	04/22/24 12:00	04/22/24 18:00	--	1

© Orange Coast Analytical, Inc

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

Lab Reference # NRE 28770
Project Name: Nasa White Sands Test Facility
Project #: 23EEHWMU.0007

Inorganics

Client Sample ID	Lab Sample Number	Date Received		Date Sampled		Matrix
2404101335	28770-007	4/19/2024	8:00	4/10/2024	13:35	Soil

ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
Chromium(VI)	7196A	<1.0	mg/kg	04/19/24 17:30	04/23/24 11:30	--	1

Client Sample ID	Lab Sample Number	Date Received		Date Sampled		Matrix
2404091335	28770-008	4/19/2024	8:00	4/9/2024	13:35	Soil

ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
Chromium(VI)	7196A	<1.0	mg/kg	04/19/24 17:30	04/23/24 11:30	--	1

Method Blank — Soil

MB ID	ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
MBDS0419241	Chromium(VI)	7196A	<1.0	mg/kg	04/19/24 17:30	04/23/24 11:30	--	1
MBDS0422242	Cyanide, Total	9014	<1.0	mg/kg	04/22/24 12:00	04/22/24 18:00	--	1

© Orange Coast Analytical, Inc

QA/QC Report
for Inorganics

Reference #: NRE 28770 Reporting units: ppm

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

Analyte	Date of Extraction	MS Date of Analysis	MSD Date of Analysis	Laboratory Sample #	R	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
Chromium(VI)	4/19/2024 17:30	4/23/2024 11:30	4/23/2024 11:30	28770-003	0.00	20.0	19.9	20.0	100	100	1	75-125	20	--
Cyanide, Total	4/22/2024 12:00	4/22/2024 18:00	4/22/2024 18:00	28770-001	0.00	5.00	4.83	5.43	97	109	12	23-131	32	--

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

Analyte	Date of Extraction	LCS Date of Analysis	LCSD Date of Analysis	Laboratory Sample #	SPC CONC	LCS	LCSD	%LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qual
Chromium(VI)	4/19/2024 17:30	4/23/2024 11:30	4/23/2024 11:30	DS0419241	20.0	20.5	20.3	102	101	1	80-120	20	--
Cyanide, Total	4/22/2024 12:00	4/22/2024 18:00	4/22/2024 18:00	DS0422242	5.00	5.50	5.37	110	107	2	80-120	20	--

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Definition of terms:

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

28770

WSTF CHAIN OF CUSTODY RECORD – OCA

Date 4/18/24

Laboratory: Summit (Alliance TG) PO#23EC057B

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

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

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

	Sample Number	Sample Location	# of Containers	Sample Matrix*	Analytical Requirements: Cyanide – 9010/9012, Perchlorate – 314.0	Analytical Requirements: Hexavalent Chromium – 7196A	Charge Number (WSTF Use Only)	Comments
1	2404091334	300-02-GSV, 10bgs	1	S	X	X	23EEHWMU	
2	2404100914	300-02-GSV, 40bgs	1	S	X		"	
3	2404100915	300-02-GSV, 40bgs	1	S		X	"	
4	2404101324	300-02-GSV, 80bgs	1	S	X		"	
5	2404101325	300-02-GSV, 80bgs	1	S		X	"	
6	2404101334	300-02-GSV, 80bgs	1	S	X		"	
7	2404101335	300-02-GSV, 80bgs	1	S		X	"	
8	2404091335	300-02-GSV	1	S		X	"	

Relinquished By:	Date/Time:	Accepted By:	Date/Time:
[signature]	4/18/24, 8:00	[signature] OCA CA	4/19/24 10:30

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

IR#3 Temp 3°C 4/19/24 on ice
Custody Seals Intact

SHIPPED FROM	WSTF ORIGINATOR/MAIL CODE/TELEPHONE NO.			
NASA JSC WHITE SANDS TEST FACILITY Environmental Department 12600 NASA ROAD - BLDG 120 LAS CRUCES, NM 88012	Deb Smith/ Buyer 575.524.5023 /Requestor: Kyle Williams			
	ORDER OR CONTRACT NUMBER		SHIPMENT CONTROL NO	
	23EC057B		WS 24 109 A	
SHIP TO: (ADDRESS, PHONE#, POINT OF CONTACT)	PROJECT OR TASK NUMBER		SHIP VIA	
Orange Coast Analytical, Inc. 3002 Dow Ave. Ste. 534 Tustin, CA, 92780 Attn: Miriam Molina (714) 832-0064	23EEHWMU.0007			
	CONTAINS BATTERIES	NO. PKG	DATE SHIPPED	AIR BILL/PRO#/BOL #
	No			
	BATTERY TYPE-PART#	AUTHORIZED BY		DEPT
	N/A			RE - Environmental

ITEM NO	EQUIPMENT CONTROL NO	MODEL STOCK NO PART NO	ITEM NAME – MANUFACTURER'S NAME AND SERIAL NO.	UNIT OF ISSUE	QTY
1	N/A	N/A	Line Item: 1 - 21-day TAT analysis of soils and water for Cyanide by Method 9010/9012.	Each	4
2	N/A	N/A	Line Item: 2 - 21-day TAT analysis of soils and water for Hexavalent Chromium by Method 7196A.	Each	4
3	N/A	N/A	Line Item: 3 - 21-day TAT analysis of soils and water for Perchlorate by Method 314.0.	Each	4
4	N/A	N/A	Line Item: 4 – Sample disposal.	Each	8

JUSTIFICATION FOR SHIPMENT: (MDR #, Return Authorization #s, Warranty Replacement, Repair, Overage/Shortage, Damage, Recycling)

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

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

PACKED BY:		# CONTAINERS	TYPE CONTAINERS	DIMENSIONS	WEIGHT
Please check off the Applicable labels					
☐	Fragile				
☐	Glass				
☐	Delicate				
☐	DO NOT XRAY				
☐	Refrigerate				
☐	Other				
		TOTAL CONTAINERS			TOTAL WEIGHT
☐	Bubblewrap				
☐	Foam				

RECEIVED BY: JR 4/19/24 10:30

REPRESENTING: OCA CA

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

_____ Date

IR#3 Temp:

Sample Receipt Report

Laboratory Reference: NRE 28770 Logged in by JR

Received:	04/19/24 08:00	Company Name:	Navarro Research and Engineering
Method of Shipment:	Hand Delivered	Project Manager:	Mr. Kyle Williams
Shipping Container:	Cooler	Project Name:	Nasa White Sands Test Facility
# Shipping Containers:	1	Project #:	23EEHWMU.0007

Sample Quantity
8 Soil

Chain of Custody		Complete ☑	Incomplete ☐	None ☐
Samples On Ice		Yes, Wet ☑	Yes, Blue ☐	No ☐
Observed Temp. (°C):	11	Thermometer ID: IR#3	Adjusted Temp.:	11+(-0)=11
Shipping Intact		Yes ☑	N/A ☐	No ☐
Shipping Custody Seals Intact		Yes ☑	N/A ☐	No ☐
Samples Intact		Yes ☑		No ☐
Sample Custody Seals Intact		Yes ☑	N/A ☐	No ☐
Custody Seals Signed & Dated		Yes ☑	N/A ☐	No ☐
Proper Test Containers		Yes ☑		No ☐
Proper Test Preservations		Yes ☑		No ☐
Samples Within Hold Times		Yes ☑		No ☐
VOAs Have Zero Headspace		Yes ☐	N/A ☑	No ☐
Sample Labels		Complete ☑	Incomplete ☐	None ☐
Sample Information Matches COC		Yes ☑	N/A ☐	No ☐

Notes

Client Notified _____ By _____ On _____

WECK LABORATORIES, INC.

Certificate of Analysis

FINAL REPORT

Work Orders: 4D24085

Project: [none]

Attn: Orange Coast Analtyical

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

Report Date: 5/14/2024
Received Date: 4/24/2024
Turnaround Time: Normal
Phones: (714) 832-0064
Fax: (714) 832-0067
P.O. #:
Billing Code:

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

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

Dear Orange Coast Analtyical,

Enclosed are the results of analyses for samples received 4/24/24 with the Chain-of-Custody document. The samples were received in good condition, at 3.5 °C and on ice. All analyses met the method criteria except as noted in the case narrative or in the report with data qualifiers.

Reviewed by:

Erika C. Alvarenga
PM Assistant

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

Certificate of Analysis

FINAL REPORT

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

Project Number:

Project Manager: Orange Coast Analtyical

Reported:
05/14/2024 10:40

Sample Summary

Sample Name	Sampled By	Lab ID	Matrix	Sampled	Qualifiers
2404091334	Client	4D24085-01	Solid	04/09/24 13:34	
2404100914	Client	4D24085-02	Solid	04/10/24 09:14	
2404101324	Client	4D24085-03	Solid	04/10/24 13:24	
2404101334	Client	4D24085-04	Solid	04/10/24 13:34	

Analyses Accreditation Summary

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

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

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

Project Number:

Project Manager: Orange Coast Analtyical

Reported:
05/14/2024 10:40

Sample Results

Sample: 2404091334 — Sampled: 04/09/24 13:34 by Client

4D24085-01 (Solid)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Perchlorate in solid by EPA 314M						
Method: EPA 314.0M			**Instr:** LC08_Channel1			
Batch ID: W4E0555 **Preparation:** _NONE (LC)			**Prepared:** 05/07/24 18:33			**Analyst:** CLL
Perchlorate	ND	30	ug/kg	1	05/09/24	

Sample Results

Sample: 2404100914 — Sampled: 04/10/24 9:14 by Client

4D24085-02 (Solid)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Perchlorate in solid by EPA 314M						
Method: EPA 314.0M			**Instr:** LC08_Channel1			
Batch ID: W4E0555 **Preparation:** _NONE (LC)			**Prepared:** 05/07/24 18:33			**Analyst:** CLL
Perchlorate	ND	30	ug/kg	1	05/09/24	

Sample Results

Sample: 2404101324 — Sampled: 04/10/24 13:24 by Client

4D24085-03 (Solid)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Perchlorate in solid by EPA 314M						
Method: EPA 314.0M			**Instr:** LC08_Channel1			
Batch ID: W4E0555 **Preparation:** _NONE (LC)			**Prepared:** 05/07/24 18:33			**Analyst:** CLL
Perchlorate	ND	30	ug/kg	1	05/09/24	

Sample Results

Sample: 2404101334 — Sampled: 04/10/24 13:34 by Client

4D24085-04 (Solid)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Perchlorate in solid by EPA 314M						
Method: EPA 314.0M			**Instr:** LC08_Channel1			
Batch ID: W4E0555 **Preparation:** _NONE (LC)			**Prepared:** 05/07/24 18:33			**Analyst:** CLL
Perchlorate	ND	30	ug/kg	1	05/09/24	

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

Project Number:

Project Manager: Orange Coast Analtyical

Reported:
05/14/2024 10:40

Quality Control Results

Perchlorate in solid by EPA 314M

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W4E0555 - EPA 314.0M										
Blank (W4E0555-BLK1)			**Prepared: 05/07/24**	**Analyzed: 05/09/24**						
Perchlorate	ND	30	ug/kg							
LCS (W4E0555-BS1)			**Prepared: 05/07/24**	**Analyzed: 05/09/24**						
Perchlorate	101	30	ug/kg	100		101	85-115			
Matrix Spike (W4E0555-MS1)	**Source: 4D24085-01**		**Prepared: 05/07/24**	**Analyzed: 05/09/24**						
Perchlorate	107	30	ug/kg	100	ND	106	80-120			
Matrix Spike Dup (W4E0555-MSD1)	**Source: 4D24085-01**		**Prepared: 05/07/24**	**Analyzed: 05/09/24**						
Perchlorate	98.5	30	ug/kg	100	ND	98	80-120	8	15	

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

Project Number:

Reported:
05/14/2024 10:40

Project Manager: Orange Coast Analtyical

Notes and Definitions

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

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

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

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

CHAIN OF CUSTODY RECORD

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

Standard TAT

4024085

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

SPECIAL HANDLING

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

Charges will apply for weekends/holidays

Method of Shipment:

COMMENTS

ID# (For lab Use Only)	DATE SAMPLED	TIME SAMPLED	SMPL TYPE	SAMPLE IDENTIFICATION/SITE LOCATION	# OF CONT.	ANALYSES REQUESTED: Perchlorate-314
	04/09/24	13:34	S	2404091334	1	x
	04/10/24	9:14	S	2404100914	1	x
	04/10/24	13:24	S	2404101324	1	x
	04/10/24	13:34	S	2404101334	1	x
			S		1	
			S		1	
			S		1	
			S		1	

RELINQUISHED BY	DATE / TIME	RECEIVED BY
[signature]	04/23/24 13:35	
GLS	4/24/24 1056	mideri 4/24/24 1056

SAMPLE CONDITION:

Actual Temperature: 3.5

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

T-0307

SAMPLE TYPE CODE:

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

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

SPECIAL REQUIREMENTS / BILLING INFORMATION
Use PO# 28770-16

JCY 4/24/24

WECK LABORATORIES, INC.

Sample Receipt Checklist

Weck WKO: **4D24085**
WKO Logged by: Jaime Gomez
Samples Checked by: Jaime Gomez

Date/Time Received: 04/24/24 10:56
# of Samples: 04
Delivered by: GLS

	Task	Yes	No	N/A	Comments
COC	COC present at receipt?	☒	☐		
	COC properly completed?	☒	☐		
	COC matches sample labels?	☒	☐		
	Project Manager notified about COC discrepancy?	☐	☐	☒	
Receipt Information	Sample Temperature	3.5 °C			
	Samples received on ice?	☒	☐		
	Ice Type (Blue/Wet)				
	All samples intact?	☒	☐		
	Samples in proper containers?	☒	☐		
	Sufficient sample volume?	☒	☐		
	Samples intact?	☒	☐		
	Received within holding time?	☒	☐		
	Project Manager notified about receipt info?	☐	☒	☐	
Sample Preservation Verification?	Sample labels checked for correct preservation?	☒	☐	☐	
	VOC Headspace: (No) none, If Yes (see comment) 524.2, 524.3, 624.1, 8260, 1666 P/T, LUFT	☐	☐	☒	☐<6mm/Pea Size?
	pH verified upon receipt? Metals <2; H2SO4 pres tests <2; 522<4; TOC <2; 508.1, 525.2<2, 6710B<2, 608.3 5-9	☐	☐	☒	pH paper Lot#
	Free Chlorine Tested <0.1 (Organics Analyses)	☐	☒	☐	Cl Test Strip Lot#
	O&G pH <2 verified?	☐	☐	☐	pH paper Lot#
	pH adjusted for O&G	☐	☐	☐	pH Reading: / Acid Lot# / Amt added:
	Project Manager notified about sample preservation?	☐	☐	☐	

PM Comments

Sample Receipt Checklist Completed by:

Signature: Jaime Gomez Date: 04/24/24

RG230406

Orange Coast Analytical, Inc.
An Alliance Technical Group Company
3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960

OCA REPORT & DATA PACKAGE (Level IV)

Laboratory Reference: NRE AZ14434

Client: Navarro Research and Engineering

Project Name: Nasa White Sands Test Facility

Information related to the Laboratory Reference, Client, and Project above is presented in this document. The final OCA laboratory report for this reference is re-presented here, followed by additional, more specific, project required reports and/or data.

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OCA Laboratory Report

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

LABORATORY REPORT FORM

ORANGE COAST ANALYTICAL, INC.

4620 East Elwood Street, Suite 4 Phoenix, AZ
85040

(480) 736-0960

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

Laboratory Director's Name:
Mark Noorani

Client:	Navarro Research and Engineering
Laboratory Reference:	NRE AZ14434
Project Name:	Nasa White Sands Test Facility
Project Number:	23EEHWMU.0007
Date Received:	4/18/2024
Date Reported:	5/7/2024
Chain of Custody Received:	☑
Analytical Method:	8260B,

Mark Noorani, Laboratory Director

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

Lab Reference # NRE AZ14434
Project Name: Nasa White Sands Test Facility
Project #: 23EEHWMU.0007

Case Narrative

Sample Receipt:

All samples on the Chain of Custody were received by OCA at 5.1ºC, on ice.

Holding Times:

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

Analytical Methods:

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

Data Qualifiers:

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

Definition of Terms:

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

Comments:

An EDD has been sent along with this report and has been reviewed for completeness.

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

Lab Reference # NRE AZ14434
Project Name: Nasa White Sands Test Facility
Project #: 23EEHWMU.0007

Client Sample Summary

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
2404091330	AZ14434-001	4/18/2024	4/9/2024	Soil
2404100910	AZ14434-002	4/18/2024	4/10/2024	Soil
2404101320	AZ14434-003	4/18/2024	4/10/2024	Soil
2404101330	AZ14434-004	4/18/2024	4/10/2024	Soil

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

Lab Reference # NRE AZ14434
Project Name: Nasa White Sands Test Facility
Project #: 23EEHWMU.0007

Volatile Organics by GC/MS (EPA 8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
2404091330	AZ14434-001	4/18/2024 10:00	4/9/2024 13:30	4/9/2024 13:30	4/22/2024 15:01	Soil

ANALYTE	CAS #	mg/kg	RL	MDL	ANALYTE	CAS #	mg/kg	RL	MDL
Acetone	67-64-1	<0.074	0.25	0.074	cis-1,3-Dichloropropene	10061-01-5	<0.013	0.050	0.013
Acrylonitrile	107-13-1	<0.022	0.25	0.022	trans-1,3-Dichloropropene	10061-02-6	<0.015	0.050	0.015
Allyl chloride	107-05-1	<0.015	0.050	0.015	Diethyl ether	60-29-7	<0.020	0.10	0.020
Benzene	71-43-2	<0.011	0.050	0.011	Ethyl methacrylate	97-63-2	<0.016	0.10	0.016
Bromobenzene	108-86-1	<0.018	0.050	0.018	Ethylbenzene	100-41-4	<0.013	0.050	0.013
Bromochloromethane	74-97-5	<0.018	0.050	0.018	Hexachlorobutadiene	87-68-3	<0.010	0.10	0.010
Bromodichloromethane	75-27-4	<0.017	0.050	0.017	2-Hexanone	591-78-6	<0.016	0.25	0.016
Bromoform	75-25-2	<0.016	0.050	0.016	Iodomethane	74-88-4	<0.019	0.050	0.019
Bromomethane	74-83-9	<0.014	0.25	0.014	Isopropylbenzene	98-82-8	<0.011	0.050	0.011
2-Butanone (MEK)	78-93-3	<0.036	0.25	0.036	4-Isopropyltoluene	99-87-6	<0.010	0.050	0.010
sec-Butylbenzene	135-98-8	<0.011	0.050	0.011	Methacrylonitrile	126-98-7	<0.017	0.25	0.017
tert-Butylbenzene	98-06-6	<0.013	0.050	0.013	Methyl acrylate	96-33-3	<0.019	0.25	0.019
n-Butylbenzene	104-51-8	<0.012	0.050	0.012	Methyl methacrylate	80-62-6	<0.018	0.25	0.018
Carbon disulfide	75-15-0	<0.017	0.10	0.017	Methyl t-butyl ether (MTBE)	1634-04-4	<0.030	0.050	0.030
Carbon tetrachloride	56-23-5	<0.022	0.050	0.022	4-Methyl-2-pentanone	108-10-1	<0.024	0.25	0.024
Chlorobenzene	108-90-7	<0.012	0.050	0.012	Naphthalene	91-20-3	<0.016	0.050	0.016
Chloroethane	75-00-3	<0.020	0.25	0.020	Pentachloroethane	76-01-7	<0.086	0.10	0.086
2-Chloroethyl vinyl ether	110-75-8	<0.013	0.25	0.013	Propionitrile	107-12-0	<0.050	0.25	0.050
Chloroform	67-66-3	<0.017	0.050	0.017	n-Propylbenzene	103-65-1	<0.015	0.050	0.015
Chloromethane	74-87-3	<0.019	0.25	0.019	Styrene	100-42-5	<0.0090	0.050	0.0090
2-Chlorotoluene	95-49-8	<0.015	0.050	0.015	1,1,2,2-Tetrachloroethane	79-34-5	<0.018	0.050	0.018
4-Chlorotoluene	106-43-4	<0.013	0.050	0.013	1,1,1,2-Tetrachloroethane	630-20-6	<0.012	0.050	0.012
1,2-Dibromo-3-chloropropane	96-12-8	<0.019	0.10	0.019	Tetrachloroethene	127-18-4	<0.016	0.050	0.016
Dibromochloromethane	124-48-1	<0.014	0.050	0.014	Tetrahydrofuran	109-99-9	<0.038	0.25	0.038
1,2-Dibromoethane	106-93-4	<0.016	0.050	0.016	Toluene	108-88-3	<0.019	0.050	0.019
Dibromomethane	74-95-3	<0.019	0.050	0.019	1,2,4-Trichlorobenzene	120-82-1	<0.017	0.050	0.017
trans-1,4-Dichloro-2-butene	110-57-6	<0.014	0.050	0.014	1,2,3-Trichlorobenzene	87-61-6	<0.015	0.050	0.015
1,4-Dichlorobenzene	106-46-7	<0.017	0.050	0.017	1,1,1-Trichloroethane	71-55-6	<0.017	0.050	0.017
1,2-Dichlorobenzene	95-50-1	<0.015	0.050	0.015	1,1,2-Trichloroethane	79-00-5	<0.017	0.050	0.017
1,3-Dichlorobenzene	541-73-1	<0.016	0.050	0.016	Trichloroethene	79-01-6	<0.017	0.050	0.017
Dichlorodifluoromethane	75-71-8	<0.028	0.25	0.028	Trichlorofluoromethane	75-69-4	<0.020	0.25	0.020
1,2-Dichloroethane	107-06-2	<0.019	0.050	0.019	1,2,3-Trichloropropane	96-18-4	<0.022	0.050	0.022
1,1-Dichloroethane	75-34-3	<0.019	0.050	0.019	1,3,5-Trimethylbenzene	108-67-8	<0.013	0.050	0.013
1,1-Dichloroethene	75-35-4	<0.022	0.050	0.022	1,2,4-Trimethylbenzene	95-63-6	<0.011	0.050	0.011
cis-1,2-Dichloroethene	156-59-2	<0.015	0.050	0.015	Vinyl acetate	108-05-4	<0.016	0.25	0.016
trans-1,2-Dichloroethene	156-60-5	<0.017	0.050	0.017	Vinyl chloride	75-01-4	<0.018	0.050	0.018
2,2-Dichloropropane	594-20-7	<0.018	0.050	0.018	o-Xylene	95-47-6	<0.011	0.050	0.011
1,3-Dichloropropane	142-28-9	<0.013	0.050	0.013	m- & p-Xylenes	179601-23-1	<0.020	0.10	0.020
1,2-Dichloropropane	78-87-5	<0.017	0.050	0.017					
1,1-Dichloropropene	563-58-6	<0.015	0.050	0.015					

Surrogate:	% RC	Acceptable % RC
Dibromofluoromethane:	112	65-130 %
Toluene-d8:	114	59-130 %
4-Bromofluorobenzene:	120	50-130 %

Dilution Factor: 1

Data Qualifiers: None

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

Lab Reference # NRE AZ14434
Project Name: Nasa White Sands Test Facility
Project #: 23EEHWMU.0007

Volatile Organics by GC/MS (EPA 8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
2404100910	AZ14434-002	4/18/2024 10:00	4/10/2024 9:10	4/10/2024 9:10	4/22/2024 16:11	Soil

ANALYTE	CAS #	mg/kg	RL	MDL	ANALYTE	CAS #	mg/kg	RL	MDL
Acetone	67-64-1	<0.074	0.25	0.074	cis-1,3-Dichloropropene	10061-01-5	<0.013	0.050	0.013
Acrylonitrile	107-13-1	<0.022	0.25	0.022	trans-1,3-Dichloropropene	10061-02-6	<0.015	0.050	0.015
Allyl chloride	107-05-1	<0.015	0.050	0.015	Diethyl ether	60-29-7	<0.020	0.10	0.020
Benzene	71-43-2	<0.011	0.050	0.011	Ethyl methacrylate	97-63-2	<0.016	0.10	0.016
Bromobenzene	108-86-1	<0.018	0.050	0.018	Ethylbenzene	100-41-4	<0.013	0.050	0.013
Bromochloromethane	74-97-5	<0.018	0.050	0.018	Hexachlorobutadiene	87-68-3	<0.010	0.10	0.010
Bromodichloromethane	75-27-4	<0.017	0.050	0.017	2-Hexanone	591-78-6	<0.016	0.25	0.016
Bromoform	75-25-2	<0.016	0.050	0.016	Iodomethane	74-88-4	<0.019	0.050	0.019
Bromomethane	74-83-9	<0.014	0.25	0.014	Isopropylbenzene	98-82-8	<0.011	0.050	0.011
2-Butanone (MEK)	78-93-3	<0.036	0.25	0.036	4-Isopropyltoluene	99-87-6	<0.010	0.050	0.010
sec-Butylbenzene	135-98-8	<0.011	0.050	0.011	Methacrylonitrile	126-98-7	<0.017	0.25	0.017
tert-Butylbenzene	98-06-6	<0.013	0.050	0.013	Methyl acrylate	96-33-3	<0.019	0.25	0.019
n-Butylbenzene	104-51-8	<0.012	0.050	0.012	Methyl methacrylate	80-62-6	<0.018	0.25	0.018
Carbon disulfide	75-15-0	<0.017	0.10	0.017	Methyl t-butyl ether (MTBE)	1634-04-4	<0.030	0.050	0.030
Carbon tetrachloride	56-23-5	<0.022	0.050	0.022	4-Methyl-2-pentanone	108-10-1	<0.024	0.25	0.024
Chlorobenzene	108-90-7	<0.012	0.050	0.012	Naphthalene	91-20-3	<0.016	0.050	0.016
Chloroethane	75-00-3	<0.020	0.25	0.020	Pentachloroethane	76-01-7	<0.086	0.10	0.086
2-Chloroethyl vinyl ether	110-75-8	<0.013	0.25	0.013	Propionitrile	107-12-0	<0.050	0.25	0.050
Chloroform	67-66-3	<0.017	0.050	0.017	n-Propylbenzene	103-65-1	<0.015	0.050	0.015
Chloromethane	74-87-3	<0.019	0.25	0.019	Styrene	100-42-5	<0.0090	0.050	0.0090
2-Chlorotoluene	95-49-8	<0.015	0.050	0.015	1,1,2,2-Tetrachloroethane	79-34-5	<0.018	0.050	0.018
4-Chlorotoluene	106-43-4	<0.013	0.050	0.013	1,1,1,2-Tetrachloroethane	630-20-6	<0.012	0.050	0.012
1,2-Dibromo-3-chloropropane	96-12-8	<0.019	0.10	0.019	Tetrachloroethene	127-18-4	<0.016	0.050	0.016
Dibromochloromethane	124-48-1	<0.014	0.050	0.014	Tetrahydrofuran	109-99-9	<0.038	0.25	0.038
1,2-Dibromoethane	106-93-4	<0.016	0.050	0.016	Toluene	108-88-3	<0.019	0.050	0.019
Dibromomethane	74-95-3	<0.019	0.050	0.019	1,2,4-Trichlorobenzene	120-82-1	<0.017	0.050	0.017
trans-1,4-Dichloro-2-butene	110-57-6	<0.014	0.050	0.014	1,2,3-Trichlorobenzene	87-61-6	<0.015	0.050	0.015
1,4-Dichlorobenzene	106-46-7	<0.017	0.050	0.017	1,1,1-Trichloroethane	71-55-6	<0.017	0.050	0.017
1,2-Dichlorobenzene	95-50-1	<0.015	0.050	0.015	1,1,2-Trichloroethane	79-00-5	<0.017	0.050	0.017
1,3-Dichlorobenzene	541-73-1	<0.016	0.050	0.016	Trichloroethene	79-01-6	<0.017	0.050	0.017
Dichlorodifluoromethane	75-71-8	<0.028	0.25	0.028	Trichlorofluoromethane	75-69-4	<0.020	0.25	0.020
1,2-Dichloroethane	107-06-2	<0.019	0.050	0.019	1,2,3-Trichloropropane	96-18-4	<0.022	0.050	0.022
1,1-Dichloroethane	75-34-3	<0.019	0.050	0.019	1,3,5-Trimethylbenzene	108-67-8	<0.013	0.050	0.013
1,1-Dichloroethene	75-35-4	<0.022	0.050	0.022	1,2,4-Trimethylbenzene	95-63-6	<0.011	0.050	0.011
cis-1,2-Dichloroethene	156-59-2	<0.015	0.050	0.015	Vinyl acetate	108-05-4	<0.016	0.25	0.016
trans-1,2-Dichloroethene	156-60-5	<0.017	0.050	0.017	Vinyl chloride	75-01-4	<0.018	0.050	0.018
2,2-Dichloropropane	594-20-7	<0.018	0.050	0.018	o-Xylene	95-47-6	<0.011	0.050	0.011
1,3-Dichloropropane	142-28-9	<0.013	0.050	0.013	m- & p-Xylenes	179601-23-1	<0.020	0.10	0.020
1,2-Dichloropropane	78-87-5	<0.017	0.050	0.017					
1,1-Dichloropropene	563-58-6	<0.015	0.050	0.015					

Surrogate:	% RC	Acceptable % RC
Dibromofluoromethane:	112	65-130 %
Toluene-d8:	115	59-130 %
4-Bromofluorobenzene:	122	50-130 %

Dilution Factor: 1

Data Qualifiers: None

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

Lab Reference # NRE AZ14434
Project Name: Nasa White Sands Test Facility
Project #: 23EEHWMU.0007

Volatile Organics by GC/MS (EPA 8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
2404101320	AZ14434-003	4/18/2024 10:00	4/10/2024 13:20	4/10/2024 13:20	4/22/2024 16:34	Soil

ANALYTE	CAS #	mg/kg	RL	MDL	ANALYTE	CAS #	mg/kg	RL	MDL
Acetone	67-64-1	<0.074	0.25	0.074	cis-1,3-Dichloropropene	10061-01-5	<0.013	0.050	0.013
Acrylonitrile	107-13-1	<0.022	0.25	0.022	trans-1,3-Dichloropropene	10061-02-6	<0.015	0.050	0.015
Allyl chloride	107-05-1	<0.015	0.050	0.015	Diethyl ether	60-29-7	<0.020	0.10	0.020
Benzene	71-43-2	<0.011	0.050	0.011	Ethyl methacrylate	97-63-2	<0.016	0.10	0.016
Bromobenzene	108-86-1	<0.018	0.050	0.018	Ethylbenzene	100-41-4	<0.013	0.050	0.013
Bromochloromethane	74-97-5	<0.018	0.050	0.018	Hexachlorobutadiene	87-68-3	<0.010	0.10	0.010
Bromodichloromethane	75-27-4	<0.017	0.050	0.017	2-Hexanone	591-78-6	<0.016	0.25	0.016
Bromoform	75-25-2	<0.016	0.050	0.016	Iodomethane	74-88-4	<0.019	0.050	0.019
Bromomethane	74-83-9	<0.014	0.25	0.014	Isopropylbenzene	98-82-8	<0.011	0.050	0.011
2-Butanone (MEK)	78-93-3	<0.036	0.25	0.036	4-Isopropyltoluene	99-87-6	<0.010	0.050	0.010
sec-Butylbenzene	135-98-8	<0.011	0.050	0.011	Methacrylonitrile	126-98-7	<0.017	0.25	0.017
tert-Butylbenzene	98-06-6	<0.013	0.050	0.013	Methyl acrylate	96-33-3	<0.019	0.25	0.019
n-Butylbenzene	104-51-8	<0.012	0.050	0.012	Methyl methacrylate	80-62-6	<0.018	0.25	0.018
Carbon disulfide	75-15-0	<0.017	0.10	0.017	Methyl t-butyl ether (MTBE)	1634-04-4	<0.030	0.050	0.030
Carbon tetrachloride	56-23-5	<0.022	0.050	0.022	4-Methyl-2-pentanone	108-10-1	<0.024	0.25	0.024
Chlorobenzene	108-90-7	<0.012	0.050	0.012	Naphthalene	91-20-3	<0.016	0.050	0.016
Chloroethane	75-00-3	<0.020	0.25	0.020	Pentachloroethane	76-01-7	<0.086	0.10	0.086
2-Chloroethyl vinyl ether	110-75-8	<0.013	0.25	0.013	Propionitrile	107-12-0	<0.050	0.25	0.050
Chloroform	67-66-3	<0.017	0.050	0.017	n-Propylbenzene	103-65-1	<0.015	0.050	0.015
Chloromethane	74-87-3	<0.019	0.25	0.019	Styrene	100-42-5	<0.0090	0.050	0.0090
2-Chlorotoluene	95-49-8	<0.015	0.050	0.015	1,1,2,2-Tetrachloroethane	79-34-5	<0.018	0.050	0.018
4-Chlorotoluene	106-43-4	<0.013	0.050	0.013	1,1,1,2-Tetrachloroethane	630-20-6	<0.012	0.050	0.012
1,2-Dibromo-3-chloropropane	96-12-8	<0.019	0.10	0.019	Tetrachloroethene	127-18-4	<0.016	0.050	0.016
Dibromochloromethane	124-48-1	<0.014	0.050	0.014	Tetrahydrofuran	109-99-9	<0.038	0.25	0.038
1,2-Dibromoethane	106-93-4	<0.016	0.050	0.016	Toluene	108-88-3	<0.019	0.050	0.019
Dibromomethane	74-95-3	<0.019	0.050	0.019	1,2,4-Trichlorobenzene	120-82-1	<0.017	0.050	0.017
trans-1,4-Dichloro-2-butene	110-57-6	<0.014	0.050	0.014	1,2,3-Trichlorobenzene	87-61-6	<0.015	0.050	0.015
1,4-Dichlorobenzene	106-46-7	<0.017	0.050	0.017	1,1,1-Trichloroethane	71-55-6	<0.017	0.050	0.017
1,2-Dichlorobenzene	95-50-1	<0.015	0.050	0.015	1,1,2-Trichloroethane	79-00-5	<0.017	0.050	0.017
1,3-Dichlorobenzene	541-73-1	<0.016	0.050	0.016	Trichloroethene	79-01-6	<0.017	0.050	0.017
Dichlorodifluoromethane	75-71-8	<0.028	0.25	0.028	Trichlorofluoromethane	75-69-4	<0.020	0.25	0.020
1,2-Dichloroethane	107-06-2	<0.019	0.050	0.019	1,2,3-Trichloropropane	96-18-4	<0.022	0.050	0.022
1,1-Dichloroethane	75-34-3	<0.019	0.050	0.019	1,3,5-Trimethylbenzene	108-67-8	<0.013	0.050	0.013
1,1-Dichloroethene	75-35-4	<0.022	0.050	0.022	1,2,4-Trimethylbenzene	95-63-6	<0.011	0.050	0.011
cis-1,2-Dichloroethene	156-59-2	<0.015	0.050	0.015	Vinyl acetate	108-05-4	<0.016	0.25	0.016
trans-1,2-Dichloroethene	156-60-5	<0.017	0.050	0.017	Vinyl chloride	75-01-4	<0.018	0.050	0.018
2,2-Dichloropropane	594-20-7	<0.018	0.050	0.018	o-Xylene	95-47-6	<0.011	0.050	0.011
1,3-Dichloropropane	142-28-9	<0.013	0.050	0.013	m- & p-Xylenes	179601-23-1	<0.020	0.10	0.020
1,2-Dichloropropane	78-87-5	<0.017	0.050	0.017					
1,1-Dichloropropene	563-58-6	<0.015	0.050	0.015					

Surrogate:	% RC	Acceptable % RC
Dibromofluoromethane:	108	65-130 %
Toluene-d8:	111	59-130 %
4-Bromofluorobenzene:	117	50-130 %

Dilution Factor: 1

Data Qualifiers: None

Mr. Kyle Williams
Navarro Research and Engineering
12600 Nasa Road Bldg 120
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Lab Reference # NRE AZ14434
Project Name: Nasa White Sands Test Facility
Project #: 23EEHWMU.0007

Volatile Organics by GC/MS (EPA 8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
2404101330	AZ14434-004	4/18/2024 10:00	4/10/2024 13:30	4/10/2024 13:30	4/22/2024 16:58	Soil

ANALYTE	CAS #	mg/kg	RL	MDL	ANALYTE	CAS #	mg/kg	RL	MDL
Acetone	67-64-1	<0.074	0.25	0.074	cis-1,3-Dichloropropene	10061-01-5	<0.013	0.050	0.013
Acrylonitrile	107-13-1	<0.022	0.25	0.022	trans-1,3-Dichloropropene	10061-02-6	<0.015	0.050	0.015
Allyl chloride	107-05-1	<0.015	0.050	0.015	Diethyl ether	60-29-7	<0.020	0.10	0.020
Benzene	71-43-2	<0.011	0.050	0.011	Ethyl methacrylate	97-63-2	<0.016	0.10	0.016
Bromobenzene	108-86-1	<0.018	0.050	0.018	Ethylbenzene	100-41-4	<0.013	0.050	0.013
Bromochloromethane	74-97-5	<0.018	0.050	0.018	Hexachlorobutadiene	87-68-3	<0.010	0.10	0.010
Bromodichloromethane	75-27-4	<0.017	0.050	0.017	2-Hexanone	591-78-6	<0.016	0.25	0.016
Bromoform	75-25-2	<0.016	0.050	0.016	Iodomethane	74-88-4	<0.019	0.050	0.019
Bromomethane	74-83-9	<0.014	0.25	0.014	Isopropylbenzene	98-82-8	<0.011	0.050	0.011
2-Butanone (MEK)	78-93-3	<0.036	0.25	0.036	4-Isopropyltoluene	99-87-6	<0.010	0.050	0.010
sec-Butylbenzene	135-98-8	<0.011	0.050	0.011	Methacrylonitrile	126-98-7	<0.017	0.25	0.017
tert-Butylbenzene	98-06-6	<0.013	0.050	0.013	Methyl acrylate	96-33-3	<0.019	0.25	0.019
n-Butylbenzene	104-51-8	<0.012	0.050	0.012	Methyl methacrylate	80-62-6	<0.018	0.25	0.018
Carbon disulfide	75-15-0	<0.017	0.10	0.017	Methyl t-butyl ether (MTBE)	1634-04-4	<0.030	0.050	0.030
Carbon tetrachloride	56-23-5	<0.022	0.050	0.022	4-Methyl-2-pentanone	108-10-1	<0.024	0.25	0.024
Chlorobenzene	108-90-7	<0.012	0.050	0.012	Naphthalene	91-20-3	<0.016	0.050	0.016
Chloroethane	75-00-3	<0.020	0.25	0.020	Pentachloroethane	76-01-7	<0.086	0.10	0.086
2-Chloroethyl vinyl ether	110-75-8	<0.013	0.25	0.013	Propionitrile	107-12-0	<0.050	0.25	0.050
Chloroform	67-66-3	<0.017	0.050	0.017	n-Propylbenzene	103-65-1	<0.015	0.050	0.015
Chloromethane	74-87-3	<0.019	0.25	0.019	Styrene	100-42-5	<0.0090	0.050	0.0090
2-Chlorotoluene	95-49-8	<0.015	0.050	0.015	1,1,2,2-Tetrachloroethane	79-34-5	<0.018	0.050	0.018
4-Chlorotoluene	106-43-4	<0.013	0.050	0.013	1,1,1,2-Tetrachloroethane	630-20-6	<0.012	0.050	0.012
1,2-Dibromo-3-chloropropane	96-12-8	<0.019	0.10	0.019	Tetrachloroethene	127-18-4	<0.016	0.050	0.016
Dibromochloromethane	124-48-1	<0.014	0.050	0.014	Tetrahydrofuran	109-99-9	<0.038	0.25	0.038
1,2-Dibromoethane	106-93-4	<0.016	0.050	0.016	Toluene	108-88-3	<0.019	0.050	0.019
Dibromomethane	74-95-3	<0.019	0.050	0.019	1,2,4-Trichlorobenzene	120-82-1	<0.017	0.050	0.017
trans-1,4-Dichloro-2-butene	110-57-6	<0.014	0.050	0.014	1,2,3-Trichlorobenzene	87-61-6	<0.015	0.050	0.015
1,4-Dichlorobenzene	106-46-7	<0.017	0.050	0.017	1,1,1-Trichloroethane	71-55-6	<0.017	0.050	0.017
1,2-Dichlorobenzene	95-50-1	<0.015	0.050	0.015	1,1,2-Trichloroethane	79-00-5	<0.017	0.050	0.017
1,3-Dichlorobenzene	541-73-1	<0.016	0.050	0.016	Trichloroethene	79-01-6	<0.017	0.050	0.017
Dichlorodifluoromethane	75-71-8	<0.028	0.25	0.028	Trichlorofluoromethane	75-69-4	<0.020	0.25	0.020
1,2-Dichloroethane	107-06-2	<0.019	0.050	0.019	1,2,3-Trichloropropane	96-18-4	<0.022	0.050	0.022
1,1-Dichloroethane	75-34-3	<0.019	0.050	0.019	1,3,5-Trimethylbenzene	108-67-8	<0.013	0.050	0.013
1,1-Dichloroethene	75-35-4	<0.022	0.050	0.022	1,2,4-Trimethylbenzene	95-63-6	<0.011	0.050	0.011
cis-1,2-Dichloroethene	156-59-2	<0.015	0.050	0.015	Vinyl acetate	108-05-4	<0.016	0.25	0.016
trans-1,2-Dichloroethene	156-60-5	<0.017	0.050	0.017	Vinyl chloride	75-01-4	<0.018	0.050	0.018
2,2-Dichloropropane	594-20-7	<0.018	0.050	0.018	o-Xylene	95-47-6	<0.011	0.050	0.011
1,3-Dichloropropane	142-28-9	<0.013	0.050	0.013	m- & p-Xylenes	179601-23-1	<0.020	0.10	0.020
1,2-Dichloropropane	78-87-5	<0.017	0.050	0.017					
1,1-Dichloropropene	563-58-6	<0.015	0.050	0.015					

Surrogate:	% RC	Acceptable % RC
Dibromofluoromethane:	108	65-130 %
Toluene-d8:	116	59-130 %
4-Bromofluorobenzene:	120	50-130 %

Dilution Factor: 1

Data Qualifiers: None

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12600 Nasa Road Bldg 120
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Lab Reference # NRE AZ14434
Project Name: Nasa White Sands Test Facility
Project #: 23EEHWMU.0007

Volatile Organics by GC/MS (EPA 8260B)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Method Blank	MBTT0418243			4/18/2024 10:40	4/22/2024 13:51	Soil

ANALYTE	CAS #	mg/kg	RL	MDL	ANALYTE	CAS #	mg/kg	RL	MDL
Acetone	67-64-1	<0.074	0.25	0.074	cis-1,3-Dichloropropene	10061-01-5	<0.013	0.050	0.013
Acrylonitrile	107-13-1	<0.022	0.25	0.022	trans-1,3-Dichloropropene	10061-02-6	<0.015	0.050	0.015
Allyl chloride	107-05-1	<0.015	0.050	0.015	Diethyl ether	60-29-7	<0.020	0.10	0.020
Benzene	71-43-2	<0.011	0.050	0.011	Ethyl methacrylate	97-63-2	<0.016	0.10	0.016
Bromobenzene	108-86-1	<0.018	0.050	0.018	Ethylbenzene	100-41-4	<0.013	0.050	0.013
Bromochloromethane	74-97-5	<0.018	0.050	0.018	Hexachlorobutadiene	87-68-3	<0.010	0.10	0.010
Bromodichloromethane	75-27-4	<0.017	0.050	0.017	2-Hexanone	591-78-6	<0.016	0.25	0.016
Bromoform	75-25-2	<0.016	0.050	0.016	Iodomethane	74-88-4	<0.019	0.050	0.019
Bromomethane	74-83-9	<0.014	0.25	0.014	Isopropylbenzene	98-82-8	<0.011	0.050	0.011
2-Butanone (MEK)	78-93-3	<0.036	0.25	0.036	4-Isopropyltoluene	99-87-6	<0.010	0.050	0.010
sec-Butylbenzene	135-98-8	<0.011	0.050	0.011	Methacrylonitrile	126-98-7	<0.017	0.25	0.017
tert-Butylbenzene	98-06-6	<0.013	0.050	0.013	Methyl acrylate	96-33-3	<0.019	0.25	0.019
n-Butylbenzene	104-51-8	<0.012	0.050	0.012	Methyl methacrylate	80-62-6	<0.018	0.25	0.018
Carbon disulfide	75-15-0	<0.017	0.10	0.017	Methyl t-butyl ether (MTBE)	1634-04-4	<0.030	0.050	0.030
Carbon tetrachloride	56-23-5	<0.022	0.050	0.022	4-Methyl-2-pentanone	108-10-1	<0.024	0.25	0.024
Chlorobenzene	108-90-7	<0.012	0.050	0.012	Naphthalene	91-20-3	<0.016	0.050	0.016
Chloroethane	75-00-3	<0.020	0.25	0.020	Pentachloroethane	76-01-7	<0.086	0.10	0.086
2-Chloroethyl vinyl ether	110-75-8	<0.013	0.25	0.013	Propionitrile	107-12-0	<0.050	0.25	0.050
Chloroform	67-66-3	<0.017	0.050	0.017	n-Propylbenzene	103-65-1	<0.015	0.050	0.015
Chloromethane	74-87-3	<0.019	0.25	0.019	Styrene	100-42-5	<0.0090	0.050	0.0090
2-Chlorotoluene	95-49-8	<0.015	0.050	0.015	1,1,2,2-Tetrachloroethane	79-34-5	<0.018	0.050	0.018
4-Chlorotoluene	106-43-4	<0.013	0.050	0.013	1,1,1,2-Tetrachloroethane	630-20-6	<0.012	0.050	0.012
1,2-Dibromo-3-chloropropane	96-12-8	<0.019	0.10	0.019	Tetrachloroethene	127-18-4	<0.016	0.050	0.016
Dibromochloromethane	124-48-1	<0.014	0.050	0.014	Tetrahydrofuran	109-99-9	<0.038	0.25	0.038
1,2-Dibromoethane	106-93-4	<0.016	0.050	0.016	Toluene	108-88-3	<0.019	0.050	0.019
Dibromomethane	74-95-3	<0.019	0.050	0.019	1,2,4-Trichlorobenzene	120-82-1	<0.017	0.050	0.017
trans-1,4-Dichloro-2-butene	110-57-6	<0.014	0.050	0.014	1,2,3-Trichlorobenzene	87-61-6	<0.015	0.050	0.015
1,4-Dichlorobenzene	106-46-7	<0.017	0.050	0.017	1,1,1-Trichloroethane	71-55-6	<0.017	0.050	0.017
1,2-Dichlorobenzene	95-50-1	<0.015	0.050	0.015	1,1,2-Trichloroethane	79-00-5	<0.017	0.050	0.017
1,3-Dichlorobenzene	541-73-1	<0.016	0.050	0.016	Trichloroethene	79-01-6	<0.017	0.050	0.017
Dichlorodifluoromethane	75-71-8	<0.028	0.25	0.028	Trichlorofluoromethane	75-69-4	<0.020	0.25	0.020
1,2-Dichloroethane	107-06-2	<0.019	0.050	0.019	1,2,3-Trichloropropane	96-18-4	<0.022	0.050	0.022
1,1-Dichloroethane	75-34-3	<0.019	0.050	0.019	1,3,5-Trimethylbenzene	108-67-8	<0.013	0.050	0.013
1,1-Dichloroethene	75-35-4	<0.022	0.050	0.022	1,2,4-Trimethylbenzene	95-63-6	<0.011	0.050	0.011
cis-1,2-Dichloroethene	156-59-2	<0.015	0.050	0.015	Vinyl acetate	108-05-4	<0.016	0.25	0.016
trans-1,2-Dichloroethene	156-60-5	<0.017	0.050	0.017	Vinyl chloride	75-01-4	<0.018	0.050	0.018
2,2-Dichloropropane	594-20-7	<0.018	0.050	0.018	o-Xylene	95-47-6	<0.011	0.050	0.011
1,3-Dichloropropane	142-28-9	<0.013	0.050	0.013	m- & p-Xylenes	179601-23-1	<0.020	0.10	0.020
1,2-Dichloropropane	78-87-5	<0.017	0.050	0.017					
1,1-Dichloropropene	563-58-6	<0.015	0.050	0.015					

Surrogate:	% RC	Acceptable % RC
Dibromofluoromethane:	107	65-130 %
Toluene-d8:	113	59-130 %
4-Bromofluorobenzene:	117	50-130 %

Dilution Factor: 1

Data Qualifiers: None

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

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

Date of Extraction: 4/22/2024 13:18
Date of Analysis: 4/22/2024 15:24
Dup Date of Analysis: 4/22/2024 15:47
Laboratory Sample #: AZ14434-001
MS/MSD Qualifiers: M1, M2, M7,
Reference #: NRE AZ14434

Analyte	R	Spike Conc.	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
Acetone	0.00	500	461	421	92	84	9	65-180	35	--
Acrylonitrile	0.00	500	546	516	109	103	6	56-142	30	--
Allyl chloride	0.00	500	517	514	103	103	1	70-130	30	--
Benzene	0.00	500	555	531	111	106	4	70-132	20	--
Bromobenzene	0.00	500	500	469	100	94	6	70-130	30	--
Bromochloromethane	0.00	500	504	469	101	94	7	65-135	30	--
Bromodichloromethane	0.00	500	496	468	99	94	6	65-135	30	--
Bromoform	0.00	500	402	370	80	74	8	65-135	30	--
Bromomethane	0.00	500	304	263	61	53	14	60-145	35	M7,
2-Butanone (MEK)	0.00	500	483	478	97	96	1	50-150	35	--
n-Butylbenzene	0.00	500	621	578	124	116	7	60-135	30	--
sec-Butylbenzene	0.00	500	608	564	122	113	8	60-130	30	--
tert-Butylbenzene	0.00	500	495	477	99	95	4	69-130	30	--
Carbon disulfide	0.00	500	512	479	102	96	7	45-155	35	--
Carbon tetrachloride	0.00	500	605	558	121	112	8	65-135	30	--
Chlorobenzene	0.00	500	535	496	107	99	8	70-130	20	--
Chloroethane	0.00	500	288	246	58	49	16	65-135	30	M7,
2-Chloroethyl vinyl ether	0.00	500	500	484	100	97	3	48-140	30	--
Chloroform	0.00	500	554	523	111	105	6	65-135	30	--
Chloromethane	0.00	500	428	412	86	82	4	60-135	30	--
2-Chlorotoluene	0.00	500	514	490	103	98	5	64-130	30	--
4-Chlorotoluene	0.00	500	564	538	113	108	5	64-130	30	--
1,2-Dibromo-3-chloropropane	0.00	500	475	454	95	91	5	65-135	30	--
Dibromochloromethane	0.00	500	432	410	86	82	5	65-135	30	--
1,2-Dibromoethane	0.00	500	475	458	95	92	4	70-130	30	--
Dibromomethane	0.00	500	464	445	93	89	4	65-135	30	--
trans-1,4-Dichloro-2-butene	0.00	500	567	542	113	108	5	64-131	20	--
1,2-Dichlorobenzene	0.00	500	499	458	100	92	9	65-130	25	--
1,3-Dichlorobenzene	0.00	500	502	466	100	93	7	70-130	30	--
1,4-Dichlorobenzene	0.00	500	496	462	99	92	7	69-132	25	--
Dichlorodifluoromethane	0.00	500	450	423	90	85	6	45-155	35	--
1,1-Dichloroethane	0.00	500	527	512	105	102	3	58-135	20	--
1,2-Dichloroethane	0.00	500	607	568	121	114	7	65-135	30	--
1,1-Dichloroethene	0.00	500	543	522	109	104	4	41-131	20	--
cis-1,2-Dichloroethene	0.00	500	533	510	107	102	4	70-130	30	--
trans-1,2-Dichloroethene	0.00	500	553	516	111	103	7	65-135	30	--
1,2-Dichloropropane	0.00	500	494	470	99	94	5	70-130	30	--
1,3-Dichloropropane	0.00	500	493	460	99	92	7	70-130	30	--
2,2-Dichloropropane	0.00	500	605	583	121	117	4	60-140	30	--

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

Reporting Units: ppb

Analyte	R	Spike Conc.	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
1,1-Dichloropropene	0.00	500	655	612	131	122	7	65-135	30	--
cis-1,3-Dichloropropene	0.00	500	484	477	97	95	1	65-135	30	--
trans-1,3-Dichloropropene	0.00	500	488	469	98	94	4	65-135	30	--
Diethyl ether	0.00	500	501	489	100	98	2	63-130	30	--
Ethyl methacrylate	0.00	500	504	471	101	94	7	42-140	30	--
Ethylbenzene	0.00	500	560	523	112	105	7	70-130	30	--
Hexachlorobutadiene	0.00	500	602	575	120	115	5	60-145	30	--
2-Hexanone	0.00	500	469	422	94	84	11	50-135	35	--
Iodomethane	0.00	500	510	484	102	97	5	60-140	30	--
Isopropylbenzene	0.00	500	583	553	117	111	5	60-130	30	--
4-Isopropyltoluene	0.00	500	591	541	118	108	9	60-130	30	--
Methacrylonitrile	0.00	500	527	522	105	104	1	46-130	30	--
Methyl acrylate	0.00	500	509	478	102	96	6	48-130	30	--
Methyl methacrylate	0.00	500	455	430	91	86	6	55-130	30	--
Methyl t-butyl ether (MTBE)	0.00	500	519	512	104	102	1	60-135	30	--
4-Methyl-2-pentanone	0.00	500	424	402	85	80	5	65-135	30	--
Naphthalene	0.00	500	513	500	103	100	3	60-141	30	--
Pentachloroethane	0.00	500	0.00	0.00	0	0		70-130	20	M2,
Propionitrile	0.00	500	522	519	104	104	1	38-133	20	--
n-Propylbenzene	0.00	500	600	562	120	112	7	62-130	30	--
Styrene	0.00	500	550	505	110	101	9	65-135	30	--
1,1,1,2-Tetrachloroethane	0.00	500	495	449	99	90	10	70-130	30	--
1,1,2,2-Tetrachloroethane	0.00	500	431	401	86	80	7	65-135	30	--
Tetrachloroethene	0.00	500	912	857	182	171	6	65-135	30	M1,
Tetrahydrofuran	0.00	500	476	443	95	89	7	43-130	20	--
Toluene	0.00	500	526	485	105	97	8	70-130	20	--
1,2,3-Trichlorobenzene	0.00	500	486	464	97	93	5	60-135	30	--
1,2,4-Trichlorobenzene	0.00	500	506	478	101	96	6	60-140	30	--
1,1,1-Trichloroethane	0.00	500	613	564	123	113	8	65-135	30	--
1,1,2-Trichloroethane	0.00	500	473	455	95	91	4	65-135	30	--
Trichloroethene	0.00	500	568	563	114	113	1	70-131	20	--
Trichlorofluoromethane	0.00	500	582	555	116	111	5	65-140	30	--
1,2,3-Trichloropropane	0.00	500	470	450	94	90	4	65-130	30	--
1,2,4-Trimethylbenzene	0.00	500	583	554	117	111	5	60-130	30	--
1,3,5-Trimethylbenzene	0.00	500	580	546	116	109	6	60-130	30	--
Vinyl acetate	0.00	500	187	181	37	36	3	55-145	35	M2,
Vinyl chloride	0.00	500	516	461	103	92	11	60-140	30	--
o-Xylene	0.00	500	524	482	105	96	8	70-130	30	--
m- & p-Xylenes	0.00	1000	1090	1020	109	102	7	70-150	30	--

Surrogate Recoveries for Spike Samples

Surrogate (%RC)	MS	MSD	Qual
Dibromofluoromethane	116	115	☐
Toluene-d8	116	116	☐
4-Bromofluorobenzene	118	120	☐

LCS	LCSD	Qual
116	117	☐
114	111	☐
120	120	☐

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

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

Reporting Units: ppb

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

Date of Extraction: 4/22/2024 13:18
Date of Analysis: 4/22/2024 14:14
Dup Date of Analysis: 4/22/2024 14:38
Laboratory Sample #: TP0422242
LCS/LCSD Qualifiers: L1, L2,

Analyte	Spike Conc.	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
Acetone	500	447	418	89	84	7	65-180	35	--
Acrylonitrile	500	561	563	112	113	0	56-142	20	--
Allyl chloride	500	544	546	109	109	0	70-130	20	--
Benzene	500	587	575	117	115	2	70-131	20	--
Bromobenzene	500	523	525	105	105	0	70-130	20	--
Bromochloromethane	500	520	502	104	100	4	70-130	20	--
Bromodichloromethane	500	535	503	107	101	6	70-130	20	--
Bromoform	500	429	418	86	84	3	70-130	20	--
Bromomethane	500	278	283	56	57	2	70-140	20	L2,
2-Butanone (MEK)	500	538	524	108	105	3	50-150	30	--
n-Butylbenzene	500	642	626	128	125	3	60-128	20	--
sec-Butylbenzene	500	626	609	125	122	3	60-125	20	--
tert-Butylbenzene	500	585	566	117	113	3	69-129	20	--
Carbon disulfide	500	534	520	107	104	3	50-150	30	--
Carbon tetrachloride	500	635	600	127	120	6	69-129	20	--
Chlorobenzene	500	547	540	109	108	1	70-130	20	--
Chloroethane	500	263	246	53	49	7	70-131	20	L2,
2-Chloroethyl vinyl ether	500	505	501	101	100	1	48-140	20	--
Chloroform	500	576	566	115	113	2	70-130	20	--
Chloromethane	500	433	429	87	86	1	66-130	20	--
2-Chlorotoluene	500	568	539	114	108	5	64-124	20	--
4-Chlorotoluene	500	595	583	119	117	2	64-124	20	--
1,2-Dibromo-3-chloropropane	500	546	511	109	102	7	66-133	20	--
Dibromochloromethane	500	470	451	94	90	4	70-130	20	--
1,2-Dibromoethane	500	494	498	99	100	1	70-130	20	--
Dibromomethane	500	506	489	101	98	3	70-130	20	--
trans-1,4-Dichloro-2-butene	500	616	610	123	122	1	64-131	20	--
1,2-Dichlorobenzene	500	538	525	108	105	2	69-130	20	--
1,3-Dichlorobenzene	500	526	516	105	103	2	70-130	20	--
1,4-Dichlorobenzene	500	528	510	106	102	3	69-132	20	--
Dichlorodifluoromethane	500	422	440	84	88	4	45-155	30	--
1,1-Dichloroethane	500	563	556	113	111	1	60-133	20	--
1,2-Dichloroethane	500	629	630	126	126	0	70-130	20	--
1,1-Dichloroethene	500	581	567	116	113	2	45-132	20	--
cis-1,2-Dichloroethene	500	564	553	113	111	2	70-130	20	--
trans-1,2-Dichloroethene	500	573	553	115	111	4	68-131	20	--
1,2-Dichloropropane	500	514	514	103	103	0	70-130	20	--
1,3-Dichloropropane	500	513	508	103	102	1	70-130	20	--
2,2-Dichloropropane	500	651	639	130	128	2	61-136	20	--
1,1-Dichloropropene	500	681	653	136	131	4	65-127	20	L1,
cis-1,3-Dichloropropene	500	527	515	105	103	2	70-130	20	--
trans-1,3-Dichloropropene	500	517	523	103	105	1	70-130	20	--
Diethyl ether	500	518	504	104	101	3	63-130	20	--

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

Reporting Units: ppb

Analyte	Spike Conc.	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
Ethyl methacrylate	500	531	522	106	104	2	42-140	20	--
Ethylbenzene	500	576	564	115	113	2	70-130	20	--
Hexachlorobutadiene	500	552	575	110	115	4	60-142	20	--
2-Hexanone	500	456	473	91	95	4	51-134	30	--
Iodomethane	500	540	520	108	104	4	67-127	20	--
Isopropylbenzene	500	610	594	122	119	3	60-125	20	--
4-Isopropyltoluene	500	611	594	122	119	3	60-130	20	--
Methacrylonitrile	500	557	557	111	111	0	46-130	20	--
Methyl acrylate	500	540	526	108	105	3	48-130	20	--
Methyl methacrylate	500	480	484	96	97	1	55-130	20	--
Methyl t-butyl ether (MTBE)	500	566	539	113	108	5	60-131	20	--
4-Methyl-2-pentanone	500	454	432	91	86	5	70-130	20	--
Naphthalene	500	525	525	105	105	0	60-141	20	--
Pentachloroethane	500	472	477	94	95	1	70-130	20	--
Propionitrile	500	543	553	109	111	2	38-133	20	--
n-Propylbenzene	500	621	611	124	122	2	62-122	20	L1,
Styrene	500	568	550	114	110	3	69-129	20	--
1,1,1,2-Tetrachloroethane	500	509	502	102	100	1	70-130	20	--
1,1,2,2-Tetrachloroethane	500	519	508	104	102	2	67-128	20	--
Tetrachloroethene	500	519	523	104	105	1	68-130	20	--
Tetrahydrofuran	500	528	555	106	111	5	43-130	20	--
Toluene	500	545	535	109	107	2	70-130	20	--
1,2,3-Trichlorobenzene	500	518	513	104	103	1	60-134	20	--
1,2,4-Trichlorobenzene	500	544	516	109	103	5	60-138	20	--
1,1,1-Trichloroethane	500	642	603	128	121	6	70-134	20	--
1,1,2-Trichloroethane	500	508	494	102	99	3	70-130	20	--
Trichloroethene	500	561	553	112	111	1	70-133	20	--
Trichlorofluoromethane	500	535	551	107	110	3	70-137	20	--
1,2,3-Trichloropropane	500	493	512	99	102	4	66-126	20	--
1,2,4-Trimethylbenzene	500	610	593	122	119	3	60-126	20	--
1,3,5-Trimethylbenzene	500	600	593	120	119	1	60-127	20	--
Vinyl acetate	500	507	447	101	89	13	56-143	30	--
Vinyl chloride	500	474	487	95	97	3	70-130	20	--
o-Xylene	500	542	528	108	106	3	70-130	20	--
m- & p-Xylenes	1000	1130	1080	113	108	5	70-150	20	--

Data Qualifier Definitions

Qualifier

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

TP0422242	8260B	1,1-Dichloropropene	LCS/LCSD	
TP0422242	8260B	n-Propylbenzene	LCS	

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

TP0422242	8260B	Bromomethane	LCS/LCSD	Compound co-elutes with methanol from extraction resulting in reduced recoveries.
TP0422242	8260B	Chloroethane	LCS/LCSD	Compound co-elutes with methanol from extraction resulting in reduced recoveries.

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

AZ14434-001	8260B	Tetrachloroethene	MS/MSD	Dechlorination of pentachloroethane in QC spike into tetrachloroethene due to sample matrix suspected.

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

AZ14434-001	8260B	Pentachloroethane	MS/MSD	Dechlorination of pentachloroethane in QC spike into tetrachloroethene due to sample matrix suspected.
AZ14434-001	8260B	Vinyl acetate	MS/MSD	

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

AZ14434-001	8260B	Bromomethane	MSD	Compound co-elutes with methanol from extraction resulting in reduced recoveries.
AZ14434-001	8260B	Chloroethane	MS/MSD	Compound co-elutes with methanol from extraction resulting in reduced recoveries.

Definition of terms:

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

WSTF CHAIN OF CUSTODY RECORD – OCA

Date 4/17/2024

AZ14434

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

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

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

Analytical Requirements

Special Instructions

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

Return Address:

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

Sample Number	Sample Location	# of Containers	Sample Matrix*	VOC – 8260	Charge Number (WSTF Use Only)	Comments
2404091330	300-002-GSV, 10bgs	2	S	X	23EEHWMU	
2404100910	300-002-GSV, 40bgs	2	S	X		
2404101320	300-002-GSV, 80bgs	2	S	X		
2404101330	300-002-GSV, 80bgs	2	S	X		

Relinquished By:	Date/Time:	Accepted By:	Date/Time:
[signature]	4/17/24 10:00	Jana Jourell OCA AZ	4/18/24 1000 on ice 5.4-0.3=5.1 #12

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

WSTF 381B (05/2016)

OCA Report and Data Package (IV) NRE AZ14434 Page 18 of 195 Compiled Date 05/07/24

Sample Receipt Report

Laboratory Reference: **NRE AZ14434** Logged in by TT

Received:	04/18/24 10:00	Company Name:	Navarro Research and Engineeri
Project Name:	Nasa White Sands Test Facility	Project Manager:	Mr. Kyle Williams
Project #:	23EEHWMU.0007	COC:	Complete

Sample Quantity

4 Soil

Container Quantity

8 VOA - 10mL MeOH

Transportation Containers

Transportation Case ID	Method of Shipment	Shipping Container	Ice	Temperature	Custody Seal
TC-AZ14434-1	FEDEX	Cooler	Wet	5.4+(-0.3)=5.1ºC	Intact-Signed

Login Preservation Checks

Container #	Preservative	pH	Chlorine	Head Space	Conductivity	Preservation Note
All containers	None	NC	NC	NA	NC	

Receipt Hold Times

All samples received within hold time.

Container Conditions

Container #	Container Condition	Container Label	Custody Seals
All containers	Good	Complete	None

Inappropriate Containers

All samples received in appropriate containers.

Inappropriate Chemical Preservation

All samples received with appropriate chemical preservation.

Inappropriate Temperature Preservation

All samples received with appropriate temperature preservation.

Notes

Client Notified _____ By _____ On _____

OCA Data Package
Level IV

The original laboratory report precedes this section and it contains information (e.g., Chain(s) of Custody, Case Narrative(s), Qualifier(s) and their definitions, etc.) which may assist data users. Specific project requirements that are not addressed in the original laboratory report have been placed in this section.

Method EPA 8260B

Volatile Organic Compounds (VOCs) by Gas Chromatography- Mass Spectrometry (GCMS)

VOCs by 8260B

Orange Coast Analytical, Inc.
An Alliance Technical Group Company
3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960

Surrogate Summary Report

Lab Reference #: **NRE AZ14434**
Project Name: **Nasa White Sands Test Facility**
Project #: **23EEHWMU.0007**

Method	Matrix
8260B	S

Lab Sample #	Client Sample #	Surr1	Surr2	Surr3
MBTT0418243		107	113	117
LCSTP0422242		116	114	120
LCSDTP0422242		117	111	120
MSAZ14434-001	2404091330	116	116	118
MSDAZ14434-001	2404091330	115	116	120
AZ14434-001	2404091330	112	114	120
AZ14434-002	2404100910	112	115	122
AZ14434-003	2404101320	108	111	117
AZ14434-004	2404101330	108	116	120

Surr1 = Dibromofluoromethane
Surr2 = Toluene-d8
Surr3 = 4-Bromofluorobenzene

Control Limits

Surrogate	LCL (%)	UCL (%)
Dibromofluoromethane	65	130
Toluene-d8	59	130
4-Bromofluorobenzene	50	130

This report is to be used only to assist in reviewing an official report. It is not comprehensive of all relevant information and all listed information must be confirmed by cross-referencing with the official laboratory report from which this report was generated.

Orange Coast Analytical, Inc.
An Alliance Technical Group Company
3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960

Method Blank Association Report

Lab Reference #: **NRE AZ14434**

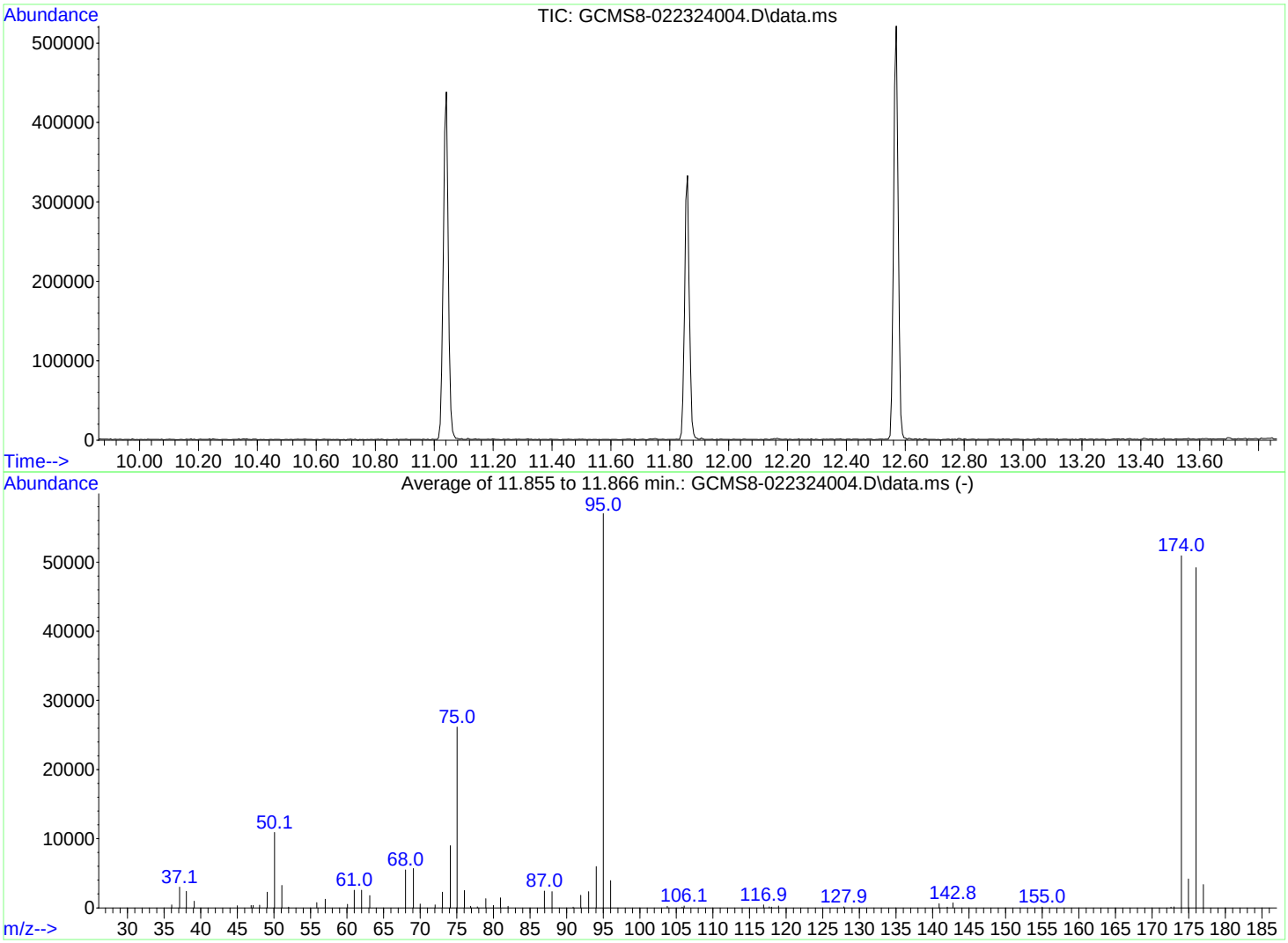
Method	Matrix
5035A	S

Lab Sample #	Client Sample #	Data File Name	Date/Time Analyzed
MBTT0418243	Method Blank	GCMS8-042224008.D	4/22/2024 1:51:00 PM
LCSTP0422242		GCMS8-042224009.D	4/22/2024 2:14:00 PM
LCSDTP0422242		GCMS8-042224010.D	4/22/2024 2:38:00 PM
AZ14434-001	2404091330	GCMS8-042224011.D	4/22/2024 3:01:00 PM
MSAZ14434-001	2404091330	GCMS8-042224012.D	4/22/2024 3:24:00 PM
MSDAZ14434-001	2404091330	GCMS8-042224013.D	4/22/2024 3:47:00 PM
AZ14434-002	2404100910	GCMS8-042224014.D	4/22/2024 4:11:00 PM
AZ14434-003	2404101320	GCMS8-042224015.D	4/22/2024 4:34:00 PM
AZ14434-004	2404101330	GCMS8-042224016.D	4/22/2024 4:58:00 PM

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324004.D
Acq On : 23 Feb 2024 13:20
Operator :
Sample : CBTP0223241 + BFB - Updated Tune
Misc : PAV 1150, 1149
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Title : 8260 Calibration
Last Update : Mon Feb 26 12:39:51 2024



AutoFind: Scans 1290, 1291, 1292; Background Corrected with Scan 1284

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.1	10892	PASS
75	95	30	60	45.8	26152	PASS
95	95	100	100	100.0	57053	PASS
96	95	5	9	6.9	3921	PASS
173	174	0.00	2	0.3	163	PASS
174	95	50	100	89.3	50936	PASS
175	174	5	9	8.2	4187	PASS
176	174	95	101	96.6	49213	PASS
177	176	5	9	6.8	3358	PASS

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324004.D
Acq On : 23 Feb 2024 13:20
Operator :
Sample : CBTP0223241 + BFB - Updated Tune
Misc : PAV 1150, 1149
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 26 12:49:14 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	6.251	168	125257	10.00	ppb		0.01
42) 1,4-Difluorobenzene	7.563	114	198909	10.00	ppb		0.00
50) Chlorobenzene-d5	11.041	117	181626	10.00	ppb		0.00
74) 1,4-Dichlorobenzene-d4	12.569	152	98855	10.00	ppb		0.00
System Monitoring Compounds							
35) Dibromofluoromethane (S)	6.099	113	54357	10.62	ppb		0.00
Spiked Amount 10.000			Recovery = 106.20%				
56) Toluene-d8 (S)	9.791	98	196425	11.04	ppb		0.00
Spiked Amount 10.000			Recovery = 110.40%				
76) 4-Bromofluorobenzene (S)	11.860	95	76608	11.21	ppb		0.00
Spiked Amount 10.000			Recovery = 112.10%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.			
3) Chloromethane	0.000		0	N.D.			
4) Vinyl chloride	0.000		0	N.D.			
5) Bromomethane	0.000		0	N.D.			
6) Chloroethane	0.000		0	N.D.			
7) Trichlorofluoromethane	0.000		0	N.D.			
8) Diethyl ether	0.000		0	N.D.			
9) 1,1-Dichloroethene	0.000		0	N.D.			
10) Freon 113	0.000		0	N.D.			
11) Acetone	3.028	58	592	-0.0115	ppb	#	51
12) Iodomethane	0.000		0	N.D.			
13) Carbon disulfide	3.119	76	340	0.0197	ppb		75
14) Allyl chloride	0.000		0	N.D.			
15) Methylene chloride	3.485	84	7570	-0.2497	ppb		94
16) t-Butanol (TBA)	0.000		0	N.D.			
17) Acrylonitrile	0.000		0	N.D.			
18) Methyl t-butyl ether (...	0.000		0	N.D.			
19) trans-1,2-Dichloroethene	0.000		0	N.D.			
20) n-Hexane	0.000		0	N.D.			
21) 1,1-Dichloroethane	0.000		0	N.D.			
22) Vinyl acetate	0.000		0	N.D.			
23) 2-chloro-1,3-butadiene	0.000		0	N.D.			
24) Diisopropyl ether (DIPE)	0.000		0	N.D.			
25) Ethyl t-butyl ether (E...	0.000		0	N.D.			
26) 2-Butanone (MEK)	0.000		0	N.D.			
27) cis-1,2-Dichloroethene	0.000		0	N.D.			
28) 2,2-Dichloropropane	0.000		0	N.D.			
29) Propionitrile	0.000		0	N.D.			
30) Methyl acrylate	0.000		0	N.D.			
31) Methacrylonitrile	0.000		0	N.D.			
32) Bromochloromethane	0.000		0	N.D.			
33) Chloroform	0.000		0	N.D.			
34) Tetrahydrofuran	0.000		0	N.D.			
36) 1,1,1-Trichloroethane	0.000		0	N.D.			
37) 1-Chlorobutane	0.000		0	N.D.	d		
38) 1,1-Dichloropropene	0.000		0	N.D.			
39) Carbon tetrachloride	0.000		0	N.D.			
40) Benzene	0.000		0	N.D.			
41) 1,2-Dichloroethane	0.000		0	N.D.			
43) t- Amyl methyl ether (...	0.000		0	N.D.			
44) Trichloroethene	0.000		0	N.D.			
45) 1,2-Dichloropropane	0.000		0	N.D.			
46) Methyl methacrylate	0.000		0	N.D.			

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324004.D
Acq On : 23 Feb 2024 13:20
Operator :
Sample : CBTP0223241 + BFB - Updated Tune
Misc : PAV 1150, 1149
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 26 12:49:14 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

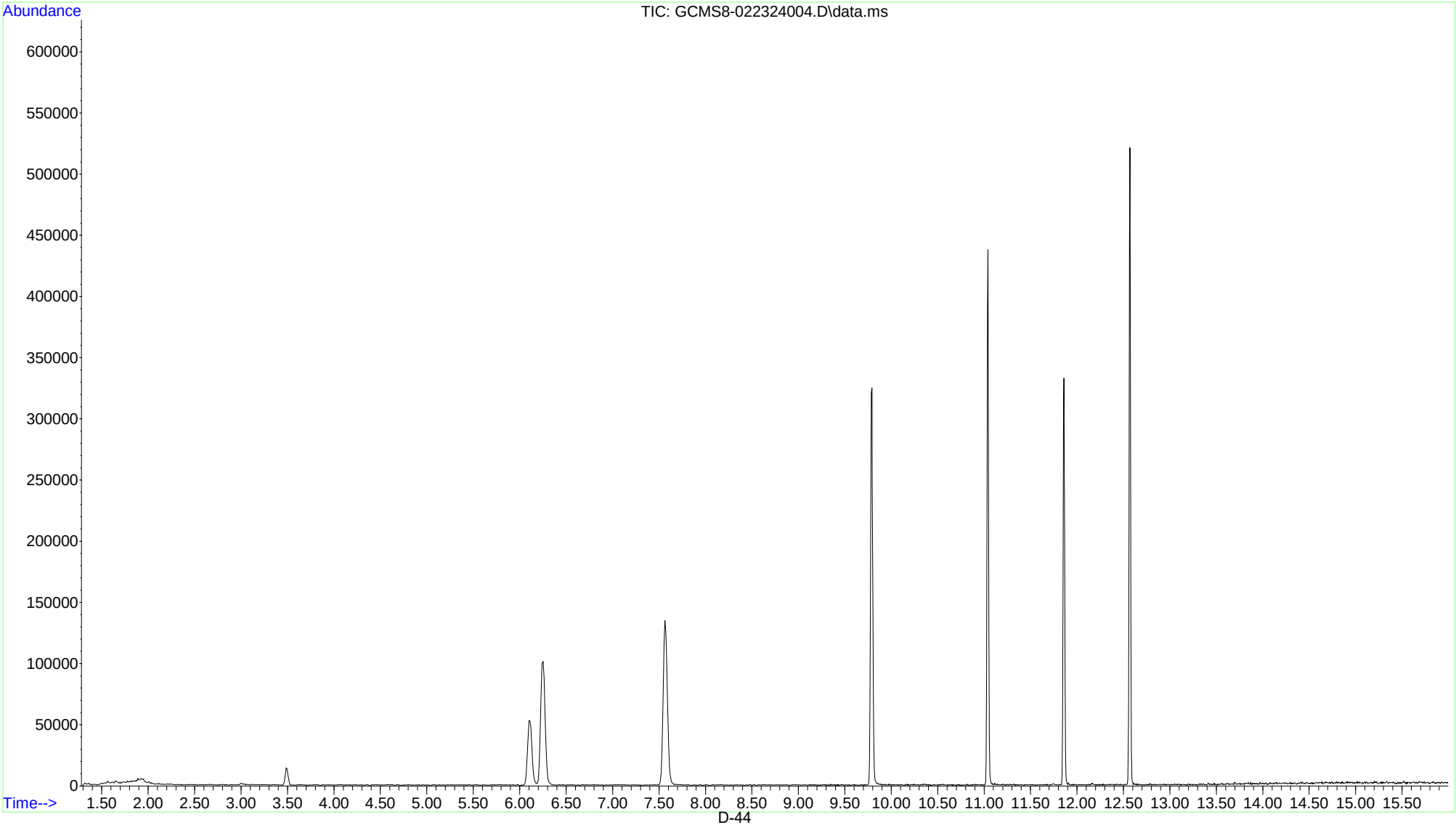
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
47) Dibromomethane	0.000		0	N.D.			
48) Bromodichloromethane	0.000		0	N.D.			
49) 2-nitro-propane	0.000		0	N.D.			
51) Chloromethyl cyanide	0.000		0	N.D.			
52) 2-Chloroethyl vinyl ether	0.000		0	N.D.			
53) cis-1,3-Dichloropropene	0.000		0	N.D.			
54) 4-Methyl-2-pentanone	0.000		0	N.D. d			
55) 1,1-Dichloro-2-propanone	0.000		0	N.D.			
57) Toluene	0.000		0	N.D.			
58) trans-1,3-Dichloropropene	0.000		0	N.D.			
59) Ethyl methacrylate	0.000		0	N.D.			
60) 1,1,2-Trichloroethane	0.000		0	N.D.			
61) 1,3-Dichloropropane	0.000		0	N.D.			
62) 2-Hexanone	0.000		0	N.D.			
63) Tetrachloroethene	0.000		0	N.D.			
64) Dibromochloromethane	0.000		0	N.D.			
65) 1,2-Dibromoethane	0.000		0	N.D.			
66) Chlorobenzene	0.000		0	N.D.			
67) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.			
68) Ethylbenzene	0.000		0	N.D. d			
69) m- & p-Xylenes	0.000		0	N.D.			
70) o-Xylene	0.000		0	N.D.			
71) Styrene	0.000		0	N.D.			
72) Bromoform	0.000		0	N.D.			
73) Isopropylbenzene	0.000		0	N.D.			
75) cis-1,4-dichloro-2-butene	0.000		0	N.D.			
77) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.			
78) trans-1,4-Dichloro-2-b...	0.000		0	N.D.			
79) 1,2,3-Trichloropropane	0.000		0	N.D.			
80) Bromobenzene	0.000		0	N.D.			
81) n-Propylbenzene	12.018	91	85	0.0029	ppb		61
82) 2-Chlorotoluene	0.000		0	N.D.			
83) 4-Ethyltoluene	0.000		0	N.D. d			
84) 1,3,5-Trimethylbenzene	0.000		0	N.D.			
85) 4-Chlorotoluene	12.144	91	128	0.0062	ppb	#	48
86) tert-Butylbenzene	0.000		0	N.D.			
87) 1,2,4-Trimethylbenzene	12.354	105	152	0.0073	ppb	#	27
88) Pentachloroethane	0.000		0	N.D.			
89) sec-Butylbenzene	12.459	105	86	0.0033	ppb		56
90) 4-Isopropyltoluene	12.538	119	165	0.0073	ppb		49
91) 1,3-Dichlorobenzene	12.533	146	126	0.0098	ppb	#	26
92) 1,4-Dichlorobenzene	12.580	146	401	0.0305	ppb	#	30
93) n-Butylbenzene	12.785	92	271	0.0240	ppb	#	40
94) 1,2-Dichlorobenzene	12.800	146	93	0.0076	ppb	#	24
95) Hexachloroethane	0.000		0	N.D.			
96) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.			
97) Nitrobenzene	0.000		0	N.D.			
98) 1,2,4-Trichlorobenzene	13.704	180	485	0.0583	ppb	#	18
99) Hexachlorobutadiene	0.000		0	N.D.			
100) Naphthalene	13.840	128	678	0.0282	ppb		69
101) 1,2,3-Trichlorobenzene	13.972	180	210	0.0259	ppb		74

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324004.D
Acq On : 23 Feb 2024 13:20
Operator :
Sample : CBTP0223241 + BFB - Updated Tune
Misc : PAV 1150, 1149
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 26 12:49:14 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration



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3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960

Tune Standard File Association Report

Sequence Sample ID **CBTP0223241 + BFB - Updated Tune**

Target Mass	Compare Mass	Raw Abundance	Relative Abundance (%)	Lower Limit (%)	Upper Limit (%)	P/F
50	95	10892	**19.1**	15	40	P
75	95	26152	**45.8**	30	60	P
95	95	57053	**100**	100	100	-
96	95	3921	**6.9**	5	9	P
173	174	163	**0.3**	0	2	P
174	95	50936	**89.3**	50	100	P
175	174	4187	**8.2**	5	9	P
176	174	49213	**96.6**	95	101	P
177	176	3358	**6.8**	5	9	P

Lab Sample #	Client Sample #	Data File Name	Date/Time Analyzed
CBTP0223241		GCMS8-022324004.D	02/23/2024 13:20
CPTP02232402		GCMS8-022324005.D	02/23/2024 13:59
CPTP02232403		GCMS8-022324006.D	02/23/2024 14:23
CPTP02232404		GCMS8-022324007.D	02/23/2024 14:47
CPTP02232405		GCMS8-022324008.D	02/23/2024 15:11
CPTP02232406		GCMS8-022324009.D	02/23/2024 15:34
CPTP02232401		GCMS8-022324010.D	02/23/2024 15:57
CPTP02232407		GCMS8-022324011.D	02/23/2024 16:21
CPTP02232408		GCMS8-022324012.D	02/23/2024 16:44
CPTP02232409		GCMS8-022324013.D	02/23/2024 17:08
CPTP02232410		GCMS8-022324014.D	02/23/2024 17:32
CPTP02232411		GCMS8-022324015.D	02/23/2024 17:55
SSCVTP0223241		GCMS8-022324018.D	02/23/2024 19:08

BFB: 02/23/2024 13:20

Last Analysis: 02/23/2024 19:08

Time Difference (Hours): 5.80

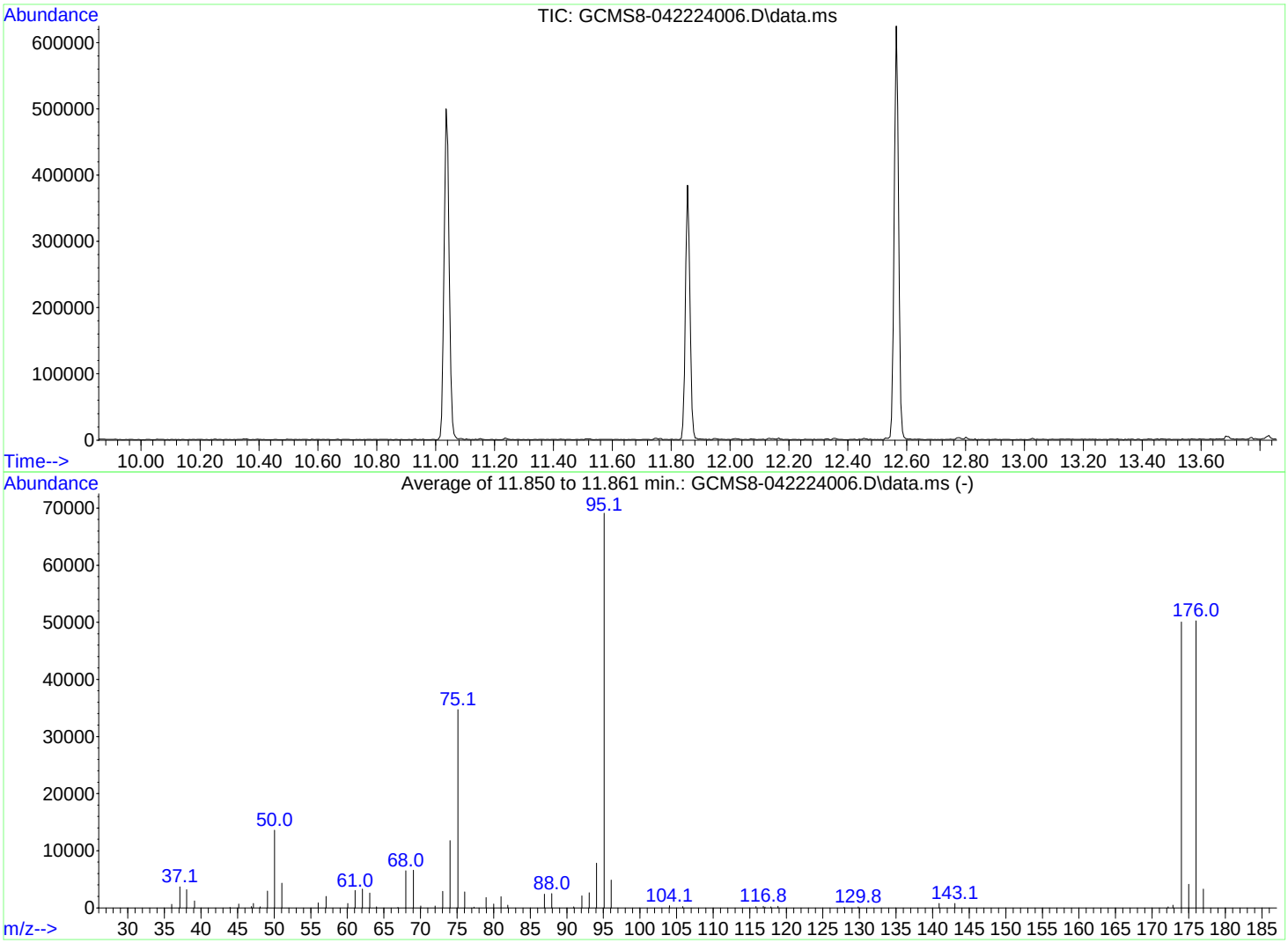
Samples and standards listed here are all associated with the same GCMS tune standard (e.g., BFB or DFTPP). All analyses are required to be performed within a 12 hour window starting with the tune standard.

A copy of the tune report is provided prior to this report.

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224006.D
Acq On : 22 Apr 2024 13:04
Operator :
Sample : BFBTP0422242 - Oven Inserts Removed
Misc : PAV 1150, 1149
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Title : 8260 Calibration
Last Update : Mon Feb 26 12:39:51 2024



AutoFind: Scans 1289, 1290, 1291; Background Corrected with Scan 1283

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.7	13605	PASS
75	95	30	60	50.3	34736	PASS
95	95	100	100	100.0	69080	PASS
96	95	5	9	7.0	4846	PASS
173	174	0.00	2	1.0	485	PASS
174	95	50	100	72.5	50053	PASS
175	174	5	9	8.2	4102	PASS
176	174	95	101	100.5	50280	PASS
177	176	5	9	6.5	3283	PASS

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224006.D
Acq On : 22 Apr 2024 13:04
Operator :
Sample : BFBTP0422242 - Oven Inserts Removed
Misc : PAV 1150, 1149
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 22 13:45:41 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	6.251	168	136543	10.00	ppb		0.01
42) 1,4-Difluorobenzene	7.563	114	222760	10.00	ppb		0.00
50) Chlorobenzene-d5	11.036	117	198396	10.00	ppb		0.00
74) 1,4-Dichlorobenzene-d4	12.564	152	106669	10.00	ppb		0.00
System Monitoring Compounds							
35) Dibromofluoromethane (S)	6.109	113	57881	10.37	ppb		0.00
Spiked Amount 10.000			Recovery = 103.70%				
56) Toluene-d8 (S)	9.791	98	214137	11.02	ppb		0.00
Spiked Amount 10.000			Recovery = 110.20%				
76) 4-Bromofluorobenzene (S)	11.855	95	86327	11.71	ppb		0.00
Spiked Amount 10.000			Recovery = 117.10%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.			
3) Chloromethane	1.563	50	164	0.0173	ppb	#	43
4) Vinyl chloride	0.000		0	N.D.			
5) Bromomethane	0.000		0	N.D.			
6) Chloroethane	0.000		0	N.D.			
7) Trichlorofluoromethane	0.000		0	N.D.			
8) Diethyl ether	0.000		0	N.D.			
9) 1,1-Dichloroethene	0.000		0	N.D.			
10) Freon 113	0.000		0	N.D.			
11) Acetone	0.000		0	N.D.			
12) Iodomethane	0.000		0	N.D.			
13) Carbon disulfide	3.129	76	1192	0.0635	ppb		75
14) Allyl chloride	0.000		0	N.D.			
15) Methylene chloride	3.496	84	14155	0.5680	ppb		96
16) t-Butanol (TBA)	0.000		0	N.D.			
17) Acrylonitrile	0.000		0	N.D.			
18) Methyl t-butyl ether (...	0.000		0	N.D.			
19) trans-1,2-Dichloroethene	0.000		0	N.D.			
20) n-Hexane	0.000		0	N.D.			
21) 1,1-Dichloroethane	0.000		0	N.D.			
22) Vinyl acetate	0.000		0	N.D.			
23) 2-chloro-1,3-butadiene	0.000		0	N.D.			
24) Diisopropyl ether (DIPE)	0.000		0	N.D.			
25) Ethyl t-butyl ether (E...	0.000		0	N.D.			
26) 2-Butanone (MEK)	0.000		0	N.D.			
27) cis-1,2-Dichloroethene	0.000		0	N.D.			
28) 2,2-Dichloropropane	0.000		0	N.D.			
29) Propionitrile	0.000		0	N.D.			
30) Methyl acrylate	0.000		0	N.D.			
31) Methacrylonitrile	0.000		0	N.D.			
32) Bromochloromethane	0.000		0	N.D.			
33) Chloroform	0.000		0	N.D.			
34) Tetrahydrofuran	0.000		0	N.D.			
36) 1,1,1-Trichloroethane	0.000		0	N.D.			
37) 1-Chlorobutane	6.241	56	2390	No Calib			
38) 1,1-Dichloropropene	0.000		0	N.D.			
39) Carbon tetrachloride	0.000		0	N.D.			
40) Benzene	6.760	78	183	0.0070	ppb		63
41) 1,2-Dichloroethane	0.000		0	N.D.			
43) t- Amyl methyl ether (...	0.000		0	N.D.			
44) Trichloroethene	0.000		0	N.D.			
45) 1,2-Dichloropropane	0.000		0	N.D.			
46) Methyl methacrylate	0.000		0	N.D.			

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224006.D
Acq On : 22 Apr 2024 13:04
Operator :
Sample : BFBTP0422242 - Oven Inserts Removed
Misc : PAV 1150, 1149
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 22 13:45:41 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

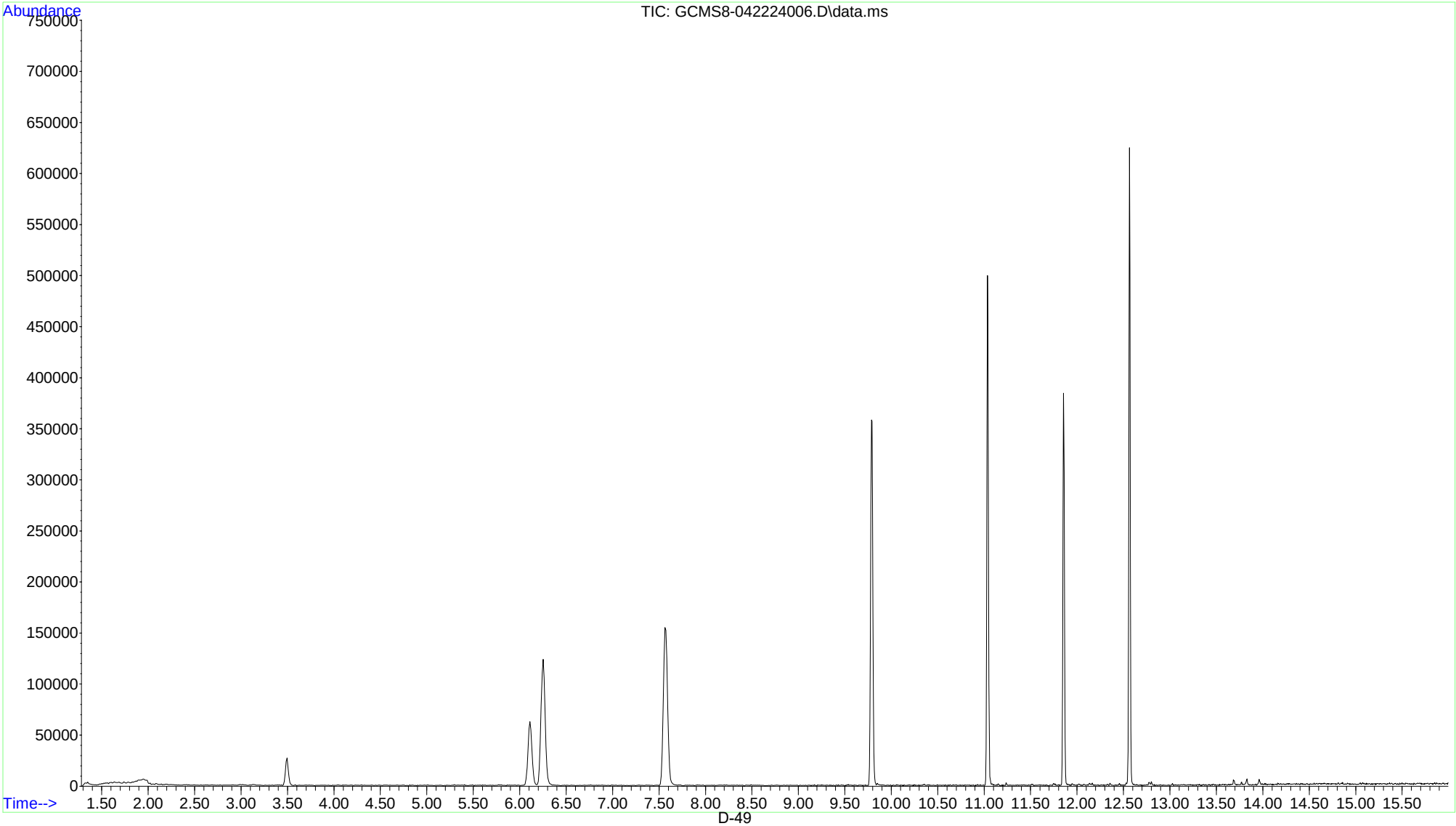
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
47) Dibromomethane	0.000		0	N.D.			
48) Bromodichloromethane	0.000		0	N.D.			
49) 2-nitro-propane	0.000		0	N.D.			
51) Chloromethyl cyanide	0.000		0	N.D.			
52) 2-Chloroethyl vinyl ether	0.000		0	N.D.			
53) cis-1,3-Dichloropropene	9.524	75	79	0.0082	ppb	#	12
54) 4-Methyl-2-pentanone	9.781	58	834	0.4453	ppb	#	1
55) 1,1-Dichloro-2-propanone	9.791	83	218	No Calib	#		
57) Toluene	9.849	92	339	0.0215	ppb	#	50
58) trans-1,3-Dichloropropene	10.101	75	108	0.0123	ppb	#	41
59) Ethyl methacrylate	0.000		0	N.D.			
60) 1,1,2-Trichloroethane	0.000		0	N.D.			
61) 1,3-Dichloropropane	10.395	76	87	0.0084	ppb	#	32
62) 2-Hexanone	0.000		0	N.D.			
63) Tetrachloroethene	0.000		0	N.D.			
64) Dibromochloromethane	0.000		0	N.D.			
65) 1,2-Dibromoethane	0.000		0	N.D.			
66) Chlorobenzene	11.062	112	664	0.0396	ppb		94
67) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.			
68) Ethylbenzene	11.152	91	601	0.0209	ppb	#	70
69) m- & p-Xylenes	11.236	106	327	0.0291	ppb	#	55
70) o-Xylene	0.000		0	N.D.			
71) Styrene	11.525	104	545	0.0313	ppb	#	56
72) Bromoform	0.000		0	N.D.			
73) Isopropylbenzene	11.761	105	868	0.0311	ppb		57
75) cis-1,4-dichloro-2-butene	0.000		0	N.D.			
77) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.			
78) trans-1,4-Dichloro-2-b...	0.000		0	N.D.			
79) 1,2,3-Trichloropropane	0.000		0	N.D.			
80) Bromobenzene	11.945	156	165	0.0234	ppb	#	2
81) n-Propylbenzene	12.018	91	783	0.0246	ppb		59
82) 2-Chlorotoluene	0.000		0	N.D.			
83) 4-Ethyltoluene	12.128	105	729	No Calib			
84) 1,3,5-Trimethylbenzene	12.128	105	729	0.0331	ppb		66
85) 4-Chlorotoluene	12.144	91	1294	0.0582	ppb	#	48
86) tert-Butylbenzene	0.000		0	N.D.			
87) 1,2,4-Trimethylbenzene	12.354	105	907	0.0402	ppb		76
88) Pentachloroethane	0.000		0	N.D.			
89) sec-Butylbenzene	12.459	105	913	0.0328	ppb		56
90) 4-Isopropyltoluene	12.543	119	780	0.0321	ppb		71
91) 1,3-Dichlorobenzene	12.528	146	844	0.0606	ppb	#	73
92) 1,4-Dichlorobenzene	12.575	146	816	0.0574	ppb	#	30
93) n-Butylbenzene	12.774	92	908	0.0745	ppb	#	67
94) 1,2-Dichlorobenzene	12.801	146	897	0.0679	ppb		92
95) Hexachloroethane	0.000		0	N.D.			
96) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.			
97) Nitrobenzene	0.000		0	N.D.			
98) 1,2,4-Trichlorobenzene	13.683	180	1276	0.1421	ppb		93
99) Hexachlorobutadiene	13.772	225	175	0.0560	ppb	#	84
100) Naphthalene	13.830	128	3259	0.1256	ppb		86
101) 1,2,3-Trichlorobenzene	13.961	180	1400	0.1603	ppb		87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224006.D
Acq On : 22 Apr 2024 13:04
Operator :
Sample : BFBTP0422242 - Oven Inserts Removed
Misc : PAV 1150, 1149
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 22 13:45:41 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration



D-49

Orange Coast Analytical, Inc.
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4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960

Tune Standard File Association Report

Sequence Sample ID **BFBTP0422242 - Oven Inserts Removed**

Target Mass	Compare Mass	Raw Abundance	Relative Abundance (%)	Lower Limit (%)	Upper Limit (%)	P/F
50	95	13605	**19.7**	15	40	P
75	95	34736	**50.3**	30	60	P
95	95	69080	**100**	100	100	-
96	95	4846	**7**	5	9	P
173	174	485	**1**	0	2	P
174	95	50053	**72.5**	50	100	P
175	174	4102	**8.2**	5	9	P
176	174	50280	**100.5**	95	101	P
177	176	3283	**6.5**	5	9	P

Lab Sample #	Client Sample #	Data File Name	Date/Time Analyzed
BFBTP0422242		GCMS8-042224006.D	04/22/2024 13:04
CCVTP0422242		GCMS8-042224007.D	04/22/2024 13:28
MBTT0418243		GCMS8-042224008.D	04/22/2024 13:51
LCSTP0422242		GCMS8-042224009.D	04/22/2024 14:14
LCSDTP0422242		GCMS8-042224010.D	04/22/2024 14:38
AZ14434-001	2404091330	GCMS8-042224011.D	04/22/2024 15:01
MSAZ14434-001	2404091330	GCMS8-042224012.D	04/22/2024 15:24
MSDAZ14434-001	2404091330	GCMS8-042224013.D	04/22/2024 15:47
AZ14434-002	2404100910	GCMS8-042224014.D	04/22/2024 16:11
AZ14434-003	2404101320	GCMS8-042224015.D	04/22/2024 16:34
AZ14434-004	2404101330	GCMS8-042224016.D	04/22/2024 16:58

BFB: 04/22/2024 13:04

Last Analysis: 04/22/2024 16:58

Time Difference (Hours): 3.90

Samples and standards listed here are all associated with the same GCMS tune standard (e.g., BFB or DFTPP). All analyses are required to be performed within a 12 hour window starting with the tune standard.

A copy of the tune report is provided prior to this report.

VOC Internal Standard and Retention Time Summary

Initial Calibration vs. Initial (a.k.a. Secondary Source) Verification & Continuing Calibration (a.k.a. Daily) Verification

Lab: Orange Coast Analytical (Alliance TG) - Phoenix, AZ
Lab Reference #: NRE AZ14434
Instrument: GCMS8

				ISTD1		ISTD2		ISTD3		ISTD4	
Type	**Date Acquired**	**Data File Name**	**Sequence Sample ID**	**Response**	**RT**	**Response**	**RT**	**Response**	**RT**	**Response**	**RT**
Calibration Midpoint	02/23/24 15:57	GCMS8-022324010.D	CPTP02232401 - 10ppb	119747	6.24	192189	7.56	177566	11.04	97720	12.57
			Acceptable Lower Limits:	59874	5.74	96095	7.06	88783	10.54	48860	12.07
			Acceptable Upperr Limits:	239494	6.74	384378	8.06	355132	11.54	195440	13.07

				ISTD1		ISTD2		ISTD3		ISTD4	
Verification Std.	**Date Acquired**	**Data File Name**	**Sequence Sample ID**	**Response**	**RT**	**Response**	**RT**	**Response**	**RT**	**Response**	**RT**
SSCV	02/23/24 19:08	GCMS8-022324018.D	SSCVTP0223241 PAV 1150, 1149	120097	6.25	192075	7.56	170804	11.04	96389	12.57
CCV	04/22/24 13:28	GCMS8-042224007.D	CCVTP0422242	127498	6.24	209172	7.56	189793	11.04	107698	12.56

ISTD1 = Pentafluorobenzene
ISTD2 = 1,4-Difluorobenzene
ISTD3 = Chlorobenzene-d5
ISTD4 = 1,4-Dichlorobenzene-d4

Acc. Response = 50-200%
Acc. RT = ±0.5min

VOC Internal Standard and Retention Time Summary

Sample Analyses vs. Continuing Calibration (AKA Daily Std) Verification

Lab: Orange Coast Analytical (Alliance TG) - Phoenix, AZ
Lab Reference #: NRE AZ14434
Instrument: GCMS8

				ISTD1		ISTD2		ISTD3		ISTD4	
Client ID	**Date Acquired**	**Data File Name**	**Sequence Sample ID**	**Response**	**RT**	**Response**	**RT**	**Response**	**RT**	**Response**	**RT**
	02/23/24 13:20	GCMS8-022324004.D	CBTP0223241 + BFB - Updated Tune	125257	6.25	198909	7.56	181626	11.04	98855	12.57
	02/23/24 13:59	GCMS8-022324005.D	CPTP02232402 - 0.25ppb	126016	6.25	200613	7.57	176339	11.04	98445	12.57
	02/23/24 14:23	GCMS8-022324006.D	CPTP02232403 - 0.5ppb	121785	6.25	197696	7.56	175923	11.04	100102	12.57
	02/23/24 14:47	GCMS8-022324007.D	CPTP02232404 - 1ppb	127248	6.25	199732	7.57	176987	11.04	100322	12.57
	02/23/24 15:11	GCMS8-022324008.D	CPTP02232405 - 2ppb	126730	6.25	199292	7.56	181107	11.04	99044	12.57
	02/23/24 15:34	GCMS8-022324009.D	CPTP02232406 - 5ppb	128031	6.25	212594	7.56	186433	11.04	102129	12.57
	02/23/24 15:57	GCMS8-022324010.D	CPTP02232401 - 10ppb	119747	6.24	192189	7.56	177566	11.04	97720	12.57
	02/23/24 16:21	GCMS8-022324011.D	CPTP02232407 - 20ppb	124620	6.25	199074	7.56	179193	11.04	98960	12.57
	02/23/24 16:44	GCMS8-022324012.D	CPTP02232408 - 30ppb	122405	6.25	199973	7.56	179712	11.04	98176	12.57
	02/23/24 17:08	GCMS8-022324013.D	CPTP02232409 - 40ppb	124451	6.25	202422	7.57	177282	11.04	99311	12.57
	02/23/24 17:32	GCMS8-022324014.D	CPTP02232410 - 50ppb	127668	6.25	201560	7.56	178621	11.04	96588	12.57
	02/23/24 17:55	GCMS8-022324015.D	CPTP02232411 - 100ppb	122171	6.24	189638	7.56	168383	11.04	92728	12.57
	02/23/24 19:08	GCMS8-022324018.D	SSCVTP0223241 PAV 1150, 1149	120097	6.25	192075	7.56	170804	11.04	96389	12.57

ISTD1 = Pentafluorobenzene
ISTD2 = 1,4-Difluorobenzene
ISTD3 = Chlorobenzene-d5
ISTD4 = 1,4-Dichlorobenzene-d4

VOC Internal Standard and Retention Time Summary

Sample Analyses vs. Continuing Calibration (AKA Daily Std) Verification

Lab: Orange Coast Analytical (Alliance TG) - Phoenix, AZ
Lab Reference #: NRE AZ14434
Instrument: GCMS8

				ISTD1		ISTD2		ISTD3		ISTD4	
Daily Standard	**Date Acquired**	**Data File Name**	**Sequence Sample ID**	**Response**	**RT**	**Response**	**RT**	**Response**	**RT**	**Response**	**RT**
VOC Daily	04/22/24 13:28	GCMS8-042224007.D	CCVTP0422242	127498	6.24	209172	7.56	189793	11.04	107698	12.56
			Acceptable Lower Limits:	63749	5.74	104586	7.06	94897	10.54	53849	12.06
			Acceptable Upperr Limits:	254996	6.74	418344	8.06	379586	11.54	215396	13.06

				ISTD1		ISTD2		ISTD3		ISTD4	
Client ID	**Date Acquired**	**Data File Name**	**Sequence Sample ID**	**Response**	**RT**	**Response**	**RT**	**Response**	**RT**	**Response**	**RT**
	04/22/24 13:04	GCMS8-042224006.D	BFBTP0422242 - Oven Inserts Removed	136543	6.25	222760	7.56	198396	11.04	106669	12.56
	04/22/24 13:28	GCMS8-042224007.D	CCVTP0422242	127498	6.24	209172	7.56	189793	11.04	107698	12.56
	04/22/24 13:51	GCMS8-042224008.D	MBTT0418243 @ 800uL	125781	6.24	209358	7.56	190628	11.04	103502	12.56
	04/22/24 14:14	GCMS8-042224009.D	LCSTP0422242 @ 800uL	119106	6.24	204880	7.56	186863	11.04	102954	12.56
	04/22/24 14:38	GCMS8-042224010.D	LCSDTP0422242 @ 800uL	124784	6.25	215443	7.56	195404	11.04	105904	12.56
2404091330	04/22/24 15:01	GCMS8-042224011.D	AZ14434-001 @ 790uL (1:1 of 10.1g in 10mL)	119767	6.24	208412	7.56	186317	11.04	102030	12.56
2404091330	04/22/24 15:24	GCMS8-042224012.D	MSAZ14434-001 @ 790uL (1:1 of 10.1g in 10mL)	123388	6.24	215259	7.56	194703	11.04	108062	12.56
2404091330	04/22/24 15:47	GCMS8-042224013.D	MSDAZ14434-001 @ 790uL (1:1 of 10.1g in 10m	124545	6.25	216490	7.56	195473	11.04	107454	12.56
2404100910	04/22/24 16:11	GCMS8-042224014.D	AZ14434-002 @ 1190uL (1:1 of 6.7g in 10mL)	120941	6.24	205593	7.56	184056	11.04	100869	12.56
2404101320	04/22/24 16:34	GCMS8-042224015.D	AZ14434-003 @ 680uL (1:1 of 11.8g in 10mL)	125255	6.25	215723	7.56	194970	11.04	107029	12.56
2404101330	04/22/24 16:58	GCMS8-042224016.D	AZ14434-004 @ 750uL (1:1 of 10.7g in 10mL)	128229	6.24	215429	7.56	195202	11.04	106537	12.56

ISTD1 = Pentafluorobenzene
ISTD2 = 1,4-Difluorobenzene
ISTD3 = Chlorobenzene-d5
ISTD4 = 1,4-Dichlorobenzene-d4

Acc. Response = 50-200%
Acc. RT = ±0.5min

Volatile Organic Analysis Data Summary

Lab Name:	Orange Coast Analytical (Alliance TG) - Phoenix, AZ	Data File Name:	GCMS8-042224011.D
Lab Reference #:	NRE AZ14434	Project Name:	Nasa White Sands Test Facility
Lab Sample ID:	AZ14434-001	Client Sample ID:	2404091330
Sample Type:	CS	Date Sampled:	04/09/24 13:30
Analysis Method:	8260B	Date Received:	04/18/24 10:00
Prep. Method:	5035A	Date Extracted:	04/09/24 13:30
Initial Sample:	10.1g	Date Analyzed:	04/22/24 15:01
Sample Extract:	10mL	Analysis Multiplier:	50
Sample Loaded:	790uL	Dilution Factor:	1
Analysis Batch:	0422242		

Units: mg/kg

Analyte	CAS #	Qualifiers:	Result	RL	MDLs	Calibration Range
Acetone	67-64-1		<0.074	0.25	0.074	0.0250-2.50
Acrylonitrile	107-13-1		<0.022	0.25	0.022	0.0500-2.50
Allyl chloride	107-05-1		<0.015	0.050	0.015	0.0500-2.50
Benzene	71-43-2		<0.011	0.050	0.011	0.0125-2.50
Bromobenzene	108-86-1		<0.018	0.050	0.018	0.0125-2.50
Bromochloromethane	74-97-5		<0.018	0.050	0.018	0.0250-2.50
Bromodichloromethane	75-27-4		<0.017	0.050	0.017	0.0125-2.50
Bromoform	75-25-2		<0.016	0.050	0.016	0.0250-2.50
Bromomethane	74-83-9		<0.014	0.25	0.014	0.0125-5.00
2-Butanone (MEK)	78-93-3		<0.036	0.25	0.036	0.250-2.50
n-Butylbenzene	104-51-8		<0.012	0.050	0.012	0.0250-2.50
tert-Butylbenzene	98-06-6		<0.013	0.050	0.013	0.0250-2.50
sec-Butylbenzene	135-98-8		<0.011	0.050	0.011	0.0125-2.50
Carbon disulfide	75-15-0		<0.017	0.10	0.017	0.0125-2.50
Carbon tetrachloride	56-23-5		<0.022	0.050	0.022	0.0250-2.50
Chlorobenzene	108-90-7		<0.012	0.050	0.012	0.0125-2.50
Chloroethane	75-00-3		<0.020	0.25	0.020	0.0125-5.00
2-Chloroethyl vinyl ether	110-75-8		<0.013	0.25	0.013	0.0250-2.50
Chloroform	67-66-3		<0.017	0.050	0.017	0.0125-2.50
Chloromethane	74-87-3		<0.019	0.25	0.019	0.0125-5.00
2-Chlorotoluene	95-49-8		<0.015	0.050	0.015	0.0125-2.50
4-Chlorotoluene	106-43-4		<0.013	0.050	0.013	0.0125-2.50
1,2-Dibromo-3-chloropropane	96-12-8		<0.019	0.10	0.019	0.0250-2.50
Dibromochloromethane	124-48-1		<0.014	0.050	0.014	0.0250-2.50
1,2-Dibromoethane	106-93-4		<0.016	0.050	0.016	0.0250-2.50
Dibromomethane	74-95-3		<0.019	0.050	0.019	0.0125-2.50
trans-1,4-Dichloro-2-butene	110-57-6		<0.014	0.050	0.014	0.0250-2.50
1,4-Dichlorobenzene	106-46-7		<0.017	0.050	0.017	0.0125-2.50
1,2-Dichlorobenzene	95-50-1		<0.015	0.050	0.015	0.0125-2.50
1,3-Dichlorobenzene	541-73-1		<0.016	0.050	0.016	0.0125-2.50
Dichlorodifluoromethane	75-71-8		<0.028	0.25	0.028	0.0250-2.00
1,1-Dichloroethane	75-34-3		<0.019	0.050	0.019	0.0250-2.50
1,2-Dichloroethane	107-06-2		<0.019	0.050	0.019	0.0125-2.50
trans-1,2-Dichloroethene	156-60-5		<0.017	0.050	0.017	0.0125-2.50
cis-1,2-Dichloroethene	156-59-2		<0.015	0.050	0.015	0.0125-2.50
1,1-Dichloroethene	75-35-4		<0.022	0.050	0.022	0.0250-2.50
1,3-Dichloropropane	142-28-9		<0.013	0.050	0.013	0.0125-2.50
2,2-Dichloropropane	594-20-7		<0.018	0.050	0.018	0.0125-2.50
1,2-Dichloropropane	78-87-5		<0.017	0.050	0.017	0.0250-2.50
1,1-Dichloropropene	563-58-6		<0.015	0.050	0.015	0.0125-2.50
trans-1,3-Dichloropropene	10061-02-6		<0.015	0.050	0.015	0.0125-2.50
cis-1,3-Dichloropropene	10061-01-5		<0.013	0.050	0.013	0.0125-2.50
Diethyl ether	60-29-7		<0.020	0.10	0.020	0.0250-2.50

All values presented with any preparation, dilution, or unit conversions taken into account.

Volatile Organic Analysis Data Summary

Lab Name:	Orange Coast Analytical (Alliance TG) - Phoenix, AZ	Data File Name:	GCMS8-042224011.D
Lab Reference #:	NRE AZ14434	Project Name:	Nasa White Sands Test Facility
Lab Sample ID:	AZ14434-001	Client Sample ID:	2404091330
Sample Type:	CS	Date Sampled:	04/09/24 13:30
Analysis Method:	8260B	Date Received:	04/18/24 10:00
Prep. Method:	5035A	Date Extracted:	04/09/24 13:30
Initial Sample:	10.1g	Date Analyzed:	04/22/24 15:01
Sample Extract:	10mL	Analysis Multiplier:	50
Sample Loaded:	790uL	Dilution Factor:	1
Analysis Batch:	0422242		

Units: mg/kg

Analyte	CAS #	Qualifiers:	Result	RL	MDLs	Calibration Range
Ethyl methacrylate	97-63-2		<0.016	0.10	0.016	0.0250-2.00
Ethylbenzene	100-41-4		<0.013	0.050	0.013	0.0125-2.50
Hexachlorobutadiene	87-68-3		<0.010	0.10	0.010	0.0125-2.00
2-Hexanone	591-78-6		<0.016	0.25	0.016	0.0250-2.50
Iodomethane	74-88-4		<0.019	0.050	0.019	0.0125-2.50
Isopropylbenzene	98-82-8		<0.011	0.050	0.011	0.0125-2.50
4-Isopropyltoluene	99-87-6		<0.010	0.050	0.010	0.0250-2.50
Methacrylonitrile	126-98-7		<0.017	0.25	0.017	0.0500-2.50
Methyl acrylate	96-33-3		<0.019	0.25	0.019	0.0250-2.50
Methyl methacrylate	80-62-6		<0.018	0.25	0.018	0.0500-2.50
Methyl t-butyl ether (MTBE)	1634-04-4		<0.030	0.050	0.030	0.0250-2.50
4-Methyl-2-pentanone	108-10-1		<0.024	0.25	0.024	0.0250-2.50
Naphthalene	91-20-3		<0.016	0.050	0.016	0.0250-2.50
Pentachloroethane	76-01-7		<0.086	0.10	0.086	0.0250-2.50
Propionitrile	107-12-0		<0.050	0.25	0.050	0.100-2.50
n-Propylbenzene	103-65-1		<0.015	0.050	0.015	0.0125-2.50
Styrene	100-42-5		<0.0090	0.050	0.0090	0.0125-2.50
1,1,2,2-Tetrachloroethane	79-34-5		<0.018	0.050	0.018	0.0125-2.50
1,1,1,2-Tetrachloroethane	630-20-6		<0.012	0.050	0.012	0.0125-2.50
Tetrachloroethene	127-18-4		<0.016	0.050	0.016	0.0125-2.50
Tetrahydrofuran	109-99-9		<0.038	0.25	0.038	0.250-2.50
Toluene	108-88-3		<0.019	0.050	0.019	0.0125-2.50
1,2,4-Trichlorobenzene	120-82-1		<0.017	0.050	0.017	0.0125-2.50
1,2,3-Trichlorobenzene	87-61-6		<0.015	0.050	0.015	0.0125-2.50
1,1,1-Trichloroethane	71-55-6		<0.017	0.050	0.017	0.0125-2.50
1,1,2-Trichloroethane	79-00-5		<0.017	0.050	0.017	0.0250-2.50
Trichloroethene	79-01-6		<0.017	0.050	0.017	0.0250-2.50
Trichlorofluoromethane	75-69-4		<0.020	0.25	0.020	0.0125-5.00
1,2,3-Trichloropropane	96-18-4		<0.022	0.050	0.022	0.0125-2.50
1,2,4-Trimethylbenzene	95-63-6		<0.011	0.050	0.011	0.0125-2.50
1,3,5-Trimethylbenzene	108-67-8		<0.013	0.050	0.013	0.0125-2.50
Vinyl acetate	108-05-4		<0.016	0.25	0.016	0.0500-2.50
Vinyl chloride	75-01-4		<0.018	0.050	0.018	0.0125-5.00
o-Xylene	95-47-6		<0.011	0.050	0.011	0.0125-2.50
m- & p-Xylenes	179601-23-1		<0.020	0.10	0.020	0.0250-5.00

Surrogate(s)

Analyte	CAS #	Qualifiers:	% Recovery	QC Limits
4-Bromofluorobenzene	460-00-4		120	50-130
Dibromofluoromethane	1868-53-7		112	65-130
Toluene-d8	2037-26-5		114	59-130

All values presented with any preparation, dilution, or unit conversions taken into account.

8260 Quantitation Review Report

C:\msdchem\1\data\2024\04-APR\VB042224\GCMS8-042224011.D **CS** 04/22/24 011

Sample Name: AZ14434-001 @ 790uL (1:1 of 10.1g in 10mL)
Data File Name: GCMS8-042224011.D
Date Acquired: 04/22/24 15:01
Vial Number: 6
Sample Multiplier: 50 **Dilution: 1**
Misc Info: PAV 1150, 1149

Operator:
Data File Path: C:\msdchem\1\data\2024\04-APR\VB042
Instrument Method: VOC092623 INSTRUMENT SCAN.M
Quant. Method: VOC022324Final
Last Result Mod: 04/22/24 16:00
Last Cal Update: 02/26/24 12:39
Last Cal Mod: 02/26/24 12:39

#	Internal Standard	Response
1)	Pentafluorobenzene	119,767
42)	1,4-Difluorobenzene	208,412
50)	Chlorobenzene-d5	186,317
74)	1,4-Dichlorobenzene-d4	102,030

#	Surrogate	% Rec	P/F	Soil Range
35)	Dibromofluoromethane	**112**	P	65-130
56)	Toluene-d8	**114**	P	59-130
76)	4-Bromofluorobenzene	**120**	P	50-130

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
1)	Pentafluorobenzene		500	-	-	6.24	0.00	-	100	119,767	168	-		-		-	
2)	Dichlorodifluoromethane		NR	ND	<28	(1.38)	-	-	0		85	87	0.00 | 34.5	-		-	
3)	Chloromethane		NR	ND	<19	(1.54)	-	-	0		50	52	0.00 | 31.3	-		-	
4)	Vinyl chloride		NR	ND	<18	(1.66)	-	-	0		62	64	0.00 | 30.5	-		-	
5)	Bromomethane		NR	ND	<14	(1.97)	-	-	0		94	96	0.00 | 88.5	-		-	
6)	Chloroethane	x	NR	ND	<20	(2.06)	-	-	**40**		64	66	0.00 | 34.3	-		-	
7)	Trichlorofluoromethane		NR	ND	<20	(2.35)	-	-	0		101	103	0.00 | 61.6	66	0.00 | 12.7	-	
8)	Diethyl ether		NR	ND	<20	(2.65)	-	-	0		74	45	0.00 | 103	59	0.00 | 129	-	
9)	1,1-Dichloroethene		NR	ND	<22	(2.90)	-	-	0		96	61	0.00 | 139	63	0.00 | 47.0	-	
10)	Freon 113		No Cal.	-	-	(2.90)	-	-	0		101	151	0.00 | 82.4	103	0.00 | 64.1	153	0.00 | 53.1
11)	Acetone		NR	ND	<74	(2.97)	-	-	0		58	43	0.00 | 266	-		-	
12)	Iodomethane		NR	ND	<19	(3.06)	-	-	0		142	127	0.00 | 40.6	141	0.00 | 12.9	-	
13)	Carbon disulfide		2.4679	ND	<17	3.11	-0.01	**Inc**	75	813	76	78	**0.00 | 9.20**	-		-	
14)	Allyl chloride		NR	ND	<15	(3.33)	-	-	0		76	78	0.00 | 30.7	41	0.00 | 283	39	0.00 | 175
15)	Methylene chloride		54.915	QL-	<86	3.48	-0.01	P	97	15,773	84	49	116 | 121	86	63.2 | 64.4	51	37.2 | 36.5
16)	t-Butanol (TBA)		No Cal.	-	-	(3.70)	-	-	0		59	57	0.00 | 8.40	-		-	
17)	Acrylonitrile		NR	ND	<22	(3.81)	-	-	0		52	53	0.00 | 120	51	0.00 | 41.7	-	
18)	Methyl t-butyl ether (MTBE)		NR	ND	<30	(3.85)	-	-	0		73	57	0.00 | 23.3	-		-	
19)	trans-1,2-Dichloroethene		NR	ND	<17	(3.83)	-	-	0		96	61	0.00 | 137	98	0.00 | 65.3	-	
20)	n-Hexane		No Cal.	-	-	(4.22)	-	-	0		57	43	0.00 | 64.9	41	0.00 | 72.0	56	0.00 | 47.3
21)	1,1-Dichloroethane		NR	ND	<19	(4.41)	-	-	0		63	65	0.00 | 33.7	83	0.00 | 15.0	-	
22)	Vinyl acetate		NR	ND	<16	(4.52)	-	-	0		86	43	0.00 | 949	-		-	
23)	2-chloro-1,3-butadiene		No Cal.	-	-	(4.54)	-	-	0		53	88	0.00 | 58.3	52	0.00 | 23.5	-	
24)	Diisopropyl ether (DIPE)		No Cal.	-	-	(4.57)	-	-	0		45	43	0.00 | 38.9	87	0.00 | 24.3	-	
25)	Ethyl t-butyl ether (ETBE)		No Cal.	-	-	(5.12)	-	-	0		59	57	0.00 | 31.8	87	0.00 | 34.1	-	
26)	2-Butanone (MEK)		NR	ND	<36	(5.35)	-	-	0		72	43	0.00 | 353	57	0.00 | 29.9	-	
27)	cis-1,2-Dichloroethene		NR	ND	<15	(5.29)	-	-	0		96	61	0.00 | 132	98	0.00 | 56.2	-	
28)	2,2-Dichloropropane		NR	ND	<18	(5.28)	-	-	0		77	97	0.00 | 22.0	79	0.00 | 30.5	-	
29)	Propionitrile		NR	ND	<50	(5.46)	-	-	0		54	52	0.00 | 11.3	55	0.00 | 15.7	-	
30)	Methyl acrylate		NR	ND	<19	(5.51)	-	-	0		55	85	0.00 | 17.1	-		-	
31)	Methacrylonitrile		NR	ND	<17	(5.67)	-	-	0		67	41	0.00 | 147	39	0.00 | 83.1	52	0.00 | 37.0
32)	Bromochloromethane		NR	ND	<18	(5.66)	-	-	0		128	49	0.00 | 167	130	0.00 | 134	-	
33)	Chloroform		NR	ND	<17	(5.83)	-	-	0		83	85	0.00 | 66.3	-		-	
34)	Tetrahydrofuran		NR	ND	<38	(5.74)	-	-	0		72	71	0.00 | 96.8	42	0.00 | 241	-	
35)	Dibromofluoromethane (S)		558.44	Sur	-	6.10	0.00	P	98	54,680	113	111	104 | 102	192	21.5 | 22.1	81	16.6 | 14.3
36)	1,1,1-Trichloroethane		NR	ND	<17	(6.10)	-	-	0		97	99	0.00 | 60.3	61	0.00 | 38.9	63	0.00 | 14.3
37)	1-Chlorobutane	x	No Cal.	-	-	(6.30)	-	-	90		56	49	0.00 | 3.40	-		-	
38)	1,1-Dichloropropene		NR	ND	<15	(6.39)	-	-	0		75	39	0.00 | 55.5	110	0.00 | 36.4	77	0.00 | 31.4
39)	Carbon tetrachloride		NR	ND	<22	(6.38)	-	-	0		117	119	0.00 | 100	-		-	
40)	Benzene		NR	ND	<11	(6.75)	-	-	0		78	51	0.00 | 15.3	-		-	
41)	1,2-Dichloroethane		NR	ND	<19	(6.81)	-	-	0		62	98	0.00 | 12.3	-		-	
42)	1,4-Difluorobenzene		500	-	-	7.56	0.00	-	100	208,412	114	-		-		-	
43)	t- Amyl methyl ether (TAME)		No Cal.	-	-	(7.05)	-	-	0		73	55	0.00 | 37.9	87	0.00 | 22.4	-	
44)	Trichloroethene		NR	ND	<17	(8.03)	-	-	0		95	132	0.00 | 115	130	0.00 | 113	97	0.00 | 64.2
45)	1,2-Dichloropropane		NR	ND	<17	(8.46)	-	-	0		63	112	0.00 | 5.70	76	0.00 | 47.7	-	

For analyst review assistance only.

8260 Quantitation Review Report

C:\msdchem\1\data\2024\04-APR\VB042224\GCMS8-042224011.D **CS** 04/22/24 011

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
46)	Methyl methacrylate		NR	ND	<18	(8.77)	-	-	0		69	41	0.00 | 133	100	0.00 | 40.0	39	0.00 | 64.9
47)	Dibromomethane		NR	ND	<19	(8.65)	-	-	0		93	174	0.00 | 107	95	0.00 | 82.1	-	
48)	Bromodichloromethane		NR	ND	<17	(8.94)	-	-	0		83	85	0.00 | 64.1	127	0.00 | 8.90	-	
49)	2-nitro-propane	x	NR	ND	<24	(9.26)	-	-	**46**		43	39	0.00 | 28.5	-		-	
50)	Chlorobenzene-d5		500	-	-	11.04	0.00	P	98	186,317	117	82	56.6 | 54.8	119	32.3 | 31.9	54	23.2 | 22.3
51)	Chloromethyl cyanide		No Cal.	-	-	(9.38)	-	-	0		75	48	0.00 | 39.0	40	0.00 | 44.5	-	
52)	2-Chloroethyl vinyl ether		NR	ND	<13	(9.38)	-	-	0		63	65	0.00 | 30.2	106	0.00 | 31.4	-	
53)	cis-1,3-Dichloropropene		NR	ND	<13	(9.51)	-	-	0		75	77	0.00 | 33.4	39	0.00 | 47.1	110	0.00 | 21.7
54)	4-Methyl-2-pentanone	x	NR	ND	<24	(9.71)	-	-	**1**		58	41	0.00 | 52.2	100	0.00 | 44.0	85	0.00 | 42.0
55)	1,1-Dichloro-2-propanone		No Cal.	-	-	(9.71)	-	-	0		83	63	0.00 | 56.4	91	0.00 | 22.8	-	
56)	Toluene-d8 (S)		569.35	Sur	-	9.79	0.00	P	95	207,878	98	100	66.2 | 71.5	42	13.5 | 12.7	70	10.6 | 11.3
57)	Toluene		2.5091	ND	<19	9.84	-0.01	**F**	**38**	743	92	91	**77.6 | 168**	65	**0.00 | 18.5**	39	**0.00 | 16.3**
58)	trans-1,3-Dichloropropene	x	NR	ND	<15	(10.10)	-	-	**41**		75	77	0.00 | 30.2	39.1	0.00 | 43.2	110	0.00 | 24.5
59)	Ethyl methacrylate		NR	ND	<16	(10.22)	-	-	0		69	41	0.00 | 69.2	99	0.00 | 18.5	86	0.00 | 16.1
60)	1,1,2-Trichloroethane		NR	ND	<17	(10.26)	-	-	0		83	97	0.00 | 125	61	0.00 | 70.3	85	0.00 | 59.8
61)	1,3-Dichloropropane	x	NR	ND	<13	(10.40)	-	-	**32**		76	41	0.00 | 61.7	78	0.00 | 32.5	39	0.00 | 22.8
62)	2-Hexanone		NR	ND	<16	(10.50)	-	-	0		43	58	0.00 | 59.4	57	0.00 | 21.2	100	0.00 | 16.0
63)	Tetrachloroethene		NR	ND	<16	(10.36)	-	-	0		164	166	0.00 | 127	129	0.00 | 88.5	131	0.00 | 84.5
64)	Dibromochloromethane		NR	ND	<14	(10.59)	-	-	0		129	127	0.00 | 79.2	-		-	
65)	1,2-Dibromoethane		NR	ND	<16	(10.66)	-	-	0		107	109	0.00 | 89.0	188	0.00 | 2.80	-	
66)	Chlorobenzene	x	NR	ND	<12	(11.06)	-	-	**45**		112	77	0.00 | 61.4	114	0.00 | 33.1	-	
67)	1,1,1,2-Tetrachloroethane		NR	ND	<12	(11.13)	-	-	0		131	133	0.00 | 94.0	117	0.00 | 64.0	119	0.00 | 63.7
68)	Ethylbenzene		2.4814	ND	<13	11.15	0.00	**Inc**	92	1,343	91	106	29.8 | 32.6	51	**0.00 | 7.80**	-	
69)	m- & p-Xylenes		3.7564	ND	<20	11.23	-0.01	**Inc**	72	793	106	91	146 | 188	105	49.4 | 41.4	77	**0.00 | 24.3**
70)	o-Xylene	x	NR	ND	<11	(11.51)	-	-	**45**		106	91	0.00 | 206	105	0.00 | 48.7	-	
71)	Styrene		2.2088	ND	<9.0	11.52	0.00	**F**	**68**	722	104	103	43.2 | 46.8	78	**0.00 | 41.6**	51	34.4 | 22.7
72)	Bromoform		NR	ND	<16	(11.65)	-	-	0		173	175	0.00 | 46.3	254	0.00 | 12.5	-	
73)	Isopropylbenzene		1.4720	ND	<11	11.76	-0.01	**Inc**	**50**	772	105	120	**0.00 | 27.0**	77	40.5 | 14.5	79	**0.00 | 11.8**
74)	1,4-Dichlorobenzene-d4		500	-	-	12.56	0.00	P	98	102,030	152	115	60.1 | 55.2	150	156 | 157	-	
75)	cis-1,4-dichloro-2-butene		No Cal.	-	-	(11.81)	-	-	0		75	53	0.00 | 106	89	0.00 | 47.5	-	
76)	4-Bromofluorobenzene (S)		599.08	Sur	-	11.86	0.00	P	96	84,492	95	174	77.7 | 75.6	176	80.4 | 73.8	75	47.0 | 47.6
77)	1,1,2,2-Tetrachloroethane		NR	ND	<18	(11.96)	-	-	0		83	85	0.00 | 70.8	131	0.00 | 11.0	95	0.00 | 18.7
78)	trans-1,4-Dichloro-2-butene		NR	ND	<14	(11.99)	-	-	0		53	88	0.00 | 55.9	124	0.00 | 23.1	-	
79)	1,2,3-Trichloropropane		NR	ND	<22	(11.98)	-	-	0		110	75	0.00 | 269	39	0.00 | 79.2	-	
80)	Bromobenzene	x	NR	ND	<18	(11.96)	-	-	**2**		156	158	0.00 | 94.7	-		-	
81)	n-Propylbenzene		1.7141	ND	<15	12.02	0.00	**Inc**	**61**	1,043	91	120	**0.00 | 23.6**	92	**0.00 | 11.4**	65	**0.00 | 9.90**
82)	2-Chlorotoluene		NR	ND	<15	(12.08)	-	-	0		126	91	0.00 | 289	63	0.00 | 36.0	-	
83)	4-Ethyltoluene	x	No Cal.	-	-	(12.09)	-	-	**52**		105	120	0.00 | 29.9	77	0.00 | 10.6	-	
84)	1,3,5-Trimethylbenzene		1.8812	ND	<13	12.12	0.00	**Inc**	77	793	105	120	37.3 | 50.6	119	**0.00 | 11.0**	77	**0.00 | 12.6**
85)	4-Chlorotoluene	x	NR	ND	<13	(12.14)	-	-	**34**		91	126	0.00 | 34.5	63	0.00 | 11.3	-	
86)	tert-Butylbenzene		NR	ND	<13	(12.33)	-	-	0		134	119	0.00 | 340	91	0.00 | 215	-	
87)	1,2,4-Trimethylbenzene		3.0988	ND	<11	12.35	0.00	P	92	1,336	105	120	44.7 | 50.1	-		-	
88)	Pentachloroethane		NR	ND	<86	(12.35)	-	-	0		167	165	0.00 | 86.1	132	0.00 | 42.9	-	
89)	sec-Butylbenzene		2.7578	ND	<11	12.46	0.00	P	96	1,470	105	134	22.2 | 20.4	-		-	
90)	4-Isopropyltoluene		2.5176	ND	<10	12.53	-0.01	**Inc**	71	1,171	119	134	36.9 | 28.5	91	**0.00 | 22.4**	-	
91)	1,3-Dichlorobenzene		5.0729	ND	<16	12.53	-0.01	**F**	**66**	1,352	146	148	**27.3 | 63.8**	111	41.6 | 35.3	-	
92)	1,4-Dichlorobenzene	x	NR	ND	<17	(12.58)	-	-	**67**		146	111	0.00 | 37.8	148	0.00 | 61.5	-	
93)	n-Butylbenzene		4.5455	ND	<12	12.77	-0.01	**F**	**51**	1,060	92	91	**95.9 | 179**	134	42.1 | 50.5	-	
94)	1,2-Dichlorobenzene		2.7049	ND	<15	12.80	0.00	P	86	684	146	148	51.2 | 64.6	111	45.3 | 40.4	-	
95)	Hexachloroethane		No Cal.	-	-	(12.95)	-	-	0		201	117	0.00 | 129	199	0.00 | 65.0	203	0.00 | 64.5
96)	1,2-Dibromo-3-chloropropane		NR	ND	<19	(13.24)	-	-	0		75	155	0.00 | 104	157	0.00 | 123	-	
97)	Nitrobenzene		No Cal.	-	-	(13.35)	-	-	0		123	51	0.00 | 62.1	77	0.00 | 146	-	
98)	1,2,4-Trichlorobenzene		12.001	ND	<17	13.69	0.00	P	92	2,061	180	182	87.8 | 97.2	184	26.7 | 29.6	145	27.3 | 30.6
99)	Hexachlorobutadiene	x	NR	ND	<10	(13.78)	-	-	**57**		225	227	0.00 | 59.6	260	0.00 | 22.3	223	0.00 | 59.4
100	Naphthalene		7.5247	ND	<16	13.82	-0.01	**Inc**	83	3,736	128	127	**0.00 | 12.5**	129	12.0 | 11.6	-	
101	1,2,3-Trichlorobenzene		8.8656	ND	<15	13.96	-0.02	P	75	1,481	180	182	68.7 | 91.8	184	27.9 | 29.8	145	55.7 | 29.8

Uses lowest known RLs; project RLs may be higher. Qualitative P/F based only on output ratios at apex and may not reflect full peak or analyst review.

For analyst review assistance only.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224011.D
Acq On : 22 Apr 2024 15:01
Operator :
Sample : AZ14434-001 @ 790uL (1:1 of 10.1g in 10mL)
Misc : PAV 1150, 1149
ALS Vial : 6 Sample Multiplier: 50

Quant Time: Apr 22 15:55:40 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	6.241	168	119767	10.00	ppb	0.00
42) 1,4-Difluorobenzene	7.563	114	208412	10.00	ppb	0.00
50) Chlorobenzene-d5	11.036	117	186317	10.00	ppb	0.00
74) 1,4-Dichlorobenzene-d4	12.564	152	102030	10.00	ppb	0.00
System Monitoring Compounds						
35) Dibromofluoromethane (S)	6.099	113	54680	11.17	ppb	0.00
Spiked Amount 10.000			Recovery = 111.70%			
56) Toluene-d8 (S)	9.786	98	207878	11.39	ppb	0.00
Spiked Amount 10.000			Recovery = 113.90%			
76) 4-Bromofluorobenzene (S)	11.855	95	84492	11.98	ppb	0.00
Spiked Amount 10.000			Recovery = 119.80%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	0.000		0	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	0.000		0	N.D.		
6) Chloroethane	0.000		0	N.D. d		
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Diethyl ether	0.000		0	N.D.		
9) 1,1-Dichloroethene	0.000		0	N.D.		
10) Freon 113	0.000		0	N.D.		
11) Acetone	0.000		0	N.D.		
12) Iodomethane	0.000		0	N.D.		
13) Carbon disulfide	3.109	76	813	2.4679	ppb	75
14) Allyl chloride	0.000		0	N.D.		
15) Methylene chloride	3.475	84	15773	54.9145	ppb	97
16) t-Butanol (TBA)	0.000		0	N.D.		
17) Acrylonitrile	0.000		0	N.D.		
18) Methyl t-butyl ether (...	0.000		0	N.D.		
19) trans-1,2-Dichloroethene	0.000		0	N.D.		
20) n-Hexane	0.000		0	N.D.		
21) 1,1-Dichloroethane	0.000		0	N.D.		
22) Vinyl acetate	0.000		0	N.D.		
23) 2-chloro-1,3-butadiene	0.000		0	N.D.		
24) Diisopropyl ether (DIPE)	0.000		0	N.D.		
25) Ethyl t-butyl ether (E...	0.000		0	N.D.		
26) 2-Butanone (MEK)	0.000		0	N.D.		
27) cis-1,2-Dichloroethene	0.000		0	N.D.		
28) 2,2-Dichloropropane	0.000		0	N.D.		
29) Propionitrile	0.000		0	N.D.		
30) Methyl acrylate	0.000		0	N.D.		
31) Methacrylonitrile	0.000		0	N.D.		
32) Bromochloromethane	0.000		0	N.D.		
33) Chloroform	0.000		0	N.D.		
34) Tetrahydrofuran	0.000		0	N.D.		
36) 1,1,1-Trichloroethane	0.000		0	N.D.		
37) 1-Chlorobutane	0.000		0	N.D. d		
38) 1,1-Dichloropropene	0.000		0	N.D.		
39) Carbon tetrachloride	0.000		0	N.D.		
40) Benzene	0.000		0	N.D.		
41) 1,2-Dichloroethane	0.000		0	N.D.		
43) t- Amyl methyl ether (...	0.000		0	N.D.		
44) Trichloroethene	0.000		0	N.D.		
45) 1,2-Dichloropropane	0.000		0	N.D.		
46) Methyl methacrylate	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224011.D
Acq On : 22 Apr 2024 15:01
Operator :
Sample : AZ14434-001 @ 790uL (1:1 of 10.1g in 10mL)
Misc : PAV 1150, 1149
ALS Vial : 6 Sample Multiplier: 50

Quant Time: Apr 22 15:55:40 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

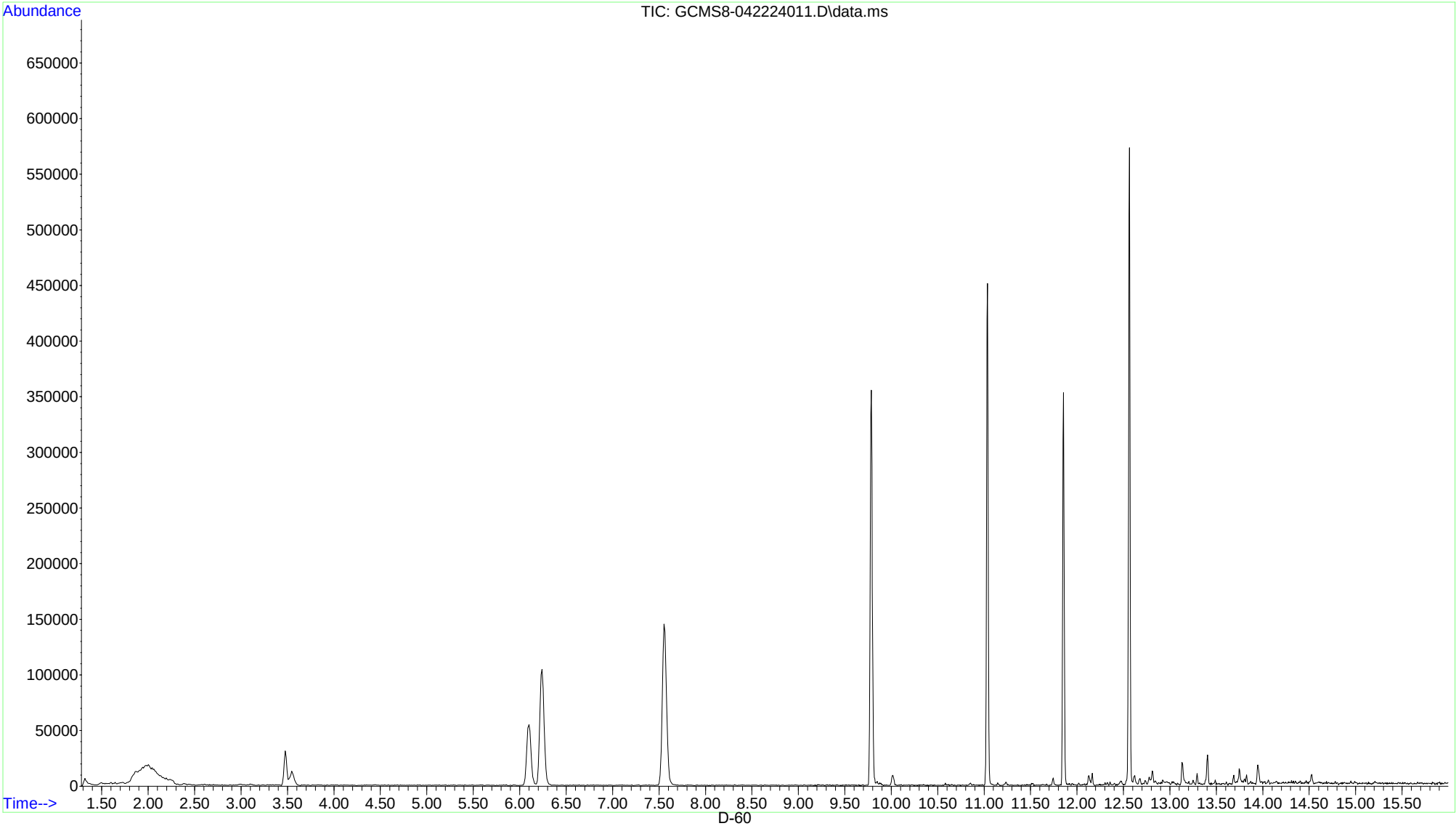
Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
47) Dibromomethane	0.000		0	N.D.		
48) Bromodichloromethane	0.000		0	N.D.		
49) 2-nitro-propane	0.000		0	N.D. d		
51) Chloromethyl cyanide	0.000		0	N.D.		
52) 2-Chloroethyl vinyl ether	0.000		0	N.D.		
53) cis-1,3-Dichloropropene	0.000		0	N.D.		
54) 4-Methyl-2-pentanone	0.000		0	N.D. d		
55) 1,1-Dichloro-2-propanone	0.000		0	N.D.		
57) Toluene	9.844	92	743	2.5091 ppb	#	38
58) trans-1,3-Dichloropropene	0.000		0	N.D. d		
59) Ethyl methacrylate	0.000		0	N.D.		
60) 1,1,2-Trichloroethane	0.000		0	N.D.		
61) 1,3-Dichloropropane	0.000		0	N.D. d		
62) 2-Hexanone	0.000		0	N.D.		
63) Tetrachloroethene	0.000		0	N.D.		
64) Dibromochloromethane	0.000		0	N.D.		
65) 1,2-Dibromoethane	0.000		0	N.D.		
66) Chlorobenzene	0.000		0	N.D. d		
67) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.		
68) Ethylbenzene	11.146	91	1343	2.4814 ppb		92
69) m- & p-Xylenes	11.230	106	793	3.7564 ppb	#	72
70) o-Xylene	0.000		0	N.D. d		
71) Styrene	11.519	104	722	2.2088 ppb	#	68
72) Bromoform	0.000		0	N.D.		
73) Isopropylbenzene	11.755	105	772	1.4720 ppb		50
75) cis-1,4-dichloro-2-butene	0.000		0	N.D.		
77) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.		
78) trans-1,4-Dichloro-2-b...	0.000		0	N.D.		
79) 1,2,3-Trichloropropane	0.000		0	N.D.		
80) Bromobenzene	0.000		0	N.D. d		
81) n-Propylbenzene	12.023	91	1043	1.7141 ppb		61
82) 2-Chlorotoluene	0.000		0	N.D.		
83) 4-Ethyltoluene	0.000		0	N.D. d		
84) 1,3,5-Trimethylbenzene	12.123	105	793	1.8812 ppb		77
85) 4-Chlorotoluene	0.000		0	N.D. d		
86) tert-Butylbenzene	0.000		0	N.D.		
87) 1,2,4-Trimethylbenzene	12.354	105	1336	3.0988 ppb		92
88) Pentachloroethane	0.000		0	N.D.		
89) sec-Butylbenzene	12.459	105	1470	2.7578 ppb		96
90) 4-Isopropyltoluene	12.533	119	1171	2.5176 ppb		71
91) 1,3-Dichlorobenzene	12.527	146	1352	5.0729 ppb	#	66
92) 1,4-Dichlorobenzene	0.000		0	N.D. d		
93) n-Butylbenzene	12.769	92	1060	4.5455 ppb	#	51
94) 1,2-Dichlorobenzene	12.795	146	684	2.7049 ppb		86
95) Hexachloroethane	0.000		0	N.D.		
96) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.		
97) Nitrobenzene	0.000		0	N.D.		
98) 1,2,4-Trichlorobenzene	13.688	180	2061	12.0006 ppb		92
99) Hexachlorobutadiene	0.000		0	N.D. d		
100) Naphthalene	13.825	128	3736	7.5247 ppb		83
101) 1,2,3-Trichlorobenzene	13.956	180	1481	8.8656 ppb		75

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224011.D
Acq On : 22 Apr 2024 15:01
Operator :
Sample : AZ14434-001 @ 790uL (1:1 of 10.1g in 10mL)
Misc : PAV 1150, 1149
ALS Vial : 6 Sample Multiplier: 50

Quant Time: Apr 22 15:55:40 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration



Volatile Organic Analysis Data Summary

Lab Name:	Orange Coast Analytical (Alliance TG) - Phoenix, AZ	Data File Name:	GCMS8-042224014.D
Lab Reference #:	NRE AZ14434	Project Name:	Nasa White Sands Test Facility
Lab Sample ID:	AZ14434-002	Client Sample ID:	2404100910
Sample Type:	CS	Date Sampled:	04/10/24 09:10
Analysis Method:	8260B	Date Received:	04/18/24 10:00
Prep. Method:	5035A	Date Extracted:	04/10/24 09:10
Initial Sample:	6.7g	Date Analyzed:	04/22/24 16:11
Sample Extract:	10mL	Analysis Multiplier:	50
Sample Loaded:	1190uL	Dilution Factor:	1
Analysis Batch:	0422242		

Units: mg/kg

Analyte	CAS #	Qualifiers:	Result	RL	MDLs	Calibration Range
Acetone	67-64-1		<0.074	0.25	0.074	0.0250-2.50
Acrylonitrile	107-13-1		<0.022	0.25	0.022	0.0500-2.50
Allyl chloride	107-05-1		<0.015	0.050	0.015	0.0500-2.50
Benzene	71-43-2		<0.011	0.050	0.011	0.0125-2.50
Bromobenzene	108-86-1		<0.018	0.050	0.018	0.0125-2.50
Bromochloromethane	74-97-5		<0.018	0.050	0.018	0.0250-2.50
Bromodichloromethane	75-27-4		<0.017	0.050	0.017	0.0125-2.50
Bromoform	75-25-2		<0.016	0.050	0.016	0.0250-2.50
Bromomethane	74-83-9		<0.014	0.25	0.014	0.0125-5.00
2-Butanone (MEK)	78-93-3		<0.036	0.25	0.036	0.250-2.50
tert-Butylbenzene	98-06-6		<0.013	0.050	0.013	0.0250-2.50
sec-Butylbenzene	135-98-8		<0.011	0.050	0.011	0.0125-2.50
n-Butylbenzene	104-51-8		<0.012	0.050	0.012	0.0250-2.50
Carbon disulfide	75-15-0		<0.017	0.10	0.017	0.0125-2.50
Carbon tetrachloride	56-23-5		<0.022	0.050	0.022	0.0250-2.50
Chlorobenzene	108-90-7		<0.012	0.050	0.012	0.0125-2.50
Chloroethane	75-00-3		<0.020	0.25	0.020	0.0125-5.00
2-Chloroethyl vinyl ether	110-75-8		<0.013	0.25	0.013	0.0250-2.50
Chloroform	67-66-3		<0.017	0.050	0.017	0.0125-2.50
Chloromethane	74-87-3		<0.019	0.25	0.019	0.0125-5.00
2-Chlorotoluene	95-49-8		<0.015	0.050	0.015	0.0125-2.50
4-Chlorotoluene	106-43-4		<0.013	0.050	0.013	0.0125-2.50
1,2-Dibromo-3-chloropropane	96-12-8		<0.019	0.10	0.019	0.0250-2.50
Dibromochloromethane	124-48-1		<0.014	0.050	0.014	0.0250-2.50
1,2-Dibromoethane	106-93-4		<0.016	0.050	0.016	0.0250-2.50
Dibromomethane	74-95-3		<0.019	0.050	0.019	0.0125-2.50
trans-1,4-Dichloro-2-butene	110-57-6		<0.014	0.050	0.014	0.0250-2.50
1,2-Dichlorobenzene	95-50-1		<0.015	0.050	0.015	0.0125-2.50
1,3-Dichlorobenzene	541-73-1		<0.016	0.050	0.016	0.0125-2.50
1,4-Dichlorobenzene	106-46-7		<0.017	0.050	0.017	0.0125-2.50
Dichlorodifluoromethane	75-71-8		<0.028	0.25	0.028	0.0250-2.00
1,1-Dichloroethane	75-34-3		<0.019	0.050	0.019	0.0250-2.50
1,2-Dichloroethane	107-06-2		<0.019	0.050	0.019	0.0125-2.50
cis-1,2-Dichloroethene	156-59-2		<0.015	0.050	0.015	0.0125-2.50
1,1-Dichloroethene	75-35-4		<0.022	0.050	0.022	0.0250-2.50
trans-1,2-Dichloroethene	156-60-5		<0.017	0.050	0.017	0.0125-2.50
1,2-Dichloropropane	78-87-5		<0.017	0.050	0.017	0.0250-2.50
2,2-Dichloropropane	594-20-7		<0.018	0.050	0.018	0.0125-2.50
1,3-Dichloropropane	142-28-9		<0.013	0.050	0.013	0.0125-2.50
trans-1,3-Dichloropropene	10061-02-6		<0.015	0.050	0.015	0.0125-2.50
1,1-Dichloropropene	563-58-6		<0.015	0.050	0.015	0.0125-2.50
cis-1,3-Dichloropropene	10061-01-5		<0.013	0.050	0.013	0.0125-2.50
Diethyl ether	60-29-7		<0.020	0.10	0.020	0.0250-2.50

All values presented with any preparation, dilution, or unit conversions taken into account.

Volatile Organic Analysis Data Summary

Lab Name:	Orange Coast Analytical (Alliance TG) - Phoenix, AZ	Data File Name:	GCMS8-042224014.D
Lab Reference #:	NRE AZ14434	Project Name:	Nasa White Sands Test Facility
Lab Sample ID:	AZ14434-002	Client Sample ID:	2404100910
Sample Type:	CS	Date Sampled:	04/10/24 09:10
Analysis Method:	8260B	Date Received:	04/18/24 10:00
Prep. Method:	5035A	Date Extracted:	04/10/24 09:10
Initial Sample:	6.7g	Date Analyzed:	04/22/24 16:11
Sample Extract:	10mL	Analysis Multiplier:	50
Sample Loaded:	1190uL	Dilution Factor:	1
Analysis Batch:	0422242		

Units: mg/kg

Analyte	CAS #	Qualifiers:	Result	RL	MDLs	Calibration Range
Ethyl methacrylate	97-63-2		<0.016	0.10	0.016	0.0250-2.00
Ethylbenzene	100-41-4		<0.013	0.050	0.013	0.0125-2.50
Hexachlorobutadiene	87-68-3		<0.010	0.10	0.010	0.0125-2.00
2-Hexanone	591-78-6		<0.016	0.25	0.016	0.0250-2.50
Iodomethane	74-88-4		<0.019	0.050	0.019	0.0125-2.50
Isopropylbenzene	98-82-8		<0.011	0.050	0.011	0.0125-2.50
4-Isopropyltoluene	99-87-6		<0.010	0.050	0.010	0.0250-2.50
Methacrylonitrile	126-98-7		<0.017	0.25	0.017	0.0500-2.50
Methyl acrylate	96-33-3		<0.019	0.25	0.019	0.0250-2.50
Methyl methacrylate	80-62-6		<0.018	0.25	0.018	0.0500-2.50
Methyl t-butyl ether (MTBE)	1634-04-4		<0.030	0.050	0.030	0.0250-2.50
4-Methyl-2-pentanone	108-10-1		<0.024	0.25	0.024	0.0250-2.50
Naphthalene	91-20-3		<0.016	0.050	0.016	0.0250-2.50
Pentachloroethane	76-01-7		<0.086	0.10	0.086	0.0250-2.50
Propionitrile	107-12-0		<0.050	0.25	0.050	0.100-2.50
n-Propylbenzene	103-65-1		<0.015	0.050	0.015	0.0125-2.50
Styrene	100-42-5		<0.0090	0.050	0.0090	0.0125-2.50
1,1,2,2-Tetrachloroethane	79-34-5		<0.018	0.050	0.018	0.0125-2.50
1,1,1,2-Tetrachloroethane	630-20-6		<0.012	0.050	0.012	0.0125-2.50
Tetrachloroethene	127-18-4		<0.016	0.050	0.016	0.0125-2.50
Tetrahydrofuran	109-99-9		<0.038	0.25	0.038	0.250-2.50
Toluene	108-88-3		<0.019	0.050	0.019	0.0125-2.50
1,2,3-Trichlorobenzene	87-61-6		<0.015	0.050	0.015	0.0125-2.50
1,2,4-Trichlorobenzene	120-82-1		<0.017	0.050	0.017	0.0125-2.50
1,1,1-Trichloroethane	71-55-6		<0.017	0.050	0.017	0.0125-2.50
1,1,2-Trichloroethane	79-00-5		<0.017	0.050	0.017	0.0250-2.50
Trichloroethene	79-01-6		<0.017	0.050	0.017	0.0250-2.50
Trichlorofluoromethane	75-69-4		<0.020	0.25	0.020	0.0125-5.00
1,2,3-Trichloropropane	96-18-4		<0.022	0.050	0.022	0.0125-2.50
1,3,5-Trimethylbenzene	108-67-8		<0.013	0.050	0.013	0.0125-2.50
1,2,4-Trimethylbenzene	95-63-6		<0.011	0.050	0.011	0.0125-2.50
Vinyl acetate	108-05-4		<0.016	0.25	0.016	0.0500-2.50
Vinyl chloride	75-01-4		<0.018	0.050	0.018	0.0125-5.00
o-Xylene	95-47-6		<0.011	0.050	0.011	0.0125-2.50
m- & p-Xylenes	179601-23-1		<0.020	0.10	0.020	0.0250-5.00

Surrogate(s)

Analyte	CAS #	Qualifiers:	% Recovery	QC Limits
4-Bromofluorobenzene	460-00-4		122	50-130
Dibromofluoromethane	1868-53-7		112	65-130
Toluene-d8	2037-26-5		115	59-130

All values presented with any preparation, dilution, or unit conversions taken into account.

8260 Quantitation Review Report

C:\msdchem\1\data\2024\04-APR\VB042224\GCMS8-042224014.D **CS** 04/22/24 014

Sample Name: AZ14434-002 @ 1190uL (1:1 of 6.7g in 10mL)
Data File Name: GCMS8-042224014.D
Date Acquired: 04/22/24 16:11
Vial Number: 9
Sample Multiplier: 50 **Dilution:** 1
Misc Info: PAV 1150, 1149

Operator:
Data File Path: C:\msdchem\1\data\2024\04-APR\VB042
Instrument Method: VOC092623 INSTRUMENT SCAN.M
Quant. Method: VOC022324Final
Last Result Mod: 04/22/24 16:38
Last Cal Update: 02/26/24 12:39
Last Cal Mod: 02/26/24 12:39

#	Internal Standard	Response
1)	Pentafluorobenzene	120,941
42)	1,4-Difluorobenzene	205,593
50)	Chlorobenzene-d5	184,056
74)	1,4-Dichlorobenzene-d4	100,869

#	Surrogate	% Rec	P/F	Soil Range
35)	Dibromofluoromethane	**112**	P	65-130
56)	Toluene-d8	**115**	P	59-130
76)	4-Bromofluorobenzene	**122**	P	50-130

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
1)	Pentafluorobenzene		500	-	-	6.24	0.00	-	100	120,941	168	-		-		-	
2)	Dichlorodifluoromethane		NR	ND	<28	(1.38)	-	-	0		85	87	0.00 | 34.5	-		-	
3)	Chloromethane		NR	ND	<19	(1.54)	-	-	0		50	52	0.00 | 31.3	-		-	
4)	Vinyl chloride		NR	ND	<18	(1.66)	-	-	0		62	64	0.00 | 30.5	-		-	
5)	Bromomethane		NR	ND	<14	(1.97)	-	-	0		94	96	0.00 | 88.5	-		-	
6)	Chloroethane	x	NR	ND	<20	(2.06)	-	-	**40**		64	66	0.00 | 34.3	-		-	
7)	Trichlorofluoromethane		NR	ND	<20	(2.35)	-	-	0		101	103	0.00 | 61.6	66	0.00 | 12.7	-	
8)	Diethyl ether		NR	ND	<20	(2.65)	-	-	0		74	45	0.00 | 103	59	0.00 | 129	-	
9)	1,1-Dichloroethene		NR	ND	<22	(2.90)	-	-	0		96	61	0.00 | 139	63	0.00 | 47.0	-	
10)	Freon 113		No Cal.	-	-	(2.90)	-	-	0		101	151	0.00 | 82.4	103	0.00 | 64.1	153	0.00 | 53.1
11)	Acetone		NR	ND	<74	(2.97)	-	-	0		58	43	0.00 | 266	-		-	
12)	Iodomethane		NR	ND	<19	(3.06)	-	-	0		142	127	0.00 | 40.6	141	0.00 | 12.9	-	
13)	Carbon disulfide		4.4431	ND	<17	3.11	-0.01	**Inc**	75	1,478	76	78	**0.00 | 9.20**	-		-	
14)	Allyl chloride		NR	ND	<15	(3.33)	-	-	0		76	78	0.00 | 30.7	41	0.00 | 283	39	0.00 | 175
15)	**Methylene chloride**		**184.99**	QL	**180**	3.47	-0.01	P	97	32,560	84	49	125 | 121	86	65.3 | 64.4	51	39.4 | 36.5
16)	t-Butanol (TBA)		No Cal.	-	-	(3.70)	-	-	0		59	57	0.00 | 8.40	-		-	
17)	Acrylonitrile		NR	ND	<22	(3.81)	-	-	0		52	53	0.00 | 120	51	0.00 | 41.7	-	
18)	Methyl t-butyl ether (MTBE)		NR	ND	<30	(3.85)	-	-	0		73	57	0.00 | 23.3	-		-	
19)	trans-1,2-Dichloroethene		NR	ND	<17	(3.83)	-	-	0		96	61	0.00 | 137	98	0.00 | 65.3	-	
20)	n-Hexane	x	No Cal.	-	-	(4.22)	-	-	**25**		57	43	0.00 | 64.9	41	0.00 | 72.0	56	0.00 | 47.3
21)	1,1-Dichloroethane		NR	ND	<19	(4.41)	-	-	0		63	65	0.00 | 33.7	83	0.00 | 15.0	-	
22)	Vinyl acetate		NR	ND	<16	(4.52)	-	-	0		86	43	0.00 | 949	-		-	
23)	2-chloro-1,3-butadiene		No Cal.	-	-	(4.54)	-	-	0		53	88	0.00 | 58.3	52	0.00 | 23.5	-	
24)	Diisopropyl ether (DIPE)		No Cal.	-	-	(4.57)	-	-	0		45	43	0.00 | 38.9	87	0.00 | 24.3	-	
25)	Ethyl t-butyl ether (ETBE)		No Cal.	-	-	(5.12)	-	-	0		59	57	0.00 | 31.8	87	0.00 | 34.1	-	
26)	2-Butanone (MEK)		NR	ND	<36	(5.35)	-	-	0		72	43	0.00 | 353	57	0.00 | 29.9	-	
27)	cis-1,2-Dichloroethene		NR	ND	<15	(5.29)	-	-	0		96	61	0.00 | 132	98	0.00 | 56.2	-	
28)	2,2-Dichloropropane		NR	ND	<18	(5.28)	-	-	0		77	97	0.00 | 22.0	79	0.00 | 30.5	-	
29)	Propionitrile		NR	ND	<50	(5.46)	-	-	0		54	52	0.00 | 11.3	55	0.00 | 15.7	-	
30)	Methyl acrylate		NR	ND	<19	(5.51)	-	-	0		55	85	0.00 | 17.1	-		-	
31)	Methacrylonitrile		NR	ND	<17	(5.67)	-	-	0		67	41	0.00 | 147	39	0.00 | 83.1	52	0.00 | 37.0
32)	Bromochloromethane		NR	ND	<18	(5.66)	-	-	0		128	49	0.00 | 167	130	0.00 | 134	-	
33)	Chloroform		NR	ND	<17	(5.83)	-	-	0		83	85	0.00 | 66.3	-		-	
34)	Tetrahydrofuran		NR	ND	<38	(5.74)	-	-	0		72	71	0.00 | 96.8	42	0.00 | 241	-	
35)	Dibromofluoromethane (S)		559.57	Sur	-	6.10	0.00	P	95	55,328	113	111	107 | 102	192	22.1 | 22.1	81	17.1 | 14.3
36)	1,1,1-Trichloroethane		NR	ND	<17	(6.10)	-	-	0		97	99	0.00 | 60.3	61	0.00 | 38.9	63	0.00 | 14.3
37)	1-Chlorobutane	x	No Cal.	-	-	(6.30)	-	-	90		56	49	0.00 | 3.40	-		-	
38)	1,1-Dichloropropene		NR	ND	<15	(6.39)	-	-	0		75	39	0.00 | 55.5	110	0.00 | 36.4	77	0.00 | 31.4
39)	Carbon tetrachloride		NR	ND	<22	(6.38)	-	-	0		117	119	0.00 | 100	-		-	
40)	Benzene		2.7675	ND	<11	6.75	0.00	**Inc**	**63**	1,281	78	51	**0.00 | 15.3**	-		-	
41)	1,2-Dichloroethane		NR	ND	<19	(6.81)	-	-	0		62	98	0.00 | 12.3	-		-	
42)	1,4-Difluorobenzene		500	-	-	7.56	0.00	-	100	205,593	114	-		-		-	
43)	t- Amyl methyl ether (TAME)		No Cal.	-	-	(7.05)	-	-	0		73	55	0.00 | 37.9	87	0.00 | 22.4	-	
44)	Trichloroethene		NR	ND	<17	(8.03)	-	-	0		95	132	0.00 | 115	130	0.00 | 113	97	0.00 | 64.2
45)	1,2-Dichloropropane		NR	ND	<17	(8.46)	-	-	0		63	112	0.00 | 5.70	76	0.00 | 47.7	-	

For analyst review assistance only.

8260 Quantitation Review Report

C:\msdchem\1\data\2024\04-APR\VB042224\GCMS8-042224014.D **CS** 04/22/24 014

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
46)	Methyl methacrylate		NR	ND	<18	(8.77)	-	-	0		69	41	0.00 | 133	100	0.00 | 40.0	39	0.00 | 64.9
47)	Dibromomethane		NR	ND	<19	(8.65)	-	-	0		93	174	0.00 | 107	95	0.00 | 82.1	-	
48)	Bromodichloromethane		NR	ND	<17	(8.94)	-	-	0		83	85	0.00 | 64.1	127	0.00 | 8.90	-	
49)	2-nitro-propane	x	NR	ND	<24	(9.26)	-	-	**46**		43	39	0.00 | 28.5	-		-	
50)	Chlorobenzene-d5		500	-	-	11.04	0.00	P	99	184,056	117	82	54.7 | 54.8	119	32.3 | 31.9	54	23.4 | 22.3
51)	Chloromethyl cyanide		No Cal.	-	-	(9.38)	-	-	0		75	48	0.00 | 39.0	40	0.00 | 44.5	-	
52)	2-Chloroethyl vinyl ether		NR	ND	<13	(9.38)	-	-	0		63	65	0.00 | 30.2	106	0.00 | 31.4	-	
53)	cis-1,3-Dichloropropene	x	NR	ND	<13	(9.51)	-	-	**39**		75	77	0.00 | 33.4	39	0.00 | 47.1	110	0.00 | 21.7
54)	4-Methyl-2-pentanone	x	NR	ND	<24	(9.71)	-	-	**1**		58	41	0.00 | 52.2	100	0.00 | 44.0	85	0.00 | 42.0
55)	1,1-Dichloro-2-propanone		No Cal.	-	-	(9.71)	-	-	0		83	63	0.00 | 56.4	91	0.00 | 22.8	-	
56)	Toluene-d8 (S)		574.78	Sur	-	9.79	0.00	P	99	207,315	98	100	72.0 | 71.5	42	13.5 | 12.7	70	11.0 | 11.3
57)	Toluene		5.0695	ND	<19	9.85	0.00	**Inc**	**66**	1,483	92	91	215 | 168	65	**0.00 | 18.5**	39	24.1 | 16.3
58)	trans-1,3-Dichloropropene	x	NR	ND	<15	(10.10)	-	-	**41**		75	77	0.00 | 30.2	39.1	0.00 | 43.2	110	0.00 | 24.5
59)	Ethyl methacrylate		NR	ND	<16	(10.22)	-	-	0		69	41	0.00 | 69.2	99	0.00 | 18.5	86	0.00 | 16.1
60)	1,1,2-Trichloroethane		NR	ND	<17	(10.26)	-	-	0		83	97	0.00 | 125	61	0.00 | 70.3	85	0.00 | 59.8
61)	1,3-Dichloropropane	x	NR	ND	<13	(10.40)	-	-	**32**		76	41	0.00 | 61.7	78	0.00 | 32.5	39	0.00 | 22.8
62)	2-Hexanone	x	NR	ND	<16	(10.50)	-	-	**35**		43	58	0.00 | 59.4	57	0.00 | 21.2	100	0.00 | 16.0
63)	Tetrachloroethene		NR	ND	<16	(10.36)	-	-	0		164	166	0.00 | 127	129	0.00 | 88.5	131	0.00 | 84.5
64)	Dibromochloromethane		NR	ND	<14	(10.59)	-	-	0		129	127	0.00 | 79.2	-		-	
65)	1,2-Dibromoethane		NR	ND	<16	(10.66)	-	-	0		107	109	0.00 | 89.0	188	0.00 | 2.80	-	
66)	Chlorobenzene	x	NR	ND	<12	(11.06)	-	-	77		112	77	0.00 | 61.4	114	0.00 | 33.1	-	
67)	1,1,1,2-Tetrachloroethane		NR	ND	<12	(11.13)	-	-	0		131	133	0.00 | 94.0	117	0.00 | 64.0	119	0.00 | 63.7
68)	Ethylbenzene		3.8605	ND	<13	11.15	0.00	**F**	**48**	2,064	91	106	**0.00 | 32.6**	51	16.4 | 7.80	-	
69)	m- & p-Xylenes		7.5188	ND	<20	11.24	0.00	P	77	1,568	106	91	152 | 188	105	37.6 | 41.4	77	45.9 | 24.3
70)	o-Xylene	x	NR	ND	<11	(11.51)	-	-	**63**		106	91	0.00 | 206	105	0.00 | 48.7	-	
71)	Styrene		2.9636	ND	<9.0	11.52	0.00	**F**	**68**	957	104	103	50.7 | 46.8	78	**75.8 | 41.6**	51	**0.00 | 22.7**
72)	Bromoform		NR	ND	<16	(11.65)	-	-	0		173	175	0.00 | 46.3	254	0.00 | 12.5	-	
73)	Isopropylbenzene		1.8317	ND	<11	11.76	0.00	**Inc**	**59**	949	105	120	52.0 | 27.0	77	**0.00 | 14.5**	79	**0.00 | 11.8**
74)	1,4-Dichlorobenzene-d4		500	-	-	12.56	0.00	P	97	100,869	152	115	58.9 | 55.2	150	160 | 157	-	
75)	cis-1,4-dichloro-2-butene		No Cal.	-	-	(11.81)	-	-	0		75	53	0.00 | 106	89	0.00 | 47.5	-	
76)	4-Bromofluorobenzene (S)		607.96	Sur	-	11.86	0.00	P	98	84,768	95	174	74.7 | 75.6	176	70.6 | 73.8	75	48.5 | 47.6
77)	1,1,2,2-Tetrachloroethane		NR	ND	<18	(11.96)	-	-	0		83	85	0.00 | 70.8	131	0.00 | 11.0	95	0.00 | 18.7
78)	trans-1,4-Dichloro-2-butene		NR	ND	<14	(11.99)	-	-	0		53	88	0.00 | 55.9	124	0.00 | 23.1	-	
79)	1,2,3-Trichloropropane		NR	ND	<22	(11.98)	-	-	0		110	75	0.00 | 269	39	0.00 | 79.2	-	
80)	Bromobenzene		1.5428	ND	<18	11.94	-0.01	P	85	206	156	158	80.1 | 94.7	-		-	
81)	n-Propylbenzene		2.3240	ND	<15	12.02	-0.01	**Inc**	80	1,398	91	120	17.6 | 23.6	92	**0.00 | 11.4**	65	**0.00 | 9.90**
82)	2-Chlorotoluene		NR	ND	<15	(12.08)	-	-	0		126	91	0.00 | 289	63	0.00 | 36.0	-	
83)	4-Ethyltoluene	x	No Cal.	-	-	(12.09)	-	-	**52**		105	120	0.00 | 29.9	77	0.00 | 10.6	-	
84)	1,3,5-Trimethylbenzene		2.7859	ND	<13	12.13	0.00	**Inc**	82	1,161	105	120	59.2 | 50.6	119	**0.00 | 11.0**	77	**0.00 | 12.6**
85)	4-Chlorotoluene	M	5.2612	ND	<13	12.17	0.03	**F**	**48**	2,214	91	126	**0.00 | 34.5**	63	**0.00 | 11.3**	-	
86)	tert-Butylbenzene		NR	ND	<13	(12.33)	-	-	0		134	119	0.00 | 340	91	0.00 | 215	-	
87)	1,2,4-Trimethylbenzene		4.7697	ND	<11	12.35	-0.01	P	89	2,033	105	120	57.8 | 50.1	-		-	
88)	Pentachloroethane		NR	ND	<86	(12.35)	-	-	0		167	165	0.00 | 86.1	132	0.00 | 42.9	-	
89)	sec-Butylbenzene		2.4916	ND	<11	12.45	-0.01	**Inc**	**56**	1,313	105	134	**0.00 | 20.4**	-		-	
90)	4-Isopropyltoluene		2.3748	ND	<10	12.54	0.00	**Inc**	74	1,092	119	134	23.8 | 28.5	91	**0.00 | 22.4**	-	
91)	1,3-Dichlorobenzene		3.0704	ND	<16	12.53	-0.01	P	72	809	146	148	89.7 | 63.8	111	46.1 | 35.3	-	
92)	1,4-Dichlorobenzene	x	NR	ND	<17	(12.58)	-	-	**67**		146	111	0.00 | 37.8	148	0.00 | 61.5	-	
93)	n-Butylbenzene		3.1187	ND	<12	12.77	0.00	**F**	**65**	719	92	91	221 | 179	134	**87.8 | 50.5**	-	
94)	1,2-Dichlorobenzene		3.5601	ND	<15	12.80	0.00	P	76	890	146	148	38.3 | 64.6	111	46.0 | 40.4	-	
95)	Hexachloroethane		No Cal.	-	-	(12.95)	-	-	0		201	117	0.00 | 129	199	0.00 | 65.0	203	0.00 | 64.5
96)	1,2-Dibromo-3-chloropropane		NR	ND	<19	(13.24)	-	-	0		75	155	0.00 | 104	157	0.00 | 123	-	
97)	Nitrobenzene		No Cal.	-	-	(13.35)	-	-	0		123	51	0.00 | 62.1	77	0.00 | 146	-	
98)	1,2,4-Trichlorobenzene		10.001	ND	<17	13.69	-0.01	P	79	1,698	180	182	67.9 | 97.2	184	23.5 | 29.6	145	31.4 | 30.6
99)	Hexachlorobutadiene	x	NR	ND	<10	(13.78)	-	-	**26**		225	227	0.00 | 59.6	260	0.00 | 22.3	223	0.00 | 59.4
100	Naphthalene		6.6191	ND	<16	13.83	-0.01	**Inc**	71	3,249	128	127	23.6 | 12.5	129	**0.00 | 11.6**	-	
101	1,2,3-Trichlorobenzene		7.3933	ND	<15	13.96	-0.01	P	96	1,221	180	182	91.0 | 91.8	184	32.5 | 29.8	145	36.1 | 29.8

Uses lowest known RLs; project RLs may be higher. Qualitative P/F based only on output ratios at apex and may not reflect full peak or analyst review.

For analyst review assistance only.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224014.D
Acq On : 22 Apr 2024 16:11
Operator :
Sample : AZ14434-002 @ 1190uL (1:1 of 6.7g in 10mL)
Misc : PAV 1150, 1149
ALS Vial : 9 Sample Multiplier: 50

Quant Time: Apr 22 16:35:10 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	6.241	168	120941	10.00	ppb	0.00
42) 1,4-Difluorobenzene	7.563	114	205593	10.00	ppb	0.00
50) Chlorobenzene-d5	11.036	117	184056	10.00	ppb	0.00
74) 1,4-Dichlorobenzene-d4	12.564	152	100869	10.00	ppb	0.00
System Monitoring Compounds						
35) Dibromofluoromethane (S)	6.099	113	55328	11.19	ppb	0.00
Spiked Amount 10.000			Recovery = 111.90%			
56) Toluene-d8 (S)	9.786	98	207315	11.50	ppb	0.00
Spiked Amount 10.000			Recovery = 115.00%			
76) 4-Bromofluorobenzene (S)	11.855	95	84768	12.16	ppb	0.00
Spiked Amount 10.000			Recovery = 121.60%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	0.000		0	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	0.000		0	N.D.		
6) Chloroethane	0.000		0	N.D. d		
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Diethyl ether	0.000		0	N.D.		
9) 1,1-Dichloroethene	0.000		0	N.D.		
10) Freon 113	0.000		0	N.D.		
11) Acetone	0.000		0	N.D.		
12) Iodomethane	0.000		0	N.D.		
13) Carbon disulfide	3.109	76	1478	4.4431	ppb	75
14) Allyl chloride	0.000		0	N.D.		
15) Methylene chloride	3.475	84	32560	184.9905	ppb	97
16) t-Butanol (TBA)	0.000		0	N.D.		
17) Acrylonitrile	0.000		0	N.D.		
18) Methyl t-butyl ether (...	0.000		0	N.D.		
19) trans-1,2-Dichloroethene	0.000		0	N.D.		
20) n-Hexane	0.000		0	N.D. d		
21) 1,1-Dichloroethane	0.000		0	N.D.		
22) Vinyl acetate	0.000		0	N.D.		
23) 2-chloro-1,3-butadiene	0.000		0	N.D.		
24) Diisopropyl ether (DIPE)	0.000		0	N.D.		
25) Ethyl t-butyl ether (E...	0.000		0	N.D.		
26) 2-Butanone (MEK)	0.000		0	N.D.		
27) cis-1,2-Dichloroethene	0.000		0	N.D.		
28) 2,2-Dichloropropane	0.000		0	N.D.		
29) Propionitrile	0.000		0	N.D.		
30) Methyl acrylate	0.000		0	N.D.		
31) Methacrylonitrile	0.000		0	N.D.		
32) Bromochloromethane	0.000		0	N.D.		
33) Chloroform	0.000		0	N.D.		
34) Tetrahydrofuran	0.000		0	N.D.		
36) 1,1,1-Trichloroethane	0.000		0	N.D.		
37) 1-Chlorobutane	0.000		0	N.D. d		
38) 1,1-Dichloropropene	0.000		0	N.D.		
39) Carbon tetrachloride	0.000		0	N.D.		
40) Benzene	6.749	78	1281	2.7675	ppb	63
41) 1,2-Dichloroethane	0.000		0	N.D.		
43) t- Amyl methyl ether (...	0.000		0	N.D.		
44) Trichloroethene	0.000		0	N.D.		
45) 1,2-Dichloropropane	0.000		0	N.D.		
46) Methyl methacrylate	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224014.D
Acq On : 22 Apr 2024 16:11
Operator :
Sample : AZ14434-002 @ 1190uL (1:1 of 6.7g in 10mL)
Misc : PAV 1150, 1149
ALS Vial : 9 Sample Multiplier: 50

Quant Time: Apr 22 16:35:10 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

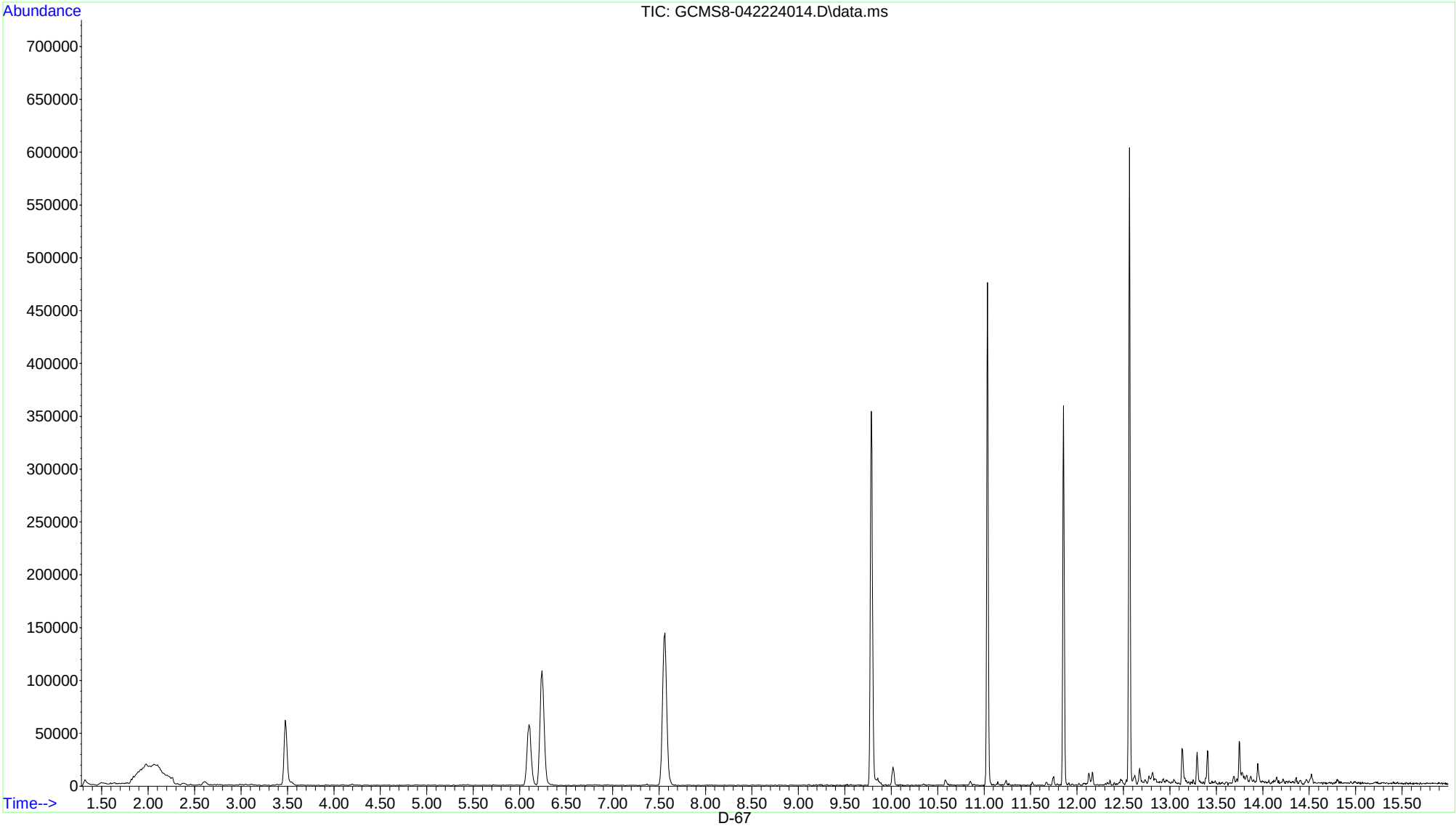
Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
47) Dibromomethane	0.000		0	N.D.		
48) Bromodichloromethane	0.000		0	N.D.		
49) 2-nitro-propane	0.000		0	N.D. d		
51) Chloromethyl cyanide	0.000		0	N.D.		
52) 2-Chloroethyl vinyl ether	0.000		0	N.D.		
53) cis-1,3-Dichloropropene	0.000		0	N.D. d		
54) 4-Methyl-2-pentanone	0.000		0	N.D. d		
55) 1,1-Dichloro-2-propanone	0.000		0	N.D.		
57) Toluene	9.854	92	1483	5.0695 ppb	#	66
58) trans-1,3-Dichloropropene	0.000		0	N.D. d		
59) Ethyl methacrylate	0.000		0	N.D.		
60) 1,1,2-Trichloroethane	0.000		0	N.D.		
61) 1,3-Dichloropropane	0.000		0	N.D. d		
62) 2-Hexanone	0.000		0	N.D. d		
63) Tetrachloroethene	0.000		0	N.D.		
64) Dibromochloromethane	0.000		0	N.D.		
65) 1,2-Dibromoethane	0.000		0	N.D.		
66) Chlorobenzene	0.000		0	N.D. d		
67) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.		
68) Ethylbenzene	11.151	91	2064	3.8605 ppb	#	48
69) m- & p-Xylenes	11.235	106	1568	7.5188 ppb	#	77
70) o-Xylene	0.000		0	N.D. d		
71) Styrene	11.519	104	957	2.9636 ppb	#	68
72) Bromoform	0.000		0	N.D.		
73) Isopropylbenzene	11.761	105	949	1.8317 ppb		59
75) cis-1,4-dichloro-2-butene	0.000		0	N.D.		
77) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.		
78) trans-1,4-Dichloro-2-b...	0.000		0	N.D.		
79) 1,2,3-Trichloropropane	0.000		0	N.D.		
80) Bromobenzene	11.944	156	206	1.5428 ppb		85
81) n-Propylbenzene	12.018	91	1398	2.3240 ppb		80
82) 2-Chlorotoluene	0.000		0	N.D.		
83) 4-Ethyltoluene	0.000		0	N.D. d		
84) 1,3,5-Trimethylbenzene	12.128	105	1161	2.7859 ppb		82
85) 4-Chlorotoluene	12.170	91	2214m	5.2612 ppb		
86) tert-Butylbenzene	0.000		0	N.D.		
87) 1,2,4-Trimethylbenzene	12.354	105	2033	4.7697 ppb		89
88) Pentachloroethane	0.000		0	N.D.		
89) sec-Butylbenzene	12.454	105	1313	2.4916 ppb		56
90) 4-Isopropyltoluene	12.543	119	1092	2.3748 ppb		74
91) 1,3-Dichlorobenzene	12.527	146	809	3.0704 ppb		72
92) 1,4-Dichlorobenzene	0.000		0	N.D. d		
93) n-Butylbenzene	12.774	92	719	3.1187 ppb	#	65
94) 1,2-Dichlorobenzene	12.800	146	890	3.5601 ppb		76
95) Hexachloroethane	0.000		0	N.D.		
96) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.		
97) Nitrobenzene	0.000		0	N.D.		
98) 1,2,4-Trichlorobenzene	13.688	180	1698	10.0007 ppb		79
99) Hexachlorobutadiene	0.000		0	N.D. d		
100) Naphthalene	13.830	128	3249	6.6191 ppb		71
101) 1,2,3-Trichlorobenzene	13.961	180	1221	7.3933 ppb		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224014.D
Acq On : 22 Apr 2024 16:11
Operator :
Sample : AZ14434-002 @ 1190uL (1:1 of 6.7g in 10mL)
Misc : PAV 1150, 1149
ALS Vial : 9 Sample Multiplier: 50

Quant Time: Apr 22 16:35:10 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration



D-67

Volatile Organic Analysis Data Summary

Lab Name:	Orange Coast Analytical (Alliance TG) - Phoenix, AZ	Data File Name:	GCMS8-042224015.D
Lab Reference #:	NRE AZ14434	Project Name:	Nasa White Sands Test Facility
Lab Sample ID:	AZ14434-003	Client Sample ID:	2404101320
Sample Type:	CS	Date Sampled:	04/10/24 13:20
Analysis Method:	8260B	Date Received:	04/18/24 10:00
Prep. Method:	5035A	Date Extracted:	04/10/24 13:20
Initial Sample:	11.8g	Date Analyzed:	04/22/24 16:34
Sample Extract:	10mL	Analysis Multiplier:	50
Sample Loaded:	680uL	Dilution Factor:	1
Analysis Batch:	0422242		

Units: mg/kg

Analyte	CAS #	Qualifiers:	Result	RL	MDLs	Calibration Range
Acetone	67-64-1		<0.074	0.25	0.074	0.0250-2.50
Acrylonitrile	107-13-1		<0.022	0.25	0.022	0.0500-2.50
Allyl chloride	107-05-1		<0.015	0.050	0.015	0.0500-2.50
Benzene	71-43-2		<0.011	0.050	0.011	0.0125-2.50
Bromobenzene	108-86-1		<0.018	0.050	0.018	0.0125-2.50
Bromochloromethane	74-97-5		<0.018	0.050	0.018	0.0250-2.50
Bromodichloromethane	75-27-4		<0.017	0.050	0.017	0.0125-2.50
Bromoform	75-25-2		<0.016	0.050	0.016	0.0250-2.50
Bromomethane	74-83-9		<0.014	0.25	0.014	0.0125-5.00
2-Butanone (MEK)	78-93-3		<0.036	0.25	0.036	0.250-2.50
n-Butylbenzene	104-51-8		<0.012	0.050	0.012	0.0250-2.50
sec-Butylbenzene	135-98-8		<0.011	0.050	0.011	0.0125-2.50
tert-Butylbenzene	98-06-6		<0.013	0.050	0.013	0.0250-2.50
Carbon disulfide	75-15-0		<0.017	0.10	0.017	0.0125-2.50
Carbon tetrachloride	56-23-5		<0.022	0.050	0.022	0.0250-2.50
Chlorobenzene	108-90-7		<0.012	0.050	0.012	0.0125-2.50
Chloroethane	75-00-3		<0.020	0.25	0.020	0.0125-5.00
2-Chloroethyl vinyl ether	110-75-8		<0.013	0.25	0.013	0.0250-2.50
Chloroform	67-66-3		<0.017	0.050	0.017	0.0125-2.50
Chloromethane	74-87-3		<0.019	0.25	0.019	0.0125-5.00
2-Chlorotoluene	95-49-8		<0.015	0.050	0.015	0.0125-2.50
4-Chlorotoluene	106-43-4		<0.013	0.050	0.013	0.0125-2.50
1,2-Dibromo-3-chloropropane	96-12-8		<0.019	0.10	0.019	0.0250-2.50
Dibromochloromethane	124-48-1		<0.014	0.050	0.014	0.0250-2.50
1,2-Dibromoethane	106-93-4		<0.016	0.050	0.016	0.0250-2.50
Dibromomethane	74-95-3		<0.019	0.050	0.019	0.0125-2.50
trans-1,4-Dichloro-2-butene	110-57-6		<0.014	0.050	0.014	0.0250-2.50
1,4-Dichlorobenzene	106-46-7		<0.017	0.050	0.017	0.0125-2.50
1,3-Dichlorobenzene	541-73-1		<0.016	0.050	0.016	0.0125-2.50
1,2-Dichlorobenzene	95-50-1		<0.015	0.050	0.015	0.0125-2.50
Dichlorodifluoromethane	75-71-8		<0.028	0.25	0.028	0.0250-2.00
1,2-Dichloroethane	107-06-2		<0.019	0.050	0.019	0.0125-2.50
1,1-Dichloroethane	75-34-3		<0.019	0.050	0.019	0.0250-2.50
cis-1,2-Dichloroethene	156-59-2		<0.015	0.050	0.015	0.0125-2.50
trans-1,2-Dichloroethene	156-60-5		<0.017	0.050	0.017	0.0125-2.50
1,1-Dichloroethene	75-35-4		<0.022	0.050	0.022	0.0250-2.50
2,2-Dichloropropane	594-20-7		<0.018	0.050	0.018	0.0125-2.50
1,3-Dichloropropane	142-28-9		<0.013	0.050	0.013	0.0125-2.50
1,2-Dichloropropane	78-87-5		<0.017	0.050	0.017	0.0250-2.50
1,1-Dichloropropene	563-58-6		<0.015	0.050	0.015	0.0125-2.50
cis-1,3-Dichloropropene	10061-01-5		<0.013	0.050	0.013	0.0125-2.50
trans-1,3-Dichloropropene	10061-02-6		<0.015	0.050	0.015	0.0125-2.50
Diethyl ether	60-29-7		<0.020	0.10	0.020	0.0250-2.50

All values presented with any preparation, dilution, or unit conversions taken into account.

Volatile Organic Analysis Data Summary

Lab Name:	Orange Coast Analytical (Alliance TG) - Phoenix, AZ	Data File Name:	GCMS8-042224015.D
Lab Reference #:	NRE AZ14434	Project Name:	Nasa White Sands Test Facility
Lab Sample ID:	AZ14434-003	Client Sample ID:	2404101320
Sample Type:	CS	Date Sampled:	04/10/24 13:20
Analysis Method:	8260B	Date Received:	04/18/24 10:00
Prep. Method:	5035A	Date Extracted:	04/10/24 13:20
Initial Sample:	11.8g	Date Analyzed:	04/22/24 16:34
Sample Extract:	10mL	Analysis Multiplier:	50
Sample Loaded:	680uL	Dilution Factor:	1
Analysis Batch:	0422242		

Units: mg/kg

Analyte	CAS #	Qualifiers:	Result	RL	MDLs	Calibration Range
Ethyl methacrylate	97-63-2		<0.016	0.10	0.016	0.0250-2.00
Ethylbenzene	100-41-4		<0.013	0.050	0.013	0.0125-2.50
Hexachlorobutadiene	87-68-3		<0.010	0.10	0.010	0.0125-2.00
2-Hexanone	591-78-6		<0.016	0.25	0.016	0.0250-2.50
Iodomethane	74-88-4		<0.019	0.050	0.019	0.0125-2.50
Isopropylbenzene	98-82-8		<0.011	0.050	0.011	0.0125-2.50
4-Isopropyltoluene	99-87-6		<0.010	0.050	0.010	0.0250-2.50
Methacrylonitrile	126-98-7		<0.017	0.25	0.017	0.0500-2.50
Methyl acrylate	96-33-3		<0.019	0.25	0.019	0.0250-2.50
Methyl methacrylate	80-62-6		<0.018	0.25	0.018	0.0500-2.50
Methyl t-butyl ether (MTBE)	1634-04-4		<0.030	0.050	0.030	0.0250-2.50
4-Methyl-2-pentanone	108-10-1		<0.024	0.25	0.024	0.0250-2.50
Naphthalene	91-20-3		<0.016	0.050	0.016	0.0250-2.50
Pentachloroethane	76-01-7		<0.086	0.10	0.086	0.0250-2.50
Propionitrile	107-12-0		<0.050	0.25	0.050	0.100-2.50
n-Propylbenzene	103-65-1		<0.015	0.050	0.015	0.0125-2.50
Styrene	100-42-5		<0.0090	0.050	0.0090	0.0125-2.50
1,1,1,2-Tetrachloroethane	630-20-6		<0.012	0.050	0.012	0.0125-2.50
1,1,2,2-Tetrachloroethane	79-34-5		<0.018	0.050	0.018	0.0125-2.50
Tetrachloroethene	127-18-4		<0.016	0.050	0.016	0.0125-2.50
Tetrahydrofuran	109-99-9		<0.038	0.25	0.038	0.250-2.50
Toluene	108-88-3		<0.019	0.050	0.019	0.0125-2.50
1,2,4-Trichlorobenzene	120-82-1		<0.017	0.050	0.017	0.0125-2.50
1,2,3-Trichlorobenzene	87-61-6		<0.015	0.050	0.015	0.0125-2.50
1,1,2-Trichloroethane	79-00-5		<0.017	0.050	0.017	0.0250-2.50
1,1,1-Trichloroethane	71-55-6		<0.017	0.050	0.017	0.0125-2.50
Trichloroethene	79-01-6		<0.017	0.050	0.017	0.0250-2.50
Trichlorofluoromethane	75-69-4		<0.020	0.25	0.020	0.0125-5.00
1,2,3-Trichloropropane	96-18-4		<0.022	0.050	0.022	0.0125-2.50
1,2,4-Trimethylbenzene	95-63-6		<0.011	0.050	0.011	0.0125-2.50
1,3,5-Trimethylbenzene	108-67-8		<0.013	0.050	0.013	0.0125-2.50
Vinyl acetate	108-05-4		<0.016	0.25	0.016	0.0500-2.50
Vinyl chloride	75-01-4		<0.018	0.050	0.018	0.0125-5.00
o-Xylene	95-47-6		<0.011	0.050	0.011	0.0125-2.50
m- & p-Xylenes	179601-23-1		<0.020	0.10	0.020	0.0250-5.00

Surrogate(s)

Analyte	CAS #	Qualifiers:	% Recovery	QC Limits
4-Bromofluorobenzene	460-00-4		117	50-130
Dibromofluoromethane	1868-53-7		108	65-130
Toluene-d8	2037-26-5		111	59-130

All values presented with any preparation, dilution, or unit conversions taken into account.

8260 Quantitation Review Report

C:\msdchem\1\data\2024\04-APR\VB042224\GCMS8-042224015.D **CS** 04/22/24 015

Sample Name: AZ14434-003 @ 680uL (1:1 of 11.8g in 10mL)
Data File Name: GCMS8-042224015.D
Date Acquired: 04/22/24 16:34
Vial Number: 10
Sample Multiplier: 50 **Dilution: 1**
Misc Info: PAV 1150, 1149

Operator:
Data File Path: C:\msdchem\1\data\2024\04-APR\VB042
Instrument Method: VOC092623 INSTRUMENT SCAN.M
Quant. Method: VOC022324Final
Last Result Mod: 04/22/24 17:10
Last Cal Update: 02/26/24 12:39
Last Cal Mod: 02/26/24 12:39

#	Internal Standard	Response
1)	Pentafluorobenzene	125,255
42)	1,4-Difluorobenzene	215,723
50)	Chlorobenzene-d5	194,970
74)	1,4-Dichlorobenzene-d4	107,029

#	Surrogate	% Rec	P/F	Soil Range
35)	Dibromofluoromethane	**108**	P	65-130
56)	Toluene-d8	**111**	P	59-130
76)	4-Bromofluorobenzene	**117**	P	50-130

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
1)	Pentafluorobenzene		500	-	-	6.25	0.01	-	100	125,255	168	-		-		-	
2)	Dichlorodifluoromethane		NR	ND	<28	(1.38)	-	-	0		85	87	0.00 | 34.5	-		-	
3)	Chloromethane		NR	ND	<19	(1.54)	-	-	0		50	52	0.00 | 31.3	-		-	
4)	Vinyl chloride		NR	ND	<18	(1.66)	-	-	0		62	64	0.00 | 30.5	-		-	
5)	Bromomethane		NR	ND	<14	(1.97)	-	-	0		94	96	0.00 | 88.5	-		-	
6)	Chloroethane		NR	ND	<20	(2.06)	-	-	0		64	66	0.00 | 34.3	-		-	
7)	Trichlorofluoromethane		NR	ND	<20	(2.35)	-	-	0		101	103	0.00 | 61.6	66	0.00 | 12.7	-	
8)	Diethyl ether		NR	ND	<20	(2.65)	-	-	0		74	45	0.00 | 103	59	0.00 | 129	-	
9)	1,1-Dichloroethene		NR	ND	<22	(2.90)	-	-	0		96	61	0.00 | 139	63	0.00 | 47.0	-	
10)	Freon 113		No Cal.	-	-	(2.90)	-	-	0		101	151	0.00 | 82.4	103	0.00 | 64.1	153	0.00 | 53.1
11)	Acetone		NR	ND	<74	(2.97)	-	-	0		58	43	0.00 | 266	-		-	
12)	Iodomethane		NR	ND	<19	(3.06)	-	-	0		142	127	0.00 | 40.6	141	0.00 | 12.9	-	
13)	Carbon disulfide		0.53988	ND	<17	3.12	0.00	Inc	75	186	76	78	**0.00 | 9.20**	-		-	
14)	Allyl chloride		NR	ND	<15	(3.33)	-	-	0		76	78	0.00 | 30.7	41	0.00 | 283	39	0.00 | 175
15)	Methylene chloride		8.7478	ND	<86	3.49	0.00	P	94	10,382	84	49	122 | 121	86	48.8 | 64.4	51	35.4 | 36.5
16)	t-Butanol (TBA)		No Cal.	-	-	(3.70)	-	-	0		59	57	0.00 | 8.40	-		-	
17)	Acrylonitrile		NR	ND	<22	(3.81)	-	-	0		52	53	0.00 | 120	51	0.00 | 41.7	-	
18)	Methyl t-butyl ether (MTBE)		NR	ND	<30	(3.85)	-	-	0		73	57	0.00 | 23.3	-		-	
19)	trans-1,2-Dichloroethene		NR	ND	<17	(3.83)	-	-	0		96	61	0.00 | 137	98	0.00 | 65.3	-	
20)	n-Hexane		No Cal.	-	-	(4.22)	-	-	0		57	43	0.00 | 64.9	41	0.00 | 72.0	56	0.00 | 47.3
21)	1,1-Dichloroethane		NR	ND	<19	(4.41)	-	-	0		63	65	0.00 | 33.7	83	0.00 | 15.0	-	
22)	Vinyl acetate		NR	ND	<16	(4.52)	-	-	0		86	43	0.00 | 949	-		-	
23)	2-chloro-1,3-butadiene		No Cal.	-	-	(4.54)	-	-	0		53	88	0.00 | 58.3	52	0.00 | 23.5	-	
24)	Diisopropyl ether (DIPE)		No Cal.	-	-	(4.57)	-	-	0		45	43	0.00 | 38.9	87	0.00 | 24.3	-	
25)	Ethyl t-butyl ether (ETBE)		No Cal.	-	-	(5.12)	-	-	0		59	57	0.00 | 31.8	87	0.00 | 34.1	-	
26)	2-Butanone (MEK)		NR	ND	<36	(5.35)	-	-	0		72	43	0.00 | 353	57	0.00 | 29.9	-	
27)	cis-1,2-Dichloroethene		NR	ND	<15	(5.29)	-	-	0		96	61	0.00 | 132	98	0.00 | 56.2	-	
28)	2,2-Dichloropropane		NR	ND	<18	(5.28)	-	-	0		77	97	0.00 | 22.0	79	0.00 | 30.5	-	
29)	Propionitrile		NR	ND	<50	(5.46)	-	-	0		54	52	0.00 | 11.3	55	0.00 | 15.7	-	
30)	Methyl acrylate		NR	ND	<19	(5.51)	-	-	0		55	85	0.00 | 17.1	-		-	
31)	Methacrylonitrile		NR	ND	<17	(5.67)	-	-	0		67	41	0.00 | 147	39	0.00 | 83.1	52	0.00 | 37.0
32)	Bromochloromethane		NR	ND	<18	(5.66)	-	-	0		128	49	0.00 | 167	130	0.00 | 134	-	
33)	Chloroform		NR	ND	<17	(5.83)	-	-	0		83	85	0.00 | 66.3	-		-	
34)	Tetrahydrofuran		NR	ND	<38	(5.74)	-	-	0		72	71	0.00 | 96.8	42	0.00 | 241	-	
35)	Dibromofluoromethane (S)		540.20	Sur	-	6.10	0.00	P	96	55,318	113	111	106 | 102	192	18.6 | 22.1	81	14.6 | 14.3
36)	1,1,1-Trichloroethane		NR	ND	<17	(6.10)	-	-	0		97	99	0.00 | 60.3	61	0.00 | 38.9	63	0.00 | 14.3
37)	1-Chlorobutane	x	No Cal.	-	-	(6.30)	-	-	90		56	49	0.00 | 3.40	-		-	
38)	1,1-Dichloropropene		NR	ND	<15	(6.39)	-	-	0		75	39	0.00 | 55.5	110	0.00 | 36.4	77	0.00 | 31.4
39)	Carbon tetrachloride		NR	ND	<22	(6.38)	-	-	0		117	119	0.00 | 100	-		-	
40)	Benzene		NR	ND	<11	(6.75)	-	-	0		78	51	0.00 | 15.3	-		-	
41)	1,2-Dichloroethane		NR	ND	<19	(6.81)	-	-	0		62	98	0.00 | 12.3	-		-	
42)	1,4-Difluorobenzene		500	-	-	7.56	0.00	-	100	215,723	114	-		-		-	
43)	t- Amyl methyl ether (TAME)		No Cal.	-	-	(7.05)	-	-	0		73	55	0.00 | 37.9	87	0.00 | 22.4	-	
44)	Trichloroethene		NR	ND	<17	(8.03)	-	-	0		95	132	0.00 | 115	130	0.00 | 113	97	0.00 | 64.2
45)	1,2-Dichloropropane		NR	ND	<17	(8.46)	-	-	0		63	112	0.00 | 5.70	76	0.00 | 47.7	-	

For analyst review assistance only.

8260 Quantitation Review Report

C:\msdchem\1\data\2024\04-APR\VB042224\GCMS8-042224015.D **CS** 04/22/24 015

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
46)	Methyl methacrylate		NR	ND	<18	(8.77)	-	-	0		69	41	0.00 | 133	100	0.00 | 40.0	39	0.00 | 64.9
47)	Dibromomethane		NR	ND	<19	(8.65)	-	-	0		93	174	0.00 | 107	95	0.00 | 82.1	-	
48)	Bromodichloromethane		NR	ND	<17	(8.94)	-	-	0		83	85	0.00 | 64.1	127	0.00 | 8.90	-	
49)	2-nitro-propane		NR	ND	<24	(9.26)	-	-	0		43	39	0.00 | 28.5	-		-	
50)	Chlorobenzene-d5		500	-	-	11.04	0.00	P	98	194,970	117	82	57.5 | 54.8	119	32.7 | 31.9	54	22.4 | 22.3
51)	Chloromethyl cyanide		No Cal.	-	-	(9.38)	-	-	0		75	48	0.00 | 39.0	40	0.00 | 44.5	-	
52)	2-Chloroethyl vinyl ether		NR	ND	<13	(9.38)	-	-	0		63	65	0.00 | 30.2	106	0.00 | 31.4	-	
53)	cis-1,3-Dichloropropene		NR	ND	<13	(9.51)	-	-	0		75	77	0.00 | 33.4	39	0.00 | 47.1	110	0.00 | 21.7
54)	4-Methyl-2-pentanone	x	NR	ND	<24	(9.71)	-	-	**1**		58	41	0.00 | 52.2	100	0.00 | 44.0	85	0.00 | 42.0
55)	1,1-Dichloro-2-propanone	x	No Cal.	-	-	(9.71)	-	-	**32**		83	63	0.00 | 56.4	91	0.00 | 22.8	-	
56)	Toluene-d8 (S)		554.95	Sur	-	9.79	0.00	P	97	212,029	98	100	68.4 | 71.5	42	11.7 | 12.7	70	11.5 | 11.3
57)	Toluene		0.79063	ND	<19	9.85	0.00	**F**	**40**	245	92	91	**79.9 | 168**	65	**0.00 | 18.5**	39	**0.00 | 16.3**
58)	trans-1,3-Dichloropropene		NR	ND	<15	(10.10)	-	-	0		75	77	0.00 | 30.2	39.1	0.00 | 43.2	110	0.00 | 24.5
59)	Ethyl methacrylate		NR	ND	<16	(10.22)	-	-	0		69	41	0.00 | 69.2	99	0.00 | 18.5	86	0.00 | 16.1
60)	1,1,2-Trichloroethane		NR	ND	<17	(10.26)	-	-	0		83	97	0.00 | 125	61	0.00 | 70.3	85	0.00 | 59.8
61)	1,3-Dichloropropane		NR	ND	<13	(10.40)	-	-	0		76	41	0.00 | 61.7	78	0.00 | 32.5	39	0.00 | 22.8
62)	2-Hexanone		NR	ND	<16	(10.50)	-	-	0		43	58	0.00 | 59.4	57	0.00 | 21.2	100	0.00 | 16.0
63)	Tetrachloroethene		NR	ND	<16	(10.36)	-	-	0		164	166	0.00 | 127	129	0.00 | 88.5	131	0.00 | 84.5
64)	Dibromochloromethane		NR	ND	<14	(10.59)	-	-	0		129	127	0.00 | 79.2	-		-	
65)	1,2-Dibromoethane		NR	ND	<16	(10.66)	-	-	0		107	109	0.00 | 89.0	188	0.00 | 2.80	-	
66)	Chlorobenzene	x	NR	ND	<12	(11.06)	-	-	**27**		112	77	0.00 | 61.4	114	0.00 | 33.1	-	
67)	1,1,1,2-Tetrachloroethane		NR	ND	<12	(11.13)	-	-	0		131	133	0.00 | 94.0	117	0.00 | 64.0	119	0.00 | 63.7
68)	Ethylbenzene	x	NR	ND	<13	(11.15)	-	-	**49**		91	106	0.00 | 32.6	51	0.00 | 7.80	-	
69)	m- & p-Xylenes		NR	ND	<20	(11.24)	-	-	0		106	91	0.00 | 188	105	0.00 | 41.4	77	0.00 | 24.3
70)	o-Xylene		NR	ND	<11	(11.51)	-	-	0		106	91	0.00 | 206	105	0.00 | 48.7	-	
71)	Styrene	x	NR	ND	<9.0	(11.52)	-	-	**36**		104	103	0.00 | 46.8	78	0.00 | 41.6	51	0.00 | 22.7
72)	Bromoform		NR	ND	<16	(11.65)	-	-	0		173	175	0.00 | 46.3	254	0.00 | 12.5	-	
73)	Isopropylbenzene		NR	ND	<11	(11.76)	-	-	0		105	120	0.00 | 27.0	77	0.00 | 14.5	79	0.00 | 11.8
74)	1,4-Dichlorobenzene-d4		500	-	-	12.56	0.00	P	97	107,029	152	115	54.3 | 55.2	150	161 | 157	-	
75)	cis-1,4-dichloro-2-butene		No Cal.	-	-	(11.81)	-	-	0		75	53	0.00 | 106	89	0.00 | 47.5	-	
76)	4-Bromofluorobenzene (S)		584.96	Sur	-	11.86	0.00	P	94	86,542	95	174	83.5 | 75.6	176	77.3 | 73.8	75	50.7 | 47.6
77)	1,1,2,2-Tetrachloroethane		NR	ND	<18	(11.96)	-	-	0		83	85	0.00 | 70.8	131	0.00 | 11.0	95	0.00 | 18.7
78)	trans-1,4-Dichloro-2-butene		NR	ND	<14	(11.99)	-	-	0		53	88	0.00 | 55.9	124	0.00 | 23.1	-	
79)	1,2,3-Trichloropropane		NR	ND	<22	(11.98)	-	-	0		110	75	0.00 | 269	39	0.00 | 79.2	-	
80)	Bromobenzene		NR	ND	<18	(11.96)	-	-	0		156	158	0.00 | 94.7	-		-	
81)	n-Propylbenzene		0.83349	ND	<15	12.02	-0.01	**Inc**	**61**	532	91	120	**0.00 | 23.6**	92	**0.00 | 11.4**	65	**0.00 | 9.90**
82)	2-Chlorotoluene		NR	ND	<15	(12.08)	-	-	0		126	91	0.00 | 289	63	0.00 | 36.0	-	
83)	4-Ethyltoluene	x	No Cal.	-	-	(12.09)	-	-	**52**		105	120	0.00 | 29.9	77	0.00 | 10.6	-	
84)	1,3,5-Trimethylbenzene	x	NR	ND	<13	(12.13)	-	-	**40**		105	120	0.00 | 50.6	119	0.00 | 11.0	77	0.00 | 12.6
85)	4-Chlorotoluene	x	NR	ND	<13	(12.14)	-	-	**48**		91	126	0.00 | 34.5	63	0.00 | 11.3	-	
86)	tert-Butylbenzene		NR	ND	<13	(12.33)	-	-	0		134	119	0.00 | 340	91	0.00 | 215	-	
87)	1,2,4-Trimethylbenzene	x	NR	ND	<11	(12.36)	-	-	**27**		105	120	0.00 | 50.1	-		-	
88)	Pentachloroethane		NR	ND	<86	(12.35)	-	-	0		167	165	0.00 | 86.1	132	0.00 | 42.9	-	
89)	sec-Butylbenzene		0.51506	ND	<11	12.46	0.00	P	**38**	288	105	134	49.2 | 20.4	-		-	
90)	4-Isopropyltoluene		0.92844	ND	<10	12.54	-0.01	**Inc**	**49**	453	119	134	**0.00 | 28.5**	91	**0.00 | 22.4**	-	
91)	1,3-Dichlorobenzene	x	NR	ND	<16	(12.53)	-	-	**26**		146	148	0.00 | 63.8	111	0.00 | 35.3	-	
92)	1,4-Dichlorobenzene	x	NR	ND	<17	(12.58)	-	-	**22**		146	111	0.00 | 37.8	148	0.00 | 61.5	-	
93)	n-Butylbenzene		1.7742	ND	<12	12.77	0.00	P	84	434	92	91	152 | 179	134	48.4 | 50.5	-	
94)	1,2-Dichlorobenzene		NR	ND	<15	(12.80)	-	-	0		146	148	0.00 | 64.6	111	0.00 | 40.4	-	
95)	Hexachloroethane		No Cal.	-	-	(12.95)	-	-	0		201	117	0.00 | 129	199	0.00 | 65.0	203	0.00 | 64.5
96)	1,2-Dibromo-3-chloropropane		NR	ND	<19	(13.24)	-	-	0		75	155	0.00 | 104	157	0.00 | 123	-	
97)	Nitrobenzene		No Cal.	-	-	(13.35)	-	-	0		123	51	0.00 | 62.1	77	0.00 | 146	-	
98)	1,2,4-Trichlorobenzene		3.9743	ND	<17	13.69	0.00	**F**	**56**	716	180	182	**60.2 | 97.2**	184	**0.00 | 29.6**	145	**0.00 | 30.6**
99)	Hexachlorobutadiene		NR	ND	<10	(13.78)	-	-	0		225	227	0.00 | 59.6	260	0.00 | 22.3	223	0.00 | 59.4
100	Naphthalene		2.2791	ND	<16	13.82	-0.01	**Inc**	**69**	1,187	128	127	**0.00 | 12.5**	129	**0.00 | 11.6**	-	
101	1,2,3-Trichlorobenzene	x	NR	ND	<15	(13.97)	-	-	**43**		180	182	0.00 | 91.8	184	0.00 | 29.8	145	0.00 | 29.8

Uses lowest known RLs; project RLs may be higher. Qualitative P/F based only on output ratios at apex and may not reflect full peak or analyst review.

For analyst review assistance only.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224015.D
Acq On : 22 Apr 2024 16:34
Operator :
Sample : AZ14434-003 @ 680uL (1:1 of 11.8g in 10mL)
Misc : PAV 1150, 1149
ALS Vial : 10 Sample Multiplier: 50

Quant Time: Apr 22 17:08:02 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	6.251	168	125255	10.00	ppb	0.01
42) 1,4-Difluorobenzene	7.563	114	215723	10.00	ppb	0.00
50) Chlorobenzene-d5	11.036	117	194970	10.00	ppb	0.00
74) 1,4-Dichlorobenzene-d4	12.564	152	107029	10.00	ppb	0.00
System Monitoring Compounds						
35) Dibromofluoromethane (S)	6.099	113	55318	10.80	ppb	0.00
Spiked Amount 10.000			Recovery = 108.00%			
56) Toluene-d8 (S)	9.786	98	212029	11.10	ppb	0.00
Spiked Amount 10.000			Recovery = 111.00%			
76) 4-Bromofluorobenzene (S)	11.855	95	86542	11.70	ppb	0.00
Spiked Amount 10.000			Recovery = 117.00%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	0.000		0	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	0.000		0	N.D.		
6) Chloroethane	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Diethyl ether	0.000		0	N.D.		
9) 1,1-Dichloroethene	0.000		0	N.D.		
10) Freon 113	0.000		0	N.D.		
11) Acetone	0.000		0	N.D.		
12) Iodomethane	0.000		0	N.D.		
13) Carbon disulfide	3.119	76	186	0.5399	ppb	75
14) Allyl chloride	0.000		0	N.D.		
15) Methylene chloride	3.485	84	10382	8.7478	ppb	94
16) t-Butanol (TBA)	0.000		0	N.D.		
17) Acrylonitrile	0.000		0	N.D.		
18) Methyl t-butyl ether (...	0.000		0	N.D.		
19) trans-1,2-Dichloroethene	0.000		0	N.D.		
20) n-Hexane	0.000		0	N.D.		
21) 1,1-Dichloroethane	0.000		0	N.D.		
22) Vinyl acetate	0.000		0	N.D.		
23) 2-chloro-1,3-butadiene	0.000		0	N.D.		
24) Diisopropyl ether (DIPE)	0.000		0	N.D.		
25) Ethyl t-butyl ether (E...	0.000		0	N.D.		
26) 2-Butanone (MEK)	0.000		0	N.D.		
27) cis-1,2-Dichloroethene	0.000		0	N.D.		
28) 2,2-Dichloropropane	0.000		0	N.D.		
29) Propionitrile	0.000		0	N.D.		
30) Methyl acrylate	0.000		0	N.D.		
31) Methacrylonitrile	0.000		0	N.D.		
32) Bromochloromethane	0.000		0	N.D.		
33) Chloroform	0.000		0	N.D.		
34) Tetrahydrofuran	0.000		0	N.D.		
36) 1,1,1-Trichloroethane	0.000		0	N.D.		
37) 1-Chlorobutane	0.000		0	N.D. d		
38) 1,1-Dichloropropene	0.000		0	N.D.		
39) Carbon tetrachloride	0.000		0	N.D.		
40) Benzene	0.000		0	N.D.		
41) 1,2-Dichloroethane	0.000		0	N.D.		
43) t- Amyl methyl ether (...	0.000		0	N.D.		
44) Trichloroethene	0.000		0	N.D.		
45) 1,2-Dichloropropane	0.000		0	N.D.		
46) Methyl methacrylate	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224015.D
Acq On : 22 Apr 2024 16:34
Operator :
Sample : AZ14434-003 @ 680uL (1:1 of 11.8g in 10mL)
Misc : PAV 1150, 1149
ALS Vial : 10 Sample Multiplier: 50

Quant Time: Apr 22 17:08:02 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

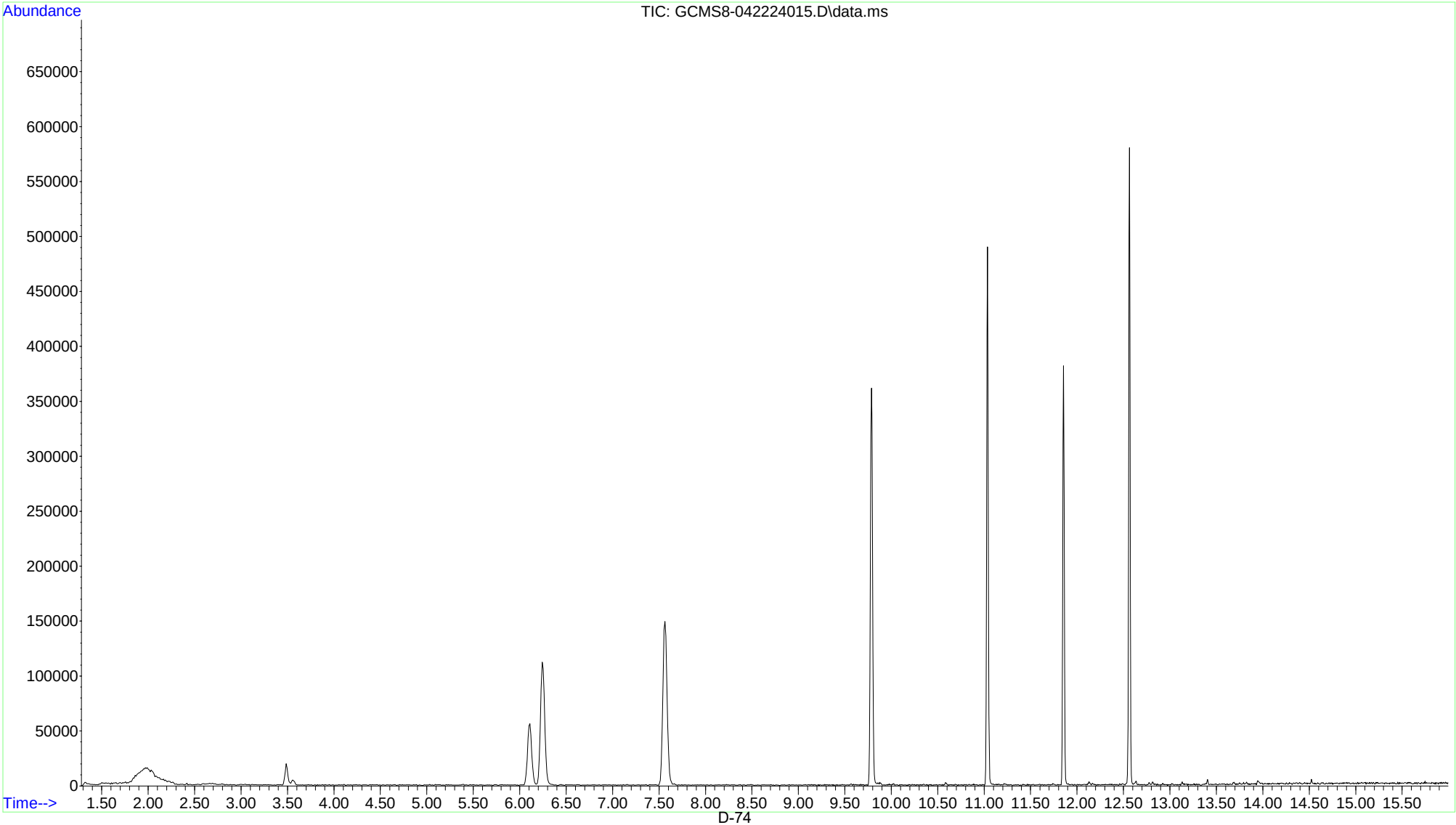
Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
47) Dibromomethane	0.000		0	N.D.		
48) Bromodichloromethane	0.000		0	N.D.		
49) 2-nitro-propane	0.000		0	N.D.		
51) Chloromethyl cyanide	0.000		0	N.D.		
52) 2-Chloroethyl vinyl ether	0.000		0	N.D.		
53) cis-1,3-Dichloropropene	0.000		0	N.D.		
54) 4-Methyl-2-pentanone	0.000		0	N.D. d		
55) 1,1-Dichloro-2-propanone	0.000		0	N.D. d		
57) Toluene	9.854	92	245	0.7906 ppb	#	40
58) trans-1,3-Dichloropropene	0.000		0	N.D.		
59) Ethyl methacrylate	0.000		0	N.D.		
60) 1,1,2-Trichloroethane	0.000		0	N.D.		
61) 1,3-Dichloropropane	0.000		0	N.D.		
62) 2-Hexanone	0.000		0	N.D.		
63) Tetrachloroethene	0.000		0	N.D.		
64) Dibromochloromethane	0.000		0	N.D.		
65) 1,2-Dibromoethane	0.000		0	N.D.		
66) Chlorobenzene	0.000		0	N.D. d		
67) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.		
68) Ethylbenzene	0.000		0	N.D. d		
69) m- & p-Xylenes	0.000		0	N.D.		
70) o-Xylene	0.000		0	N.D.		
71) Styrene	0.000		0	N.D. d		
72) Bromoform	0.000		0	N.D.		
73) Isopropylbenzene	0.000		0	N.D.		
75) cis-1,4-dichloro-2-butene	0.000		0	N.D.		
77) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.		
78) trans-1,4-Dichloro-2-b...	0.000		0	N.D.		
79) 1,2,3-Trichloropropane	0.000		0	N.D.		
80) Bromobenzene	0.000		0	N.D.		
81) n-Propylbenzene	12.018	91	532	0.8335 ppb		61
82) 2-Chlorotoluene	0.000		0	N.D.		
83) 4-Ethyltoluene	0.000		0	N.D. d		
84) 1,3,5-Trimethylbenzene	0.000		0	N.D. d		
85) 4-Chlorotoluene	0.000		0	N.D. d		
86) tert-Butylbenzene	0.000		0	N.D.		
87) 1,2,4-Trimethylbenzene	0.000		0	N.D. d		
88) Pentachloroethane	0.000		0	N.D.		
89) sec-Butylbenzene	12.459	105	288	0.5151 ppb		38
90) 4-Isopropyltoluene	12.538	119	453	0.9284 ppb		49
91) 1,3-Dichlorobenzene	0.000		0	N.D. d		
92) 1,4-Dichlorobenzene	0.000		0	N.D. d		
93) n-Butylbenzene	12.774	92	434	1.7742 ppb		84
94) 1,2-Dichlorobenzene	0.000		0	N.D.		
95) Hexachloroethane	0.000		0	N.D.		
96) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.		
97) Nitrobenzene	0.000		0	N.D.		
98) 1,2,4-Trichlorobenzene	13.693	180	716	3.9743 ppb	#	56
99) Hexachlorobutadiene	0.000		0	N.D.		
100) Naphthalene	13.824	128	1187	2.2791 ppb		69
101) 1,2,3-Trichlorobenzene	0.000		0	N.D. d		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224015.D
Acq On : 22 Apr 2024 16:34
Operator :
Sample : AZ14434-003 @ 680uL (1:1 of 11.8g in 10mL)
Misc : PAV 1150, 1149
ALS Vial : 10 Sample Multiplier: 50

Quant Time: Apr 22 17:08:02 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration



D-74

Volatile Organic Analysis Data Summary

Lab Name:	Orange Coast Analytical (Alliance TG) - Phoenix, AZ	Data File Name:	GCMS8-042224016.D
Lab Reference #:	NRE AZ14434	Project Name:	Nasa White Sands Test Facility
Lab Sample ID:	AZ14434-004	Client Sample ID:	2404101330
Sample Type:	CS	Date Sampled:	04/10/24 13:30
Analysis Method:	8260B	Date Received:	04/18/24 10:00
Prep. Method:	5035A	Date Extracted:	04/10/24 13:30
Initial Sample:	10.7g	Date Analyzed:	04/22/24 16:58
Sample Extract:	10mL	Analysis Multiplier:	50
Sample Loaded:	750uL	Dilution Factor:	1
Analysis Batch:	0422242		

Units: mg/kg

Analyte	CAS #	Qualifiers:	Result	RL	MDLs	Calibration Range
Acetone	67-64-1		<0.074	0.25	0.074	0.0250-2.50
Acrylonitrile	107-13-1		<0.022	0.25	0.022	0.0500-2.50
Allyl chloride	107-05-1		<0.015	0.050	0.015	0.0500-2.50
Benzene	71-43-2		<0.011	0.050	0.011	0.0125-2.50
Bromobenzene	108-86-1		<0.018	0.050	0.018	0.0125-2.50
Bromochloromethane	74-97-5		<0.018	0.050	0.018	0.0250-2.50
Bromodichloromethane	75-27-4		<0.017	0.050	0.017	0.0125-2.50
Bromoform	75-25-2		<0.016	0.050	0.016	0.0250-2.50
Bromomethane	74-83-9		<0.014	0.25	0.014	0.0125-5.00
2-Butanone (MEK)	78-93-3		<0.036	0.25	0.036	0.250-2.50
tert-Butylbenzene	98-06-6		<0.013	0.050	0.013	0.0250-2.50
sec-Butylbenzene	135-98-8		<0.011	0.050	0.011	0.0125-2.50
n-Butylbenzene	104-51-8		<0.012	0.050	0.012	0.0250-2.50
Carbon disulfide	75-15-0		<0.017	0.10	0.017	0.0125-2.50
Carbon tetrachloride	56-23-5		<0.022	0.050	0.022	0.0250-2.50
Chlorobenzene	108-90-7		<0.012	0.050	0.012	0.0125-2.50
Chloroethane	75-00-3		<0.020	0.25	0.020	0.0125-5.00
2-Chloroethyl vinyl ether	110-75-8		<0.013	0.25	0.013	0.0250-2.50
Chloroform	67-66-3		<0.017	0.050	0.017	0.0125-2.50
Chloromethane	74-87-3		<0.019	0.25	0.019	0.0125-5.00
4-Chlorotoluene	106-43-4		<0.013	0.050	0.013	0.0125-2.50
2-Chlorotoluene	95-49-8		<0.015	0.050	0.015	0.0125-2.50
1,2-Dibromo-3-chloropropane	96-12-8		<0.019	0.10	0.019	0.0250-2.50
Dibromochloromethane	124-48-1		<0.014	0.050	0.014	0.0250-2.50
1,2-Dibromoethane	106-93-4		<0.016	0.050	0.016	0.0250-2.50
Dibromomethane	74-95-3		<0.019	0.050	0.019	0.0125-2.50
trans-1,4-Dichloro-2-butene	110-57-6		<0.014	0.050	0.014	0.0250-2.50
1,2-Dichlorobenzene	95-50-1		<0.015	0.050	0.015	0.0125-2.50
1,4-Dichlorobenzene	106-46-7		<0.017	0.050	0.017	0.0125-2.50
1,3-Dichlorobenzene	541-73-1		<0.016	0.050	0.016	0.0125-2.50
Dichlorodifluoromethane	75-71-8		<0.028	0.25	0.028	0.0250-2.00
1,1-Dichloroethane	75-34-3		<0.019	0.050	0.019	0.0250-2.50
1,2-Dichloroethane	107-06-2		<0.019	0.050	0.019	0.0125-2.50
cis-1,2-Dichloroethene	156-59-2		<0.015	0.050	0.015	0.0125-2.50
trans-1,2-Dichloroethene	156-60-5		<0.017	0.050	0.017	0.0125-2.50
1,1-Dichloroethene	75-35-4		<0.022	0.050	0.022	0.0250-2.50
2,2-Dichloropropane	594-20-7		<0.018	0.050	0.018	0.0125-2.50
1,3-Dichloropropane	142-28-9		<0.013	0.050	0.013	0.0125-2.50
1,2-Dichloropropane	78-87-5		<0.017	0.050	0.017	0.0250-2.50
1,1-Dichloropropene	563-58-6		<0.015	0.050	0.015	0.0125-2.50
cis-1,3-Dichloropropene	10061-01-5		<0.013	0.050	0.013	0.0125-2.50
trans-1,3-Dichloropropene	10061-02-6		<0.015	0.050	0.015	0.0125-2.50
Diethyl ether	60-29-7		<0.020	0.10	0.020	0.0250-2.50

All values presented with any preparation, dilution, or unit conversions taken into account.

Volatile Organic Analysis Data Summary

Lab Name:	Orange Coast Analytical (Alliance TG) - Phoenix, AZ	Data File Name:	GCMS8-042224016.D
Lab Reference #:	NRE AZ14434	Project Name:	Nasa White Sands Test Facility
Lab Sample ID:	AZ14434-004	Client Sample ID:	2404101330
Sample Type:	CS	Date Sampled:	04/10/24 13:30
Analysis Method:	8260B	Date Received:	04/18/24 10:00
Prep. Method:	5035A	Date Extracted:	04/10/24 13:30
Initial Sample:	10.7g	Date Analyzed:	04/22/24 16:58
Sample Extract:	10mL	Analysis Multiplier:	50
Sample Loaded:	750uL	Dilution Factor:	1
Analysis Batch:	0422242		

Units: mg/kg

Analyte	CAS #	Qualifiers:	Result	RL	MDLs	Calibration Range
Ethyl methacrylate	97-63-2		<0.016	0.10	0.016	0.0250-2.00
Ethylbenzene	100-41-4		<0.013	0.050	0.013	0.0125-2.50
Hexachlorobutadiene	87-68-3		<0.010	0.10	0.010	0.0125-2.00
2-Hexanone	591-78-6		<0.016	0.25	0.016	0.0250-2.50
Iodomethane	74-88-4		<0.019	0.050	0.019	0.0125-2.50
Isopropylbenzene	98-82-8		<0.011	0.050	0.011	0.0125-2.50
4-Isopropyltoluene	99-87-6		<0.010	0.050	0.010	0.0250-2.50
Methacrylonitrile	126-98-7		<0.017	0.25	0.017	0.0500-2.50
Methyl acrylate	96-33-3		<0.019	0.25	0.019	0.0250-2.50
Methyl methacrylate	80-62-6		<0.018	0.25	0.018	0.0500-2.50
Methyl t-butyl ether (MTBE)	1634-04-4		<0.030	0.050	0.030	0.0250-2.50
4-Methyl-2-pentanone	108-10-1		<0.024	0.25	0.024	0.0250-2.50
Naphthalene	91-20-3		<0.016	0.050	0.016	0.0250-2.50
Pentachloroethane	76-01-7		<0.086	0.10	0.086	0.0250-2.50
Propionitrile	107-12-0		<0.050	0.25	0.050	0.100-2.50
n-Propylbenzene	103-65-1		<0.015	0.050	0.015	0.0125-2.50
Styrene	100-42-5		<0.0090	0.050	0.0090	0.0125-2.50
1,1,2,2-Tetrachloroethane	79-34-5		<0.018	0.050	0.018	0.0125-2.50
1,1,1,2-Tetrachloroethane	630-20-6		<0.012	0.050	0.012	0.0125-2.50
Tetrachloroethene	127-18-4		<0.016	0.050	0.016	0.0125-2.50
Tetrahydrofuran	109-99-9		<0.038	0.25	0.038	0.250-2.50
Toluene	108-88-3		<0.019	0.050	0.019	0.0125-2.50
1,2,4-Trichlorobenzene	120-82-1		<0.017	0.050	0.017	0.0125-2.50
1,2,3-Trichlorobenzene	87-61-6		<0.015	0.050	0.015	0.0125-2.50
1,1,1-Trichloroethane	71-55-6		<0.017	0.050	0.017	0.0125-2.50
1,1,2-Trichloroethane	79-00-5		<0.017	0.050	0.017	0.0250-2.50
Trichloroethene	79-01-6		<0.017	0.050	0.017	0.0250-2.50
Trichlorofluoromethane	75-69-4		<0.020	0.25	0.020	0.0125-5.00
1,2,3-Trichloropropane	96-18-4		<0.022	0.050	0.022	0.0125-2.50
1,2,4-Trimethylbenzene	95-63-6		<0.011	0.050	0.011	0.0125-2.50
1,3,5-Trimethylbenzene	108-67-8		<0.013	0.050	0.013	0.0125-2.50
Vinyl acetate	108-05-4		<0.016	0.25	0.016	0.0500-2.50
Vinyl chloride	75-01-4		<0.018	0.050	0.018	0.0125-5.00
o-Xylene	95-47-6		<0.011	0.050	0.011	0.0125-2.50
m- & p-Xylenes	179601-23-1		<0.020	0.10	0.020	0.0250-5.00

Surrogate(s)

Analyte	CAS #	Qualifiers:	% Recovery	QC Limits
4-Bromofluorobenzene	460-00-4		120	50-130
Dibromofluoromethane	1868-53-7		108	65-130
Toluene-d8	2037-26-5		116	59-130

All values presented with any preparation, dilution, or unit conversions taken into account.

8260 Quantitation Review Report

C:\msdchem\1\data\2024\04-APR\VB042224\GCMS8-042224016.D **CS** 04/22/24 016

Sample Name: AZ14434-004 @ 750uL (1:1 of 10.7g in 10mL)
Data File Name: GCMS8-042224016.D
Date Acquired: 04/22/24 16:58
Vial Number: 11
Sample Multiplier: 50 **Dilution:** 1
Misc Info: PAV 1150, 1149

Operator:
Data File Path: C:\msdchem\1\data\2024\04-APR\VB042
Instrument Method: VOC092623 INSTRUMENT SCAN.M
Quant. Method: VOC022324Final
Last Result Mod: 04/23/24 09:29
Last Cal Update: 02/26/24 12:39
Last Cal Mod: 02/26/24 12:39

#	Internal Standard	Response
1)	Pentafluorobenzene	128,229
42)	1,4-Difluorobenzene	215,429
50)	Chlorobenzene-d5	195,202
74)	1,4-Dichlorobenzene-d4	106,537

#	Surrogate	% Rec	P/F	Soil Range
35)	Dibromofluoromethane	**108**	P	65-130
56)	Toluene-d8	**116**	P	59-130
76)	4-Bromofluorobenzene	**120**	P	50-130

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
1)	Pentafluorobenzene		500	-	-	6.24	0.00	-	100	128,229	168	-		-		-	
2)	Dichlorodifluoromethane		NR	ND	<28	(1.38)	-	-	0		85	87	0.00 | 34.5	-		-	
3)	Chloromethane		NR	ND	<19	(1.54)	-	-	0		50	52	0.00 | 31.3	-		-	
4)	Vinyl chloride		NR	ND	<18	(1.66)	-	-	0		62	64	0.00 | 30.5	-		-	
5)	Bromomethane	x	NR	ND	<14	(1.97)	-	-	**5**		94	96	0.00 | 88.5	-		-	
6)	Chloroethane	x	NR	ND	<20	(2.06)	-	-	**40**		64	66	0.00 | 34.3	-		-	
7)	Trichlorofluoromethane		NR	ND	<20	(2.35)	-	-	0		101	103	0.00 | 61.6	66	0.00 | 12.7	-	
8)	Diethyl ether		NR	ND	<20	(2.65)	-	-	0		74	45	0.00 | 103	59	0.00 | 129	-	
9)	1,1-Dichloroethene		NR	ND	<22	(2.90)	-	-	0		96	61	0.00 | 139	63	0.00 | 47.0	-	
10)	Freon 113		No Cal.	-	-	(2.90)	-	-	0		101	151	0.00 | 82.4	103	0.00 | 64.1	153	0.00 | 53.1
11)	Acetone		NR	ND	<74	(2.97)	-	-	0		58	43	0.00 | 266	-		-	
12)	Iodomethane		NR	ND	<19	(3.06)	-	-	0		142	127	0.00 | 40.6	141	0.00 | 12.9	-	
13)	Carbon disulfide		1.8826	ND	<17	3.12	0.00	**Inc**	75	664	76	78	**0.00 | 9.20**	-		-	
14)	Allyl chloride		NR	ND	<15	(3.33)	-	-	0		76	78	0.00 | 30.7	41	0.00 | 283	39	0.00 | 175
15)	Methylene chloride		76.981	QL-	<86	3.48	-0.01	P	90	19,879	84	49	137 | 121	86	64.7 | 64.4	51	43.7 | 36.5
16)	t-Butanol (TBA)		No Cal.	-	-	(3.70)	-	-	0		59	57	0.00 | 8.40	-		-	
17)	Acrylonitrile		NR	ND	<22	(3.81)	-	-	0		52	53	0.00 | 120	51	0.00 | 41.7	-	
18)	Methyl t-butyl ether (MTBE)		NR	ND	<30	(3.85)	-	-	0		73	57	0.00 | 23.3	-		-	
19)	trans-1,2-Dichloroethene		NR	ND	<17	(3.83)	-	-	0		96	61	0.00 | 137	98	0.00 | 65.3	-	
20)	n-Hexane	x	No Cal.	-	-	(4.22)	-	-	**19**		57	43	0.00 | 64.9	41	0.00 | 72.0	56	0.00 | 47.3
21)	1,1-Dichloroethane		NR	ND	<19	(4.41)	-	-	0		63	65	0.00 | 33.7	83	0.00 | 15.0	-	
22)	Vinyl acetate		NR	ND	<16	(4.52)	-	-	0		86	43	0.00 | 949	-		-	
23)	2-chloro-1,3-butadiene		No Cal.	-	-	(4.54)	-	-	0		53	88	0.00 | 58.3	52	0.00 | 23.5	-	
24)	Diisopropyl ether (DIPE)		No Cal.	-	-	(4.57)	-	-	0		45	43	0.00 | 38.9	87	0.00 | 24.3	-	
25)	Ethyl t-butyl ether (ETBE)		No Cal.	-	-	(5.12)	-	-	0		59	57	0.00 | 31.8	87	0.00 | 34.1	-	
26)	2-Butanone (MEK)		NR	ND	<36	(5.35)	-	-	0		72	43	0.00 | 353	57	0.00 | 29.9	-	
27)	cis-1,2-Dichloroethene		NR	ND	<15	(5.29)	-	-	0		96	61	0.00 | 132	98	0.00 | 56.2	-	
28)	2,2-Dichloropropane		NR	ND	<18	(5.28)	-	-	0		77	97	0.00 | 22.0	79	0.00 | 30.5	-	
29)	Propionitrile		NR	ND	<50	(5.46)	-	-	0		54	52	0.00 | 11.3	55	0.00 | 15.7	-	
30)	Methyl acrylate		NR	ND	<19	(5.51)	-	-	0		55	85	0.00 | 17.1	-		-	
31)	Methacrylonitrile		NR	ND	<17	(5.67)	-	-	0		67	41	0.00 | 147	39	0.00 | 83.1	52	0.00 | 37.0
32)	Bromochloromethane		NR	ND	<18	(5.66)	-	-	0		128	49	0.00 | 167	130	0.00 | 134	-	
33)	Chloroform		NR	ND	<17	(5.83)	-	-	0		83	85	0.00 | 66.3	-		-	
34)	Tetrahydrofuran		NR	ND	<38	(5.74)	-	-	0		72	71	0.00 | 96.8	42	0.00 | 241	-	
35)	Dibromofluoromethane (S)		540.80	Sur	-	6.10	0.00	P	99	56,694	113	111	100 | 102	192	22.2 | 22.1	81	15.6 | 14.3
36)	1,1,1-Trichloroethane		NR	ND	<17	(6.10)	-	-	0		97	99	0.00 | 60.3	61	0.00 | 38.9	63	0.00 | 14.3
37)	1-Chlorobutane	x	No Cal.	-	-	(6.30)	-	-	90		56	49	0.00 | 3.40	-		-	
38)	1,1-Dichloropropene		NR	ND	<15	(6.39)	-	-	0		75	39	0.00 | 55.5	110	0.00 | 36.4	77	0.00 | 31.4
39)	Carbon tetrachloride		NR	ND	<22	(6.38)	-	-	0		117	119	0.00 | 100	-		-	
40)	Benzene		0.77022	ND	<11	6.75	0.00	**Inc**	**63**	378	78	51	**0.00 | 15.3**	-		-	
41)	1,2-Dichloroethane		NR	ND	<19	(6.81)	-	-	0		62	98	0.00 | 12.3	-		-	
42)	1,4-Difluorobenzene		500	-	-	7.56	0.00	-	100	215,429	114	-		-		-	
43)	t- Amyl methyl ether (TAME)		No Cal.	-	-	(7.05)	-	-	0		73	55	0.00 | 37.9	87	0.00 | 22.4	-	
44)	Trichloroethene		NR	ND	<17	(8.03)	-	-	0		95	132	0.00 | 115	130	0.00 | 113	97	0.00 | 64.2
45)	1,2-Dichloropropane		NR	ND	<17	(8.46)	-	-	0		63	112	0.00 | 5.70	76	0.00 | 47.7	-	

For analyst review assistance only.

8260 Quantitation Review Report

C:\msdchem\1\data\2024\04-APR\VB042224\GCMS8-042224016.D **CS** 04/22/24 016

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
46)	Methyl methacrylate		NR	ND	<18	(8.77)	-	-	0		69	41	0.00 | 133	100	0.00 | 40.0	39	0.00 | 64.9
47)	Dibromomethane		NR	ND	<19	(8.65)	-	-	0		93	174	0.00 | 107	95	0.00 | 82.1	-	
48)	Bromodichloromethane		NR	ND	<17	(8.94)	-	-	0		83	85	0.00 | 64.1	127	0.00 | 8.90	-	
49)	2-nitro-propane	x	NR	ND	<24	(9.26)	-	-	**46**		43	39	0.00 | 28.5	-		-	
50)	Chlorobenzene-d5		500	-	-	11.04	0.00	P	97	195,202	117	82	56.6 | 54.8	119	34.2 | 31.9	54	23.9 | 22.3
51)	Chloromethyl cyanide		No Cal.	-	-	(9.38)	-	-	0		75	48	0.00 | 39.0	40	0.00 | 44.5	-	
52)	2-Chloroethyl vinyl ether		NR	ND	<13	(9.38)	-	-	0		63	65	0.00 | 30.2	106	0.00 | 31.4	-	
53)	cis-1,3-Dichloropropene		NR	ND	<13	(9.51)	-	-	0		75	77	0.00 | 33.4	39	0.00 | 47.1	110	0.00 | 21.7
54)	4-Methyl-2-pentanone	x	NR	ND	<24	(9.71)	-	-	**1**		58	41	0.00 | 52.2	100	0.00 | 44.0	85	0.00 | 42.0
55)	1,1-Dichloro-2-propanone		No Cal.	-	-	(9.71)	-	-	0		83	63	0.00 | 56.4	91	0.00 | 22.8	-	
56)	Toluene-d8 (S)		578.69	Sur	-	9.79	0.00	P	97	221,365	98	100	68.1 | 71.5	42	12.5 | 12.7	70	11.0 | 11.3
57)	Toluene		3.0782	ND	<19	9.85	0.00	**Inc**	70	955	92	91	132 | 168	65	**0.00 | 18.5**	39	39.0 | 16.3
58)	trans-1,3-Dichloropropene	x	NR	ND	<15	(10.10)	-	-	**41**		75	77	0.00 | 30.2	39.1	0.00 | 43.2	110	0.00 | 24.5
59)	Ethyl methacrylate		NR	ND	<16	(10.22)	-	-	0		69	41	0.00 | 69.2	99	0.00 | 18.5	86	0.00 | 16.1
60)	1,1,2-Trichloroethane		NR	ND	<17	(10.26)	-	-	0		83	97	0.00 | 125	61	0.00 | 70.3	85	0.00 | 59.8
61)	1,3-Dichloropropane		NR	ND	<13	(10.40)	-	-	0		76	41	0.00 | 61.7	78	0.00 | 32.5	39	0.00 | 22.8
62)	2-Hexanone	x	NR	ND	<16	(10.50)	-	-	**35**		43	58	0.00 | 59.4	57	0.00 | 21.2	100	0.00 | 16.0
63)	Tetrachloroethene		NR	ND	<16	(10.36)	-	-	0		164	166	0.00 | 127	129	0.00 | 88.5	131	0.00 | 84.5
64)	Dibromochloromethane		NR	ND	<14	(10.59)	-	-	0		129	127	0.00 | 79.2	-		-	
65)	1,2-Dibromoethane		NR	ND	<16	(10.66)	-	-	0		107	109	0.00 | 89.0	188	0.00 | 2.80	-	
66)	Chlorobenzene	x	NR	ND	<12	(11.06)	-	-	**27**		112	77	0.00 | 61.4	114	0.00 | 33.1	-	
67)	1,1,1,2-Tetrachloroethane		NR	ND	<12	(11.13)	-	-	0		131	133	0.00 | 94.0	117	0.00 | 64.0	119	0.00 | 63.7
68)	Ethylbenzene		1.9646	ND	<13	11.15	0.00	**Inc**	92	1,114	91	106	30.2 | 32.6	51	**0.00 | 7.80**	-	
69)	m- & p-Xylenes	x	NR	ND	<20	(11.24)	-	-	**57**		106	91	0.00 | 188	105	0.00 | 41.4	77	0.00 | 24.3
70)	o-Xylene	x	NR	ND	<11	(11.51)	-	-	**17**		106	91	0.00 | 206	105	0.00 | 48.7	-	
71)	Styrene	x	NR	ND	<9.0	(11.52)	-	-	**36**		104	103	0.00 | 46.8	78	0.00 | 41.6	51	0.00 | 22.7
72)	Bromoform		NR	ND	<16	(11.65)	-	-	0		173	175	0.00 | 46.3	254	0.00 | 12.5	-	
73)	Isopropylbenzene	x	NR	ND	<11	(11.76)	-	-	**57**		105	120	0.00 | 27.0	77	0.00 | 14.5	79	0.00 | 11.8
74)	1,4-Dichlorobenzene-d4		500	-	-	12.56	0.00	P	99	106,537	152	115	54.0 | 55.2	150	156 | 157	-	
75)	cis-1,4-dichloro-2-butene		No Cal.	-	-	(11.81)	-	-	0		75	53	0.00 | 106	89	0.00 | 47.5	-	
76)	4-Bromofluorobenzene (S)		599.07	Sur	-	11.86	0.00	P	95	88,223	95	174	79.3 | 75.6	176	79.1 | 73.8	75	49.5 | 47.6
77)	1,1,2,2-Tetrachloroethane		NR	ND	<18	(11.96)	-	-	0		83	85	0.00 | 70.8	131	0.00 | 11.0	95	0.00 | 18.7
78)	trans-1,4-Dichloro-2-butene		NR	ND	<14	(11.99)	-	-	0		53	88	0.00 | 55.9	124	0.00 | 23.1	-	
79)	1,2,3-Trichloropropane		NR	ND	<22	(11.98)	-	-	0		110	75	0.00 | 269	39	0.00 | 79.2	-	
80)	Bromobenzene		NR	ND	<18	(11.96)	-	-	0		156	158	0.00 | 94.7	-		-	
81)	n-Propylbenzene		0.65004	ND	<15	12.03	0.01	**Inc**	**61**	413	91	120	**0.00 | 23.6**	92	**0.00 | 11.4**	65	**0.00 | 9.90**
82)	2-Chlorotoluene		NR	ND	<15	(12.08)	-	-	0		126	91	0.00 | 289	63	0.00 | 36.0	-	
83)	4-Ethyltoluene	x	No Cal.	-	-	(12.09)	-	-	**52**		105	120	0.00 | 29.9	77	0.00 | 10.6	-	
84)	1,3,5-Trimethylbenzene		NR	ND	<13	(12.13)	-	-	0		105	120	0.00 | 50.6	119	0.00 | 11.0	77	0.00 | 12.6
85)	4-Chlorotoluene	x	NR	ND	<13	(12.14)	-	-	**48**		91	126	0.00 | 34.5	63	0.00 | 11.3	-	
86)	tert-Butylbenzene		NR	ND	<13	(12.33)	-	-	0		134	119	0.00 | 340	91	0.00 | 215	-	
87)	1,2,4-Trimethylbenzene		1.2839	ND	<11	12.35	0.00	P	83	578	105	120	38.3 | 50.1	-		-	
88)	Pentachloroethane		NR	ND	<86	(12.35)	-	-	0		167	165	0.00 | 86.1	132	0.00 | 42.9	-	
89)	sec-Butylbenzene		0.51565	ND	<11	12.45	-0.01	**Inc**	**56**	287	105	134	**0.00 | 20.4**	-		-	
90)	4-Isopropyltoluene		NR	ND	<10	(12.54)	-	-	0		119	134	0.00 | 28.5	91	0.00 | 22.4	-	
91)	1,3-Dichlorobenzene		0.82288	ND	<16	12.53	-0.01	P	76	229	146	148	77.9 | 63.8	111	56.3 | 35.3	-	
92)	1,4-Dichlorobenzene	x	NR	ND	<17	(12.58)	-	-	**69**		146	111	0.00 | 37.8	148	0.00 | 61.5	-	
93)	n-Butylbenzene	x	NR	ND	<12	(12.78)	-	-	83		92	91	0.00 | 179	134	0.00 | 50.5	-	
94)	1,2-Dichlorobenzene	x	NR	ND	<15	(12.80)	-	-	**24**		146	148	0.00 | 64.6	111	0.00 | 40.4	-	
95)	Hexachloroethane		No Cal.	-	-	(12.95)	-	-	0		201	117	0.00 | 129	199	0.00 | 65.0	203	0.00 | 64.5
96)	1,2-Dibromo-3-chloropropane		NR	ND	<19	(13.24)	-	-	0		75	155	0.00 | 104	157	0.00 | 123	-	
97)	Nitrobenzene		No Cal.	-	-	(13.35)	-	-	0		123	51	0.00 | 62.1	77	0.00 | 146	-	
98)	1,2,4-Trichlorobenzene	x	NR	ND	<17	(13.69)	-	-	**52**		180	182	0.00 | 97.2	184	0.00 | 29.6	145	0.00 | 30.6
99)	Hexachlorobutadiene		NR	ND	<10	(13.78)	-	-	0		225	227	0.00 | 59.6	260	0.00 | 22.3	223	0.00 | 59.4
100	Naphthalene		2.2530	ND	<16	13.83	-0.01	**Inc**	**69**	1,168	128	127	**0.00 | 12.5**	129	**0.00 | 11.6**	-	
101	1,2,3-Trichlorobenzene	x	NR	ND	<15	(13.97)	-	-	**20**		180	182	0.00 | 91.8	184	0.00 | 29.8	145	0.00 | 29.8

Uses lowest known RLs; project RLs may be higher. Qualitative P/F based only on output ratios at apex and may not reflect full peak or analyst review.

For analyst review assistance only.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224016.D
Acq On : 22 Apr 2024 16:58
Operator :
Sample : AZ14434-004 @ 750uL (1:1 of 10.7g in 10mL)
Misc : PAV 1150, 1149
ALS Vial : 11 Sample Multiplier: 50

Quant Time: Apr 22 17:43:42 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	6.241	168	128229	10.00	ppb	0.00
42) 1,4-Difluorobenzene	7.563	114	215429	10.00	ppb	0.00
50) Chlorobenzene-d5	11.036	117	195202	10.00	ppb	0.00
74) 1,4-Dichlorobenzene-d4	12.564	152	106537	10.00	ppb	0.00
System Monitoring Compounds						
35) Dibromofluoromethane (S)	6.099	113	56694	10.82	ppb	0.00
Spiked Amount 10.000			Recovery = 108.20%			
56) Toluene-d8 (S)	9.786	98	221365	11.57	ppb	0.00
Spiked Amount 10.000			Recovery = 115.70%			
76) 4-Bromofluorobenzene (S)	11.855	95	88223	11.98	ppb	0.00
Spiked Amount 10.000			Recovery = 119.80%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	0.000		0	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	0.000		0	N.D. d		
6) Chloroethane	0.000		0	N.D. d		
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Diethyl ether	0.000		0	N.D.		
9) 1,1-Dichloroethene	0.000		0	N.D.		
10) Freon 113	0.000		0	N.D.		
11) Acetone	0.000		0	N.D.		
12) Iodomethane	0.000		0	N.D.		
13) Carbon disulfide	3.119	76	664	1.8826	ppb	75
14) Allyl chloride	0.000		0	N.D.		
15) Methylene chloride	3.475	84	19879	76.9809	ppb	90
16) t-Butanol (TBA)	0.000		0	N.D.		
17) Acrylonitrile	0.000		0	N.D.		
18) Methyl t-butyl ether (...	0.000		0	N.D.		
19) trans-1,2-Dichloroethene	0.000		0	N.D.		
20) n-Hexane	0.000		0	N.D. d		
21) 1,1-Dichloroethane	0.000		0	N.D.		
22) Vinyl acetate	0.000		0	N.D.		
23) 2-chloro-1,3-butadiene	0.000		0	N.D.		
24) Diisopropyl ether (DIPE)	0.000		0	N.D.		
25) Ethyl t-butyl ether (E...	0.000		0	N.D.		
26) 2-Butanone (MEK)	0.000		0	N.D.		
27) cis-1,2-Dichloroethene	0.000		0	N.D.		
28) 2,2-Dichloropropane	0.000		0	N.D.		
29) Propionitrile	0.000		0	N.D.		
30) Methyl acrylate	0.000		0	N.D.		
31) Methacrylonitrile	0.000		0	N.D.		
32) Bromochloromethane	0.000		0	N.D.		
33) Chloroform	0.000		0	N.D.		
34) Tetrahydrofuran	0.000		0	N.D.		
36) 1,1,1-Trichloroethane	0.000		0	N.D.		
37) 1-Chlorobutane	0.000		0	N.D. d		
38) 1,1-Dichloropropene	0.000		0	N.D.		
39) Carbon tetrachloride	0.000		0	N.D.		
40) Benzene	6.750	78	378	0.7702	ppb	63
41) 1,2-Dichloroethane	0.000		0	N.D.		
43) t- Amyl methyl ether (...	0.000		0	N.D.		
44) Trichloroethene	0.000		0	N.D.		
45) 1,2-Dichloropropane	0.000		0	N.D.		
46) Methyl methacrylate	0.000		0	N.D.		

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224016.D
Acq On : 22 Apr 2024 16:58
Operator :
Sample : AZ14434-004 @ 750uL (1:1 of 10.7g in 10mL)
Misc : PAV 1150, 1149
ALS Vial : 11 Sample Multiplier: 50

Quant Time: Apr 22 17:43:42 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

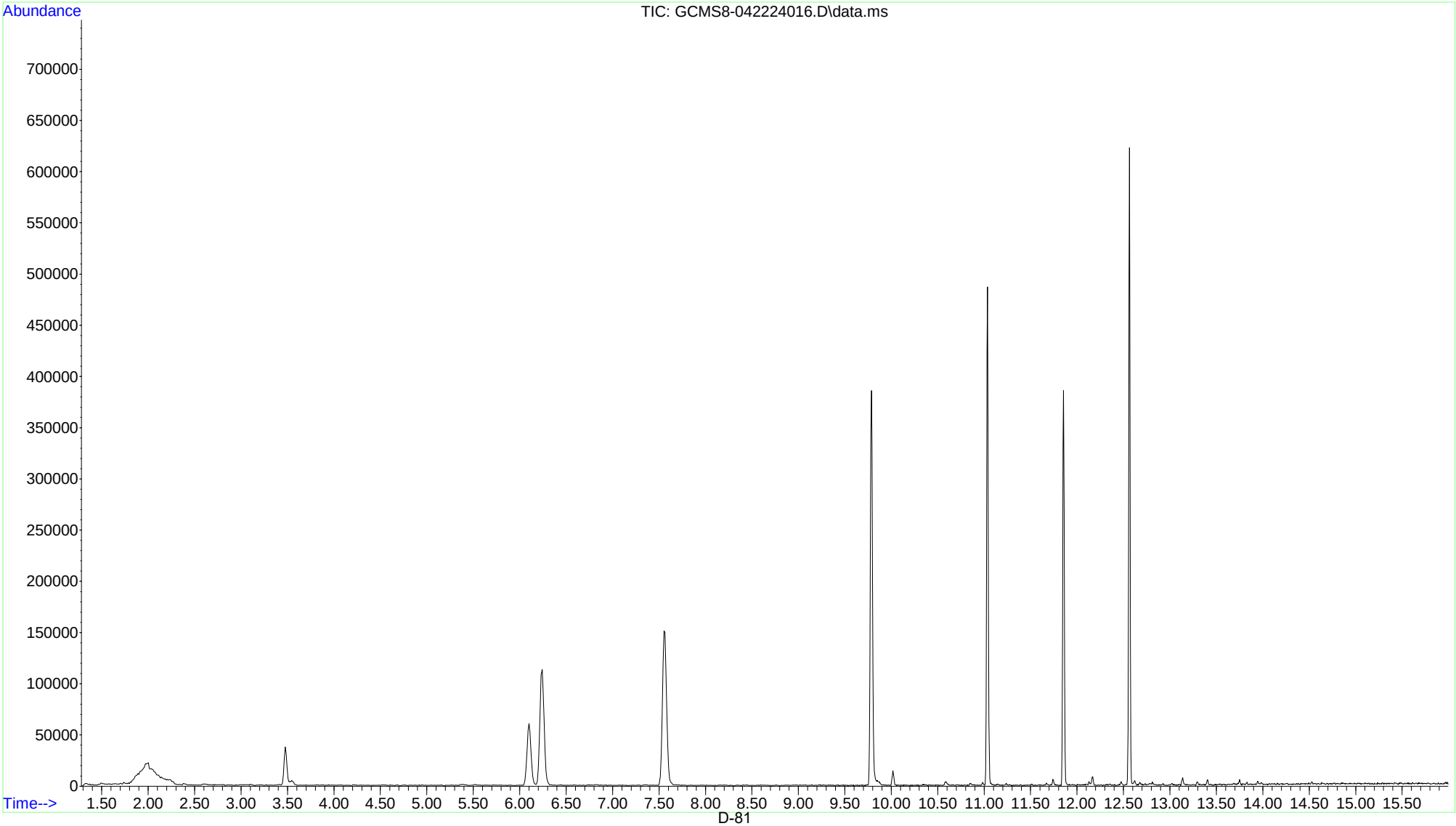
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
47) Dibromomethane	0.000		0	N.D.	
48) Bromodichloromethane	0.000		0	N.D.	
49) 2-nitro-propane	0.000		0	N.D. d	
51) Chloromethyl cyanide	0.000		0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000		0	N.D.	
53) cis-1,3-Dichloropropene	0.000		0	N.D.	
54) 4-Methyl-2-pentanone	0.000		0	N.D. d	
55) 1,1-Dichloro-2-propanone	0.000		0	N.D.	
57) Toluene	9.854	92	955	3.0782 ppb #	70
58) trans-1,3-Dichloropropene	0.000		0	N.D. d	
59) Ethyl methacrylate	0.000		0	N.D.	
60) 1,1,2-Trichloroethane	0.000		0	N.D.	
61) 1,3-Dichloropropane	0.000		0	N.D.	
62) 2-Hexanone	0.000		0	N.D. d	
63) Tetrachloroethene	0.000		0	N.D.	
64) Dibromochloromethane	0.000		0	N.D.	
65) 1,2-Dibromoethane	0.000		0	N.D.	
66) Chlorobenzene	0.000		0	N.D. d	
67) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.	
68) Ethylbenzene	11.146	91	1114	1.9646 ppb	92
69) m- & p-Xylenes	0.000		0	N.D. d	
70) o-Xylene	0.000		0	N.D. d	
71) Styrene	0.000		0	N.D. d	
72) Bromoform	0.000		0	N.D.	
73) Isopropylbenzene	0.000		0	N.D. d	
75) cis-1,4-dichloro-2-butene	0.000		0	N.D.	
77) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	
78) trans-1,4-Dichloro-2-b...	0.000		0	N.D.	
79) 1,2,3-Trichloropropane	0.000		0	N.D.	
80) Bromobenzene	0.000		0	N.D.	
81) n-Propylbenzene	12.029	91	413	0.6500 ppb	61
82) 2-Chlorotoluene	0.000		0	N.D.	
83) 4-Ethyltoluene	0.000		0	N.D. d	
84) 1,3,5-Trimethylbenzene	0.000		0	N.D.	
85) 4-Chlorotoluene	0.000		0	N.D. d	
86) tert-Butylbenzene	0.000		0	N.D.	
87) 1,2,4-Trimethylbenzene	12.354	105	578	1.2839 ppb	83
88) Pentachloroethane	0.000		0	N.D.	
89) sec-Butylbenzene	12.454	105	287	0.5156 ppb	56
90) 4-Isopropyltoluene	0.000		0	N.D.	
91) 1,3-Dichlorobenzene	12.527	146	229	0.8229 ppb	76
92) 1,4-Dichlorobenzene	0.000		0	N.D. d	
93) n-Butylbenzene	0.000		0	N.D. d	
94) 1,2-Dichlorobenzene	0.000		0	N.D. d	
95) Hexachloroethane	0.000		0	N.D.	
96) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.	
97) Nitrobenzene	0.000		0	N.D.	
98) 1,2,4-Trichlorobenzene	0.000		0	N.D. d	
99) Hexachlorobutadiene	0.000		0	N.D.	
100) Naphthalene	13.830	128	1168	2.2530 ppb	69
101) 1,2,3-Trichlorobenzene	0.000		0	N.D. d	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224016.D
Acq On : 22 Apr 2024 16:58
Operator :
Sample : AZ14434-004 @ 750uL (1:1 of 10.7g in 10mL)
Misc : PAV 1150, 1149
ALS Vial : 11 Sample Multiplier: 50

Quant Time: Apr 22 17:43:42 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration



D-81

Volatile Organic Analysis Initial Calibration Data

Lab Name: Orange Coast Analytical (Alliance TG) - Phoenix, AZ Analysis Method: 8260B

Lab Reference #: NRE AZ14434 Project Name: Nasa White Sands Test Facility Project Number: 23EEHWMU.0007

Calibration Method: VOC022324Final

Level	Sequence Sample ID	Lab Sample ID	Nominal Spk	Spk/ISTD Ratio	File Name	Lab Standard ID	Analysis Batch	Date
1	CPTP02232401 - 10ppb	CPTP02232401	10	1	GCMS8-022324010.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 15:57
2	CPTP02232402 - 0.25ppb	CPTP02232402	0.25	0.025	GCMS8-022324005.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 13:59
3	CPTP02232403 - 0.5ppb	CPTP02232403	0.5	0.05	GCMS8-022324006.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 14:23
4	CPTP02232404 - 1ppb	CPTP02232404	1	0.1	GCMS8-022324007.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 14:47
5	CPTP02232405 - 2ppb	CPTP02232405	2	0.2	GCMS8-022324008.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 15:11
6	CPTP02232406 - 5ppb	CPTP02232406	5	0.5	GCMS8-022324009.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 15:34
7	CPTP02232407 - 20ppb	CPTP02232407	20	2	GCMS8-022324011.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 16:21
8	CPTP02232408 - 30ppb	CPTP02232408	30	3	GCMS8-022324012.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 16:44
9	CPTP02232409 - 40ppb	CPTP02232409	40	4	GCMS8-022324013.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 17:08
10	CPTP02232410 - 50ppb	CPTP02232410	50	5	GCMS8-022324014.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 17:32
11	CPTP02232411 - 100ppb	CPTP02232411	100	10	GCMS8-022324015.D	PAV 1150, 1153, 1144J	0223241	02/23/24 17:55

		Relative Response Factors (RRF)									Coefficients					
Analyte	Fit Weight	Level 01 Level 09	Level 02 Level 10	Level 03 Level 11	Level 04 Level 12	Level 05	Level 06	Level 07	Level 08	Average	x^0	x^1	x^2	%RSD R^2	Max %RSD Min R^2	Min Avg. RRF
Dichlorodifluoromethane	Avg RF	0.62331		0.45851	0.47026	0.46319	0.46584	0.55309	0.57558	0.52842	0	0.52842	0	13.6	15	
	1	0.61758														
Chloromethane	Avg RF	0.72383	0.69166	0.75855	0.70972	0.67837	0.64178	0.63914	0.68687	0.69375	0	0.69375	0	5.0	15	0.1
	1	0.69659	0.68744	0.71731												
Vinyl chloride	Avg RF	0.6748	0.60119	0.59942	0.61557	0.57477	0.56057	0.56914	0.62183	0.61447	0	0.61447	0	6.2	15	
	1	0.63807	0.63890	0.66491												
Bromomethane	Avg RF	0.40596	0.40408	0.44143	0.40559	0.41218	0.36191	0.38497	0.3769	0.39478	0	0.39478	0	5.5	15	
	1	0.39016	0.38036	0.37905												
Chloroethane	Avg RF	0.39771	0.40852	0.38034	0.40716	0.37994	0.39019	0.38002	0.39297	0.39465	0	0.39465	0	2.9	15	
	1	0.40499	0.39236	0.40701												
Trichlorofluoromethane	Avg RF	0.72414	0.69578	0.60812	0.65478	0.60984	0.63164	0.65073	0.68080	0.6848	0	0.6848	0	8.9	15	
	1	0.72206	0.76073	0.79411												
Diethyl ether	Avg RF	0.30929		0.25258	0.32244	0.29393	0.28321	0.31355	0.33530	0.30516	0	0.30516	0	8.2	15	
	1	0.32148	0.31467													
1,1-Dichloroethene	Avg RF	0.43963		0.35242	0.44236	0.4235	0.40939	0.41573	0.44061	0.42373	0	0.42373	0	7.1	15	
	1	0.45265	0.43732													
Acetone	Linear	0.056001		0.14961	0.10067	0.075752	0.058142	0.063357	0.053350	0.073957	0.0047873	0.053061	0			
	1/x^2	0.055660	0.053070											0.99461	0.9900	
Iodomethane	Avg RF	0.83658	0.66785	0.79369	0.8008	0.76876	0.80006	0.81684	0.86273	0.80374	0	0.80374	0	7.0	15	
	1	0.85506	0.83501													
Carbon disulfide	Avg RF	1.3938	1.3897	1.5022	1.3358	1.2427	1.2858	1.3321	1.3989	1.3753	0	1.3753	0	5.7	15	
	1	1.4635	1.4084													
Allyl chloride	Avg RF	0.27302			0.27183	0.24244	0.26569	0.28727	0.29464	0.27927	0	0.27927	0	7.2	15	
	1	0.30394	0.29536													
Acrylonitrile	Linear	0.15696			0.079844	0.1229	0.13886	0.16470	0.17370	0.1462	-0.0090081	0.16791	0			
	1/x^2	0.16468	0.16793											0.99854	0.9900	
Methyl t-butyl ether (MTBE)	Avg RF	1.4713		1.3594	1.4058	1.3960	1.4007	1.4781	1.5517	1.4446	0	1.4446	0	4.1	15	
	1	1.4880	1.4499													
trans-1,2-Dichloroethene	Avg RF	0.49208	0.42312	0.50466	0.44952	0.50118	0.46921	0.49914	0.51759	0.49015	0	0.49015	0	6.8	15	
	1	0.53247	0.51256													

Volatile Organic Analysis Initial Calibration Data

Lab Name: Orange Coast Analytical (Alliance TG) - Phoenix, AZ Analysis Method: 8260B

Lab Reference #: NRE AZ14434 Project Name: Nasa White Sands Test Facility Project Number: 23EEHWMU.0007

Calibration Method: VOC022324Final

Level	Sequence Sample ID	Lab Sample ID	Nominal Spk	Spk/ISTD Ratio	File Name	Lab Standard ID	Analysis Batch	Date
1	CPTP02232401 - 10ppb	CPTP02232401	10	1	GCMS8-022324010.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 15:57
2	CPTP02232402 - 0.25ppb	CPTP02232402	0.25	0.025	GCMS8-022324005.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 13:59
3	CPTP02232403 - 0.5ppb	CPTP02232403	0.5	0.05	GCMS8-022324006.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 14:23
4	CPTP02232404 - 1ppb	CPTP02232404	1	0.1	GCMS8-022324007.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 14:47
5	CPTP02232405 - 2ppb	CPTP02232405	2	0.2	GCMS8-022324008.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 15:11
6	CPTP02232406 - 5ppb	CPTP02232406	5	0.5	GCMS8-022324009.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 15:34
7	CPTP02232407 - 20ppb	CPTP02232407	20	2	GCMS8-022324011.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 16:21
8	CPTP02232408 - 30ppb	CPTP02232408	30	3	GCMS8-022324012.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 16:44
9	CPTP02232409 - 40ppb	CPTP02232409	40	4	GCMS8-022324013.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 17:08
10	CPTP02232410 - 50ppb	CPTP02232410	50	5	GCMS8-022324014.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 17:32
11	CPTP02232411 - 100ppb	CPTP02232411	100	10	GCMS8-022324015.D	PAV 1150, 1153, 1144J	0223241	02/23/24 17:55

		Relative Response Factors (RRF)									Coefficients					
Analyte	Fit Weight	Level 01 Level 09	Level 02 Level 10	Level 03 Level 11	Level 04 Level 12	Level 05	Level 06	Level 07	Level 08	Average	x^0	x^1	x^2	%RSD R^2	Max %RSD Min R^2	Min Avg. RRF
1,1-Dichloroethane	Avg RF 1	0.85194 0.90428	0.88249	0.9034	0.8977	0.85852	0.85201	0.87693	0.90363	0.88121	0	0.88121	0	2.6	15	0.1
Vinyl acetate	Linear 1/x^2	0.10701 0.1112	0.12192		0.076543	0.079579	0.095633	0.10892	0.11367	0.10181	-0.0042519	0.11206	0	0.99441	0.9900	
2-Butanone (MEK)	Linear 1/x^2	0.066524 0.068053	0.070019				0.053315	0.072641	0.068777	0.066555	-0.009003	0.072982	0	0.99741	0.9900	
cis-1,2-Dichloroethene	Avg RF 1	0.56441 0.58022	0.51168 0.56149	0.48577	0.51867	0.52639	0.53948	0.56568	0.58887	0.54427	0	0.54427	0	6.1	15	
2,2-Dichloropropane	Avg RF 1	0.72547 0.72603	0.64182 0.70034	0.70633	0.67475	0.68358	0.68711	0.70583	0.72375	0.69750	0	0.69750	0	3.8	15	
Propionitrile	Linear 1/x^2	0.085430 0.088917	0.087441			0.047858	0.068249	0.087863	0.090263	0.079432	-0.0089486	0.091299	0	0.99865	0.9900	
Methyl acrylate	Linear 1/x^2	0.46304 0.50049	0.49932	0.26916	0.38657	0.42602	0.45347	0.51709	0.51676	0.44799	-0.011682	0.49898	0	0.99842	0.9900	
Methacrylonitrile	Avg RF 1	0.21144 0.22874	0.22552		0.1725	0.18496	0.18786	0.22756	0.23594	0.20932	0	0.20932	0	11.6	15	
Bromochloromethane	Avg RF 1	0.25926 0.28420	0.27126	0.23106	0.29006	0.24785	0.26836	0.28515	0.28134	0.26873	0	0.26873	0	7.3	15	
Chloroform	Avg RF 1	0.85354 0.89186	0.75863 0.87257	0.91538	0.81730	0.83094	0.83189	0.87210	0.90367	0.85479	0	0.85479	0	5.5	15	
Tetrahydrofuran	Avg RF 1	0.093689 0.084557	0.083971				0.077997	0.087875	0.087927	0.086003	0	0.086003	0	6.1	15	
Dibromofluoromethane (S)	Avg RF 1	0.41715 0.43689	0.41894	0.3654 0.41919	0.39647	0.39525	0.40334	0.41127	0.42386	0.40878	0	0.40878	0	4.9	15	
1,1,1-Trichloroethane	Avg RF 1	0.75996 0.79213	0.62563 0.76944	0.74426	0.76206	0.69873	0.70102	0.72346	0.77968	0.73564	0	0.73564	0	6.8	15	
1,1-Dichloropropene	Avg RF 1	0.57652 0.60342	0.57834 0.58633	0.58053	0.61313	0.53827	0.56416	0.5604	0.58567	0.57868	0	0.57868	0	3.7	15	
Carbon tetrachloride	Avg RF 1	0.61178 0.65956	0.64509	0.66445	0.61911	0.54387	0.59764	0.59764	0.63231	0.61905	0	0.61905	0	6.0	15	

Volatile Organic Analysis Initial Calibration Data

Lab Name: Orange Coast Analytical (Alliance TG) - Phoenix, AZ Analysis Method: 8260B

Lab Reference #: NRE AZ14434 Project Name: Nasa White Sands Test Facility Project Number: 23EEHWMU.0007

Calibration Method: VOC022324Final

Level	Sequence Sample ID	Lab Sample ID	Nominal Spk	Spk/ISTD Ratio	File Name	Lab Standard ID	Analysis Batch	Date
1	CPTP02232401 - 10ppb	CPTP02232401	10	1	GCMS8-022324010.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 15:57
2	CPTP02232402 - 0.25ppb	CPTP02232402	0.25	0.025	GCMS8-022324005.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 13:59
3	CPTP02232403 - 0.5ppb	CPTP02232403	0.5	0.05	GCMS8-022324006.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 14:23
4	CPTP02232404 - 1ppb	CPTP02232404	1	0.1	GCMS8-022324007.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 14:47
5	CPTP02232405 - 2ppb	CPTP02232405	2	0.2	GCMS8-022324008.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 15:11
6	CPTP02232406 - 5ppb	CPTP02232406	5	0.5	GCMS8-022324009.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 15:34
7	CPTP02232407 - 20ppb	CPTP02232407	20	2	GCMS8-022324011.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 16:21
8	CPTP02232408 - 30ppb	CPTP02232408	30	3	GCMS8-022324012.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 16:44
9	CPTP02232409 - 40ppb	CPTP02232409	40	4	GCMS8-022324013.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 17:08
10	CPTP02232410 - 50ppb	CPTP02232410	50	5	GCMS8-022324014.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 17:32
11	CPTP02232411 - 100ppb	CPTP02232411	100	10	GCMS8-022324015.D	PAV 1150, 1153, 1144J	0223241	02/23/24 17:55

		Relative Response Factors (RRF)									Coefficients					
Analyte	Fit Weight	Level 01 Level 09	Level 02 Level 10	Level 03 Level 11	Level 04 Level 12	Level 05	Level 06	Level 07	Level 08	Average	x^0	x^1	x^2	%RSD R^2	Max %RSD Min R^2	Min Avg. RRF
Benzene	Avg RF 1	1.9251 2.0089	1.8607 1.9369	1.8324	1.9249	1.8672	1.8719	1.9195	1.9889	1.9136	0	1.9136	0	3.0	15	
1,2-Dichloroethane	Avg RF 1	0.59969 0.63654	0.47803 0.60612	0.54933	0.58241	0.57784	0.60793	0.62185	0.64146	0.59012	0	0.59012	0	8.2	15	
Trichloroethene	Avg RF 1	0.2807 0.29721	0.28759	0.28367	0.27993	0.28293	0.26631	0.27505	0.28418	0.28195	0	0.28195	0	3.0	15	
1,2-Dichloropropane	Avg RF 1	0.28914 0.29514	0.29409	0.25736	0.27562	0.28403	0.26979	0.28952	0.29726	0.28355	0	0.28355	0	4.7	15	
Methyl methacrylate	Linear 1/x^2	0.23208 0.25872	0.24677		0.17233	0.19253	0.21659	0.25684	0.25429	0.22877	-0.0087280	0.24981	0	0.99714	0.9900	
Dibromomethane	Avg RF 1	0.18494 0.19062	0.1645 0.19118	0.16014	0.17664	0.18425	0.17282	0.18560	0.19304	0.18037	0	0.18037	0	6.3	15	
Bromodichloromethane	Avg RF 1	0.37587 0.40218	0.32560 0.40345	0.32585	0.35022	0.33481	0.35236	0.38631	0.39311	0.36498	0	0.36498	0	8.5	15	
2-Chloroethyl vinyl ether	Avg RF 1	0.20419 0.23912	0.22997	0.20031	0.19911	0.20085	0.20818	0.22538	0.23872	0.21620	0	0.21620	0	7.8	15	
cis-1,3-Dichloropropene	Avg RF 1	0.47207 0.55286	0.41488 0.54708	0.43519	0.47698	0.43778	0.49360	0.51248	0.53183	0.48748	0	0.48748	0	10	15	
4-Methyl-2-pentanone	Linear 1/x^2	0.14274 0.16695	0.16539	0.10561	0.13063	0.12874	0.13906	0.16324	0.16354	0.14510	-0.0028021	0.15733	0	0.99460	0.9900	
Toluene-d8 (S)	Avg RF 1	0.96564 1.0483	0.98946 1.0211	0.94644 1.0355	0.93803	0.93216	0.94153	0.96897	0.99086	0.97982	0	0.97982	0	4.2	15	
Toluene	Avg RF 1	0.78693 0.84600	0.76217 0.82061	0.77022	0.79876	0.76673	0.78631	0.79181	0.81732	0.79469	0	0.79469	0	3.4	15	
trans-1,3-Dichloropropene	Avg RF 1	0.43752 0.50557	0.42985 0.48974	0.37300	0.40393	0.38864	0.43662	0.46407	0.49208	0.44210	0	0.44210	0	10.3	15	
Ethyl methacrylate	Avg RF 1	0.40986 0.45999		0.37789	0.3363	0.35970	0.40628	0.42386	0.47233	0.40578	0	0.40578	0	11.6	15	
1,1,2-Trichloroethane	Avg RF 1	0.23467 0.24953	0.24249	0.20725	0.24589	0.22824	0.23344	0.24405	0.25066	0.23736	0	0.23736	0	5.7	15	

Volatile Organic Analysis Initial Calibration Data

Lab Name: Orange Coast Analytical (Alliance TG) - Phoenix, AZ Analysis Method: 8260B

Lab Reference #: NRE AZ14434 Project Name: Nasa White Sands Test Facility Project Number: 23EEHWMU.0007

Calibration Method: VOC022324Final

Level	Sequence Sample ID	Lab Sample ID	Nominal Spk	Spk/ISTD Ratio	File Name	Lab Standard ID	Analysis Batch	Date
1	CPTP02232401 - 10ppb	CPTP02232401	10	1	GCMS8-022324010.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 15:57
2	CPTP02232402 - 0.25ppb	CPTP02232402	0.25	0.025	GCMS8-022324005.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 13:59
3	CPTP02232403 - 0.5ppb	CPTP02232403	0.5	0.05	GCMS8-022324006.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 14:23
4	CPTP02232404 - 1ppb	CPTP02232404	1	0.1	GCMS8-022324007.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 14:47
5	CPTP02232405 - 2ppb	CPTP02232405	2	0.2	GCMS8-022324008.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 15:11
6	CPTP02232406 - 5ppb	CPTP02232406	5	0.5	GCMS8-022324009.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 15:34
7	CPTP02232407 - 20ppb	CPTP02232407	20	2	GCMS8-022324011.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 16:21
8	CPTP02232408 - 30ppb	CPTP02232408	30	3	GCMS8-022324012.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 16:44
9	CPTP02232409 - 40ppb	CPTP02232409	40	4	GCMS8-022324013.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 17:08
10	CPTP02232410 - 50ppb	CPTP02232410	50	5	GCMS8-022324014.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 17:32
11	CPTP02232411 - 100ppb	CPTP02232411	100	10	GCMS8-022324015.D	PAV 1150, 1153, 1144J	0223241	02/23/24 17:55

		Relative Response Factors (RRF)									Coefficients					
Analyte	Fit Weight	Level 01 Level 09	Level 02 Level 10	Level 03 Level 11	Level 04 Level 12	Level 05	Level 06	Level 07	Level 08	Average	x^0	x^1	x^2	%RSD R^2	Max %RSD Min R^2	Min Avg. RRF
1,3-Dichloropropane	Avg RF 1	0.51200 0.5540	0.49496 0.53423	0.49601	0.53422	0.49192	0.51334	0.52621	0.54287	0.51998	0	0.51998	0	4.2	15	
2-Hexanone	Linear 1/x^2	0.24736 0.29558	0.29158	0.12403	0.20137	0.20397	0.25288	0.28869	0.29094	0.24404	-0.0082063	0.27986	0	0.99406	0.9900	
Tetrachloroethene	Avg RF 1	0.25715 0.28278	0.28445 0.28061	0.27546	0.28725	0.24991	0.26637	0.25729	0.26678	0.27081	0	0.27081	0	4.9	15	
Dibromochloromethane	Avg RF 1	0.3019 0.34952	0.34609	0.28501	0.29036	0.27823	0.28986	0.32105	0.33938	0.31127	0	0.31127	0	9.0	15	
1,2-Dibromoethane	Avg RF 1	0.28530 0.31643	0.31311	0.26944	0.28816	0.25778	0.28605	0.30777	0.30882	0.29254	0	0.29254	0	7.0	15	
Chlorobenzene	Avg RF 1	0.81989 0.89555	0.8275 0.86733	0.86765	0.84503	0.80312	0.83964	0.83501	0.84918	0.84499	0	0.84499	0	3.2	15	0.3
1,1,1,2-Tetrachloroethane	Avg RF 1	0.30468 0.34934	0.29171 0.33932	0.29229	0.29776	0.28958	0.30115	0.33046	0.33041	0.31267	0	0.31267	0	7.1	15	
Ethylbenzene	Avg RF 1	1.4329 1.5379	1.3910 1.5273	1.4279	1.4462	1.4009	1.4363	1.4358	1.4880	1.4524	0	1.4524	0	3.4	15	
m- & p-Xylenes	Avg RF 1	0.58278 0.61722	0.52547 0.59803	0.54194	0.53572	0.54504	0.56693	0.56158	0.59052	0.56652	0	0.56652	0	5.3	15	
o-Xylene	Avg RF 1	0.55782 0.61606	0.58796 0.59605	0.55217	0.58750	0.56431	0.55666	0.5718	0.60016	0.57905	0	0.57905	0	3.7	15	
Styrene	Avg RF 1	0.89824 1.0063	0.73767 0.9812	0.75510	0.82531	0.79047	0.87024	0.93145	0.97621	0.87722	0	0.87722	0	11.1	15	
Bromoform	Linear 1/x^2	0.19993 0.23877	0.23373	0.13381	0.18645	0.17327	0.19594	0.21702	0.23450	0.20149	-0.0045218	0.22123	0	0.99315	0.9900	0.1
Isopropylbenzene	Avg RF 1	1.4310 1.5554	1.3034 1.5314	1.3446	1.3176	1.3065	1.3917	1.4124	1.4802	1.4074	0	1.4074	0	6.5	15	
4-Bromofluorobenzene (S)	Avg RF 1	0.70233 0.71625	0.69827	0.67751 0.70187	0.68739	0.68162	0.68173	0.66468	0.69983	0.69115	0	0.69115	0	2.2	15	
1,1,2,2-Tetrachloroethane	Avg RF 1	0.74652 0.78779	0.74316 0.79565	0.65233	0.71290	0.73099	0.78268	0.78474	0.81049	0.75472	0	0.75472	0	6.3	15	0.3

Volatile Organic Analysis Initial Calibration Data

Lab Name: Orange Coast Analytical (Alliance TG) - Phoenix, AZ Analysis Method: 8260B

Lab Reference #: NRE AZ14434 Project Name: Nasa White Sands Test Facility Project Number: 23EEHWMU.0007

Calibration Method: VOC022324Final

Level	Sequence Sample ID	Lab Sample ID	Nominal Spk	Spk/ISTD Ratio	File Name	Lab Standard ID	Analysis Batch	Date
1	CPTP02232401 - 10ppb	CPTP02232401	10	1	GCMS8-022324010.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 15:57
2	CPTP02232402 - 0.25ppb	CPTP02232402	0.25	0.025	GCMS8-022324005.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 13:59
3	CPTP02232403 - 0.5ppb	CPTP02232403	0.5	0.05	GCMS8-022324006.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 14:23
4	CPTP02232404 - 1ppb	CPTP02232404	1	0.1	GCMS8-022324007.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 14:47
5	CPTP02232405 - 2ppb	CPTP02232405	2	0.2	GCMS8-022324008.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 15:11
6	CPTP02232406 - 5ppb	CPTP02232406	5	0.5	GCMS8-022324009.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 15:34
7	CPTP02232407 - 20ppb	CPTP02232407	20	2	GCMS8-022324011.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 16:21
8	CPTP02232408 - 30ppb	CPTP02232408	30	3	GCMS8-022324012.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 16:44
9	CPTP02232409 - 40ppb	CPTP02232409	40	4	GCMS8-022324013.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 17:08
10	CPTP02232410 - 50ppb	CPTP02232410	50	5	GCMS8-022324014.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 17:32
11	CPTP02232411 - 100ppb	CPTP02232411	100	10	GCMS8-022324015.D	PAV 1150, 1153, 1144J	0223241	02/23/24 17:55

		Relative Response Factors (RRF)									Coefficients					
Analyte	Fit Weight	Level 01 Level 09	Level 02 Level 10	Level 03 Level 11	Level 04 Level 12	Level 05	Level 06	Level 07	Level 08	Average	x^0	x^1	x^2	%RSD R^2	Max %RSD Min R^2	Min Avg. RRF
trans-1,4-Dichloro-2-butene	Linear 1/x^2	0.18128 0.20833	0.20602	0.12287	0.15959	0.18835	0.19800	0.19594	0.21239	0.18586	-0.0040861	0.2037	0	0.99781	0.9900	
1,2,3-Trichloropropane	Avg RF 1	0.26537 0.27550	0.29702 0.27384	0.34265	0.2486	0.24535	0.25936	0.27206	0.27788	0.27576	0	0.27576	0	10.1	15	
Bromobenzene	Avg RF 1	0.65961 0.69015	0.57047 0.69737	0.67671	0.63884	0.67379	0.64413	0.66881	0.69890	0.66188	0	0.66188	0	5.8	15	
n-Propylbenzene	Avg RF 1	3.0683 3.2421	2.6175 3.3612	2.7564	2.6745	3.0165	3.0478	2.9128	3.1209	2.9818	0	2.9818	0	8.1	15	
2-Chlorotoluene	Avg RF 1	0.64034 0.65921	0.68627 0.66277	0.52526	0.60495	0.63588	0.60647	0.62856	0.65191	0.63016	0	0.63016	0	7.1	15	
1,3,5-Trimethylbenzene	Avg RF 1	2.1470 2.2975	1.6529 2.3552	1.7964	1.9048	2.0708	2.0763	2.1146	2.2416	2.0657	0	2.0657	0	10.8	15	
4-Chlorotoluene	Avg RF 1	2.1006 2.1952	1.6765 2.2052	2.0893	2.0626	2.1181	2.1278	2.0734	2.2107	2.0859	0	2.0859	0	7.4	15	
tert-Butylbenzene	Avg RF 1	0.53095 0.57806	0.59955	0.56223	0.52700	0.52340	0.55391	0.51978	0.55012	0.54944	0	0.54944	0	5.0	15	
1,2,4-Trimethylbenzene	Avg RF 1	2.1828 2.3224	1.7399 2.3432	1.9093	1.9977	2.0030	2.1963	2.1621	2.2712	2.1128	0	2.1128	0	9.2	15	
Pentachloroethane	Avg RF 1	0.38022 0.43813	0.44358	0.36483	0.32954	0.34111	0.37321	0.40682	0.43822	0.39063	0	0.39063	0	11.0	15	
sec-Butylbenzene	Avg RF 1	2.6614 2.8766	2.2331 3.0066	2.4379	2.4062	2.5396	2.6396	2.5720	2.7487	2.6122	0	2.6122	0	8.8	15	
4-Isopropyltoluene	Avg RF 1	2.3020 2.4881	2.5945	2.0703	1.9456	2.1565	2.3275	2.2271	2.4027	2.2794	0	2.2794	0	9.0	15	
1,3-Dichlorobenzene	Avg RF 1	1.2812 1.3288	1.3469 1.3264	1.3266	1.2333	1.3315	1.2766	1.2783	1.3310	1.3061	0	1.3061	0	2.8	15	
1,4-Dichlorobenzene	Avg RF 1	1.3129 1.3637	1.3404 1.3408	1.3632	1.3468	1.3007	1.3305	1.2800	1.3381	1.3317	0	1.3317	0	2.0	15	
n-Butylbenzene	Avg RF 1	1.1453 1.2641	1.3402	0.98020	1.0519	1.0780	1.1112	1.0926	1.2216	1.1428	0	1.1428	0	9.9	15	

Volatile Organic Analysis Initial Calibration Data

Lab Name: Orange Coast Analytical (Alliance TG) - Phoenix, AZ Analysis Method: 8260B

Lab Reference #: NRE AZ14434 Project Name: Nasa White Sands Test Facility Project Number: 23EEHWMU.0007

Calibration Method: VOC022324Final

Level	Sequence Sample ID	Lab Sample ID	Nominal Spk	Spk/ISTD Ratio	File Name	Lab Standard ID	Analysis Batch	Date
1	CPTP02232401 - 10ppb	CPTP02232401	10	1	GCMS8-022324010.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 15:57
2	CPTP02232402 - 0.25ppb	CPTP02232402	0.25	0.025	GCMS8-022324005.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 13:59
3	CPTP02232403 - 0.5ppb	CPTP02232403	0.5	0.05	GCMS8-022324006.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 14:23
4	CPTP02232404 - 1ppb	CPTP02232404	1	0.1	GCMS8-022324007.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 14:47
5	CPTP02232405 - 2ppb	CPTP02232405	2	0.2	GCMS8-022324008.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 15:11
6	CPTP02232406 - 5ppb	CPTP02232406	5	0.5	GCMS8-022324009.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 15:34
7	CPTP02232407 - 20ppb	CPTP02232407	20	2	GCMS8-022324011.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 16:21
8	CPTP02232408 - 30ppb	CPTP02232408	30	3	GCMS8-022324012.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 16:44
9	CPTP02232409 - 40ppb	CPTP02232409	40	4	GCMS8-022324013.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 17:08
10	CPTP02232410 - 50ppb	CPTP02232410	50	5	GCMS8-022324014.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 17:32
11	CPTP02232411 - 100ppb	CPTP02232411	100	10	GCMS8-022324015.D	PAV 1150, 1153, 1144J	0223241	02/23/24 17:55

		Relative Response Factors (RRF)									Coefficients					
Analyte	Fit Weight	Level 01 Level 09	Level 02 Level 10	Level 03 Level 11	Level 04 Level 12	Level 05	Level 06	Level 07	Level 08	Average	x^0	x^1	x^2	%RSD R^2	Max %RSD Min R^2	Min Avg. RRF
1,2-Dichlorobenzene	Avg RF 1	1.2432 1.2883	1.1491 1.2977	1.2261	1.1893	1.2075	1.2539	1.2354	1.3016	1.2392	0	1.2392	0	4.0	15	
1,2-Dibromo-3-chloropropane	Avg RF 1	0.14761 0.15733	0.16398	0.12907	0.13626	0.12621	0.14783	0.15497	0.16129	0.14717	0	0.14717	0	9.4	15	
1,2,4-Trichlorobenzene	Avg RF 1	0.81094 0.91445	0.92153 0.91568	0.78380	0.78457	0.81055	0.75644	0.82739	0.89088	0.84162	0	0.84162	0	7.5	15	
Hexachlorobutadiene	Avg RF 1	0.30180 0.33234	0.28524	0.26333	0.27222	0.32581	0.26470	0.27067	0.31874	0.29276	0	0.29276	0	9.4	15	
Naphthalene	Avg RF 1	2.4402 2.7201	2.7072	2.0010	2.1542	2.2536	2.3207	2.6158	2.6852	2.4331	0	2.4331	0	10.9	15	
1,2,3-Trichlorobenzene	Avg RF 1	0.80144 0.85814	0.77851 0.86098	0.90867	0.75347	0.78218	0.78415	0.81021	0.84860	0.81863	0	0.81863	0	5.9	15	

Volatile Organic Analysis Initial Calibration Data

Lab Name: Orange Coast Analytical (Alliance TG) - Phoenix, AZ Analysis Method: 8260B

Lab Reference #: NRE AZ14434 Project Name: Nasa White Sands Test Facility Project Number: 23EEHWMU.0007

Calibration Method: VOC022324Final

Level	Sequence Sample ID	Lab Sample ID	Nominal Spk	Spk/ISTD Ratio	File Name	Lab Standard ID	Analysis Batch	Date
1	CPTP02232401 - 10ppb	CPTP02232401	10	1	GCMS8-022324010.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 15:57
2	CPTP02232402 - 0.25ppb	CPTP02232402	0.25	0.025	GCMS8-022324005.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 13:59
3	CPTP02232403 - 0.5ppb	CPTP02232403	0.5	0.05	GCMS8-022324006.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 14:23
4	CPTP02232404 - 1ppb	CPTP02232404	1	0.1	GCMS8-022324007.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 14:47
5	CPTP02232405 - 2ppb	CPTP02232405	2	0.2	GCMS8-022324008.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 15:11
6	CPTP02232406 - 5ppb	CPTP02232406	5	0.5	GCMS8-022324009.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 15:34
7	CPTP02232407 - 20ppb	CPTP02232407	20	2	GCMS8-022324011.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 16:21
8	CPTP02232408 - 30ppb	CPTP02232408	30	3	GCMS8-022324012.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 16:44
9	CPTP02232409 - 40ppb	CPTP02232409	40	4	GCMS8-022324013.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 17:08
10	CPTP02232410 - 50ppb	CPTP02232410	50	5	GCMS8-022324014.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 17:32
11	CPTP02232411 - 100ppb	CPTP02232411	100	10	GCMS8-022324015.D	PAV 1150, 1153, 1144J	0223241	02/23/24 17:55

Analyte (ISTD Referenced)	Fit Weight	Responses								Concentrations (ppb)							
		Level 01 / Level 09	Level 02 / Level 10	Level 03 / Level 11	Level 04 / Level 12	Level 05	Level 06	Level 07	Level 08	Level 01 / Level 09	Level 02 / Level 10	Level 03 / Level 11	Level 04 / Level 12	Level 05	Level 06	Level 07	Level 08
Dichlorodifluoromethane	Avg RF	74640		2792	5984	11740	29821	137852	211363	10		0.5	1	2	5	20	30
(Pentafluorobenzene)	1	307433								40							
Chloromethane	Avg RF	86676	2179	4619	9031	17194	41084	159300	252229	10	0.25	0.5	1	2	5	20	30
(Pentafluorobenzene)	1	346763	438818	876349						40	50	100					
Vinyl chloride	Avg RF	80805	1894	3650	7833	14568	35885	141852	228346	10	0.25	0.5	1	2	5	20	30
(Pentafluorobenzene)	1	317633	407838	812324						40	50	100					
Bromomethane	Avg RF	48612	1273	2688	5161	10447	23168	95949	138403	10	0.25	0.5	1	2	5	20	30
(Pentafluorobenzene)	1	194224	242797	463092						40	50	100					
Chloroethane	Avg RF	47625	1287	2316	5181	9630	24978	94716	144304	10	0.25	0.5	1	2	5	20	30
(Pentafluorobenzene)	1	201604	250458	497243						40	50	100					
Trichlorofluoromethane	Avg RF	86714	2192	3703	8332	15457	40435	162188	250000	10	0.25	0.5	1	2	5	20	30
(Pentafluorobenzene)	1	359444	485606	970168						40	50	100					
Diethyl ether	Avg RF	37036		1538	4103	7450	18130	78150	123129	10		0.5	1	2	5	20	30
(Pentafluorobenzene)	1	160035	200866							40	50						
1,1-Dichloroethene	Avg RF	52644		2146	5629	10734	26207	103616	161797	10		0.5	1	2	5	20	30
(Pentafluorobenzene)	1	225333	279159							40	50						
Acetone	Linear	6706		911	1281	1920	3722	15791	19591	10		0.5	1	2	5	20	30
(Pentafluorobenzene)	1/x^2	27708	33877							40	50						
Iodomethane	Avg RF	100178	2104	4833	10190	19485	51216	203589	316808	10	0.25	0.5	1	2	5	20	30
(Pentafluorobenzene)	1	425652	533019							40	50						
Carbon disulfide	Avg RF	166898	4378	9147	16998	31497	82312	332009	513687	10	0.25	0.5	1	2	5	20	30
(Pentafluorobenzene)	1	728523	899052							40	50						
Allyl chloride	Avg RF	32693			3459	6145	17008	71598	108195	10			1	2	5	20	30
(Pentafluorobenzene)	1	151304	188539							40	50						
Acrylonitrile	Linear	18795			1016	3115	8889	41051	63786	10			1	2	5	20	30
(Pentafluorobenzene)	1/x^2	81977	107194							40	50						
Methyl t-butyl ether (MTBE)	Avg RF	176179		8278	17889	35383	89667	368391	569821	10		0.5	1	2	5	20	30
(Pentafluorobenzene)	1	740755	925558							40	50						
trans-1,2-Dichloroethene	Avg RF	58925	1333	3073	5720	12703	30037	124405	190066	10	0.25	0.5	1	2	5	20	30
(Pentafluorobenzene)	1	265067	327185							40	50						

Volatile Organic Analysis Initial Calibration Data

Lab Name: Orange Coast Analytical (Alliance TG) - Phoenix, AZ Analysis Method: 8260B

Lab Reference #: NRE AZ14434 Project Name: Nasa White Sands Test Facility Project Number: 23EEHWMU.0007

Calibration Method: VOC022324Final

Level	Sequence Sample ID	Lab Sample ID	Nominal Spk	Spk/ISTD Ratio	File Name	Lab Standard ID	Analysis Batch	Date
1	CPTP02232401 - 10ppb	CPTP02232401	10	1	GCMS8-022324010.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 15:57
2	CPTP02232402 - 0.25ppb	CPTP02232402	0.25	0.025	GCMS8-022324005.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 13:59
3	CPTP02232403 - 0.5ppb	CPTP02232403	0.5	0.05	GCMS8-022324006.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 14:23
4	CPTP02232404 - 1ppb	CPTP02232404	1	0.1	GCMS8-022324007.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 14:47
5	CPTP02232405 - 2ppb	CPTP02232405	2	0.2	GCMS8-022324008.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 15:11
6	CPTP02232406 - 5ppb	CPTP02232406	5	0.5	GCMS8-022324009.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 15:34
7	CPTP02232407 - 20ppb	CPTP02232407	20	2	GCMS8-022324011.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 16:21
8	CPTP02232408 - 30ppb	CPTP02232408	30	3	GCMS8-022324012.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 16:44
9	CPTP02232409 - 40ppb	CPTP02232409	40	4	GCMS8-022324013.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 17:08
10	CPTP02232410 - 50ppb	CPTP02232410	50	5	GCMS8-022324014.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 17:32
11	CPTP02232411 - 100ppb	CPTP02232411	100	10	GCMS8-022324015.D	PAV 1150, 1153, 1144J	0223241	02/23/24 17:55

Analyte (ISTD Referenced)	Fit Weight	Responses								Concentrations (ppb)							
		Level 01 Level 09	Level 02 Level 10	Level 03 Level 11	Level 04 Level 12	Level 05	Level 06	Level 07	Level 08	Level 01 Level 09	Level 02 Level 10	Level 03 Level 11	Level 04 Level 12	Level 05	Level 06	Level 07	Level 08
1,1-Dichloroethane	Avg RF	102017		5501	11423	21760	54542	218567	331827	10		0.5	1	2	5	20	30
(Pentafluorobenzene)	1	450156	563326							40	50						
Vinyl acetate	Linear	12814			974	2017	6122	27148	41740	10			1	2	5	20	30
(Pentafluorobenzene)	1/x^2	55355	77827							40	50						
2-Butanone (MEK)	Linear	7966					3413	18105	25256	10					5	20	30
(Pentafluorobenzene)	1/x^2	33877	44696							40	50						
cis-1,2-Dichloroethene	Avg RF	67587	1612	2958	6600	13342	34535	140991	216241	10	0.25	0.5	1	2	5	20	30
(Pentafluorobenzene)	1	288835	358423							40	50						
2,2-Dichloropropane	Avg RF	86873	2022	4301	8586	17326	43986	175922	265771	10	0.25	0.5	1	2	5	20	30
(Pentafluorobenzene)	1	361421	447055							40	50						
Propionitrile	Linear	10230				1213	4369	21899	33146	10				2	5	20	30
(Pentafluorobenzene)	1/x^2	44263	55817							40	50						
Methyl acrylate	Linear	55448		1639	4919	10798	29029	128880	189763	10		0.5	1	2	5	20	30
(Pentafluorobenzene)	1/x^2	249148	318733							40	50						
Methacrylonitrile	Avg RF	25319			2195	4688	12026	56718	86639	10			1	2	5	20	30
(Pentafluorobenzene)	1	113870	143961							40	50						
Bromochloromethane	Avg RF	31046		1407	3691	6282	17179	71072	103314	10		0.5	1	2	5	20	30
(Pentafluorobenzene)	1	141476	173156							40	50						
Chloroform	Avg RF	102209	2390	5574	10400	21061	53254	217363	331841	10	0.25	0.5	1	2	5	20	30
(Pentafluorobenzene)	1	443969	556995							40	50						
Tetrahydrofuran	Avg RF	11219					4993	21902	32288	10					5	20	30
(Pentafluorobenzene)	1	42093	53602							40	50						
Dibromofluoromethane (S)	Avg RF	49952		2225	5045	10018	25820	102504	155647	10		0.5	1	2	5	20	30
(Pentafluorobenzene)	1	217484	267429	512133						40	50	100					
1,1,1-Trichloroethane	Avg RF	91003	1971	4532	9697	17710	44876	180315	286310	10	0.25	0.5	1	2	5	20	30
(Pentafluorobenzene)	1	394323	491167							40	50						
1,1-Dichloropropene	Avg RF	69037	1822	3535	7802	13643	36115	139674	215067	10	0.25	0.5	1	2	5	20	30
(Pentafluorobenzene)	1	300384	374276							40	50						
Carbon tetrachloride	Avg RF	73259		4046	7878	13785	38258	148955	232192	10		0.5	1	2	5	20	30
(Pentafluorobenzene)	1	328330	411787							40	50						

Volatile Organic Analysis Initial Calibration Data

Lab Name: Orange Coast Analytical (Alliance TG) - Phoenix, AZ Analysis Method: 8260B

Lab Reference #: NRE AZ14434 Project Name: Nasa White Sands Test Facility Project Number: 23EEHWMU.0007

Calibration Method: VOC022324Final

Level	Sequence Sample ID	Lab Sample ID	Nominal Spk	Spk/ISTD Ratio	File Name	Lab Standard ID	Analysis Batch	Date
1	CPTP02232401 - 10ppb	CPTP02232401	10	1	GCMS8-022324010.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 15:57
2	CPTP02232402 - 0.25ppb	CPTP02232402	0.25	0.025	GCMS8-022324005.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 13:59
3	CPTP02232403 - 0.5ppb	CPTP02232403	0.5	0.05	GCMS8-022324006.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 14:23
4	CPTP02232404 - 1ppb	CPTP02232404	1	0.1	GCMS8-022324007.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 14:47
5	CPTP02232405 - 2ppb	CPTP02232405	2	0.2	GCMS8-022324008.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 15:11
6	CPTP02232406 - 5ppb	CPTP02232406	5	0.5	GCMS8-022324009.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 15:34
7	CPTP02232407 - 20ppb	CPTP02232407	20	2	GCMS8-022324011.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 16:21
8	CPTP02232408 - 30ppb	CPTP02232408	30	3	GCMS8-022324012.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 16:44
9	CPTP02232409 - 40ppb	CPTP02232409	40	4	GCMS8-022324013.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 17:08
10	CPTP02232410 - 50ppb	CPTP02232410	50	5	GCMS8-022324014.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 17:32
11	CPTP02232411 - 100ppb	CPTP02232411	100	10	GCMS8-022324015.D	PAV 1150, 1153, 1144J	0223241	02/23/24 17:55

Analyte (ISTD Referenced)	Fit Weight	Responses								Concentrations (ppb)							
		Level 01 Level 09	Level 02 Level 10	Level 03 Level 11	Level 04 Level 12	Level 05	Level 06	Level 07	Level 08	Level 01 Level 09	Level 02 Level 10	Level 03 Level 11	Level 04 Level 12	Level 05	Level 06	Level 07	Level 08
Benzene	Avg RF	230527	5862	11158	24494	47326	119832	478414	730356	10	0.25	0.5	1	2	5	20	30
(Pentafluorobenzene)	1	1000029	1236373							40	50						
1,2-Dichloroethane	Avg RF	71811	1506	3345	7411	14646	38917	154990	235555	10	0.25	0.5	1	2	5	20	30
(Pentafluorobenzene)	1	316870	386909							40	50						
Trichloroethene	Avg RF	53947		2804	5591	11277	28308	109511	170487	10		0.5	1	2	5	20	30
(1,4-Difluorobenzene)	1	240644	289836							40	50						
1,2-Dichloropropane	Avg RF	55570		2544	5505	11321	28678	115273	178334	10		0.5	1	2	5	20	30
(1,4-Difluorobenzene)	1	238971	296383							40	50						
Methyl methacrylate	Linear	44604			3442	7674	23023	102261	152552	10			1	2	5	20	30
(1,4-Difluorobenzene)	1/x^2	209486	248696							40	50						
Dibromomethane	Avg RF	35544	825	1583	3528	7344	18370	73898	115808	10	0.25	0.5	1	2	5	20	30
(1,4-Difluorobenzene)	1	154346	192667							40	50						
Bromodichloromethane	Avg RF	72238	1633	3221	6995	13345	37455	153809	235835	10	0.25	0.5	1	2	5	20	30
(1,4-Difluorobenzene)	1	325643	406592							40	50						
2-Chloroethyl vinyl ether	Avg RF	36258		1762	3524	7275	19406	80773	128704	10		0.5	1	2	5	20	30
(Chlorobenzene-d5)	1	169566	205384							40	50						
cis-1,3-Dichloropropene	Avg RF	83823	1829	3828	8442	15857	46012	183667	286729	10	0.25	0.5	1	2	5	20	30
(Chlorobenzene-d5)	1	392051	488599							40	50						
4-Methyl-2-pentanone	Linear	25345		929	2312	4663	12963	58503	88172	10		0.5	1	2	5	20	30
(Chlorobenzene-d5)	1/x^2	118389	147712							40	50						
Toluene-d8 (S)	Avg RF	171465	4362	8325	16602	33764	87766	347265	534206	10	0.25	0.5	1	2	5	20	30
(Chlorobenzene-d5)	1	743379	911938	1743675						40	50	100					
Toluene	Avg RF	139732	3360	6775	14137	27772	73297	283773	440647	10	0.25	0.5	1	2	5	20	30
(Chlorobenzene-d5)	1	599924	732888							40	50						
trans-1,3-Dichloropropene	Avg RF	77688	1895	3281	7149	14077	40700	166317	265300	10	0.25	0.5	1	2	5	20	30
(Chlorobenzene-d5)	1	358517	437386							40	50						
Ethyl methacrylate	Avg RF	72777		3324	5952	13029	37872	151905	254648	10		0.5	1	2	5	20	30
(Chlorobenzene-d5)	1	326191								40							
1,1,2-Trichloroethane	Avg RF	41670		1823	4352	8267	21760	87463	135142	10		0.5	1	2	5	20	30
(Chlorobenzene-d5)	1	176949	216573							40	50						

Volatile Organic Analysis Initial Calibration Data

Lab Name: Orange Coast Analytical (Alliance TG) - Phoenix, AZ Analysis Method: 8260B

Lab Reference #: NRE AZ14434 Project Name: Nasa White Sands Test Facility Project Number: 23EEHWMU.0007

Calibration Method: VOC022324Final

Level	Sequence Sample ID	Lab Sample ID	Nominal Spk	Spk/ISTD Ratio	File Name	Lab Standard ID	Analysis Batch	Date
1	CPTP02232401 - 10ppb	CPTP02232401	10	1	GCMS8-022324010.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 15:57
2	CPTP02232402 - 0.25ppb	CPTP02232402	0.25	0.025	GCMS8-022324005.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 13:59
3	CPTP02232403 - 0.5ppb	CPTP02232403	0.5	0.05	GCMS8-022324006.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 14:23
4	CPTP02232404 - 1ppb	CPTP02232404	1	0.1	GCMS8-022324007.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 14:47
5	CPTP02232405 - 2ppb	CPTP02232405	2	0.2	GCMS8-022324008.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 15:11
6	CPTP02232406 - 5ppb	CPTP02232406	5	0.5	GCMS8-022324009.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 15:34
7	CPTP02232407 - 20ppb	CPTP02232407	20	2	GCMS8-022324011.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 16:21
8	CPTP02232408 - 30ppb	CPTP02232408	30	3	GCMS8-022324012.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 16:44
9	CPTP02232409 - 40ppb	CPTP02232409	40	4	GCMS8-022324013.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 17:08
10	CPTP02232410 - 50ppb	CPTP02232410	50	5	GCMS8-022324014.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 17:32
11	CPTP02232411 - 100ppb	CPTP02232411	100	10	GCMS8-022324015.D	PAV 1150, 1153, 1144J	0223241	02/23/24 17:55

Analyte (ISTD Referenced)	Fit Weight	Responses								Concentrations (ppb)							
		Level 01 Level 09	Level 02 Level 10	Level 03 Level 11	Level 04 Level 12	Level 05	Level 06	Level 07	Level 08	Level 01 Level 09	Level 02 Level 10	Level 03 Level 11	Level 04 Level 12	Level 05	Level 06	Level 07	Level 08
1,3-Dichloropropane	Avg RF	90914	2182	4363	9455	17818	47852	188586	292683	10	0.25	0.5	1	2	5	20	30
(Chlorobenzene-d5)	1	392855	477127							40	50						
2-Hexanone	Linear	43922		1091	3564	7388	23573	103464	156855	10		0.5	1	2	5	20	30
(Chlorobenzene-d5)	1/x^2	209603	260410							40	50						
Tetrachloroethene	Avg RF	45661	1254	2423	5084	9052	24830	92209	143833	10	0.25	0.5	1	2	5	20	30
(Chlorobenzene-d5)	1	200526	250615							40	50						
Dibromochloromethane	Avg RF	53607		2507	5139	10078	27020	115061	182973	10		0.5	1	2	5	20	30
(Chlorobenzene-d5)	1	247857	309094							40	50						
1,2-Dibromoethane	Avg RF	50660		2370	5100	9337	26665	110302	166495	10		0.5	1	2	5	20	30
(Chlorobenzene-d5)	1	224390	279636							40	50						
Chlorobenzene	Avg RF	145585	3648	7632	14956	29090	78268	299255	457825	10	0.25	0.5	1	2	5	20	30
(Chlorobenzene-d5)	1	635059	774619							40	50						
1,1,1,2-Tetrachloroethane	Avg RF	54100	1286	2571	5270	10489	28072	118434	178135	10	0.25	0.5	1	2	5	20	30
(Chlorobenzene-d5)	1	247729	303047							40	50						
Ethylbenzene	Avg RF	254436	6132	12560	25596	50741	133886	514573	802250	10	0.25	0.5	1	2	5	20	30
(Chlorobenzene-d5)	1	1090542	1364011							40	50						
m- & p-Xylenes	Avg RF	206965	4633	9534	18963	39484	105694	402522	636744	20	0.5	1	2	4	10	40	60
(Chlorobenzene-d5)	1	875373	1068209							80	100						
o-Xylene	Avg RF	99050	2592	4857	10398	20440	51890	204924	323568	10	0.25	0.5	1	2	5	20	30
(Chlorobenzene-d5)	1	436865	532338							40	50						
Styrene	Avg RF	159496	3252	6642	14607	28632	81121	333819	526310	10	0.25	0.5	1	2	5	20	30
(Chlorobenzene-d5)	1	713587	876312							40	50						
Bromoform	Linear	35501		1177	3300	6276	18265	77778	126430	10		0.5	1	2	5	20	30
(Chlorobenzene-d5)	1/x^2	169321	208745							40	50						
Isopropylbenzene	Avg RF	254091	5746	11827	23320	47323	129726	506175	798052	10	0.25	0.5	1	2	5	20	30
(Chlorobenzene-d5)	1	1102977	1367707							40	50						
4-Bromofluorobenzene (S)	Avg RF	68632		3391	6896	13502	34812	131554	206120	10		0.5	1	2	5	20	30
(1,4-Dichlorobenzene-d4)	1	284528	337221	650833						40	50	100					
1,1,2,2-Tetrachloroethane	Avg RF	72950	1829	3265	7152	14480	39967	155316	238712	10	0.25	0.5	1	2	5	20	30
(1,4-Dichlorobenzene-d4)	1	312944	384249							40	50						

Volatile Organic Analysis Initial Calibration Data

Lab Name: Orange Coast Analytical (Alliance TG) - Phoenix, AZ Analysis Method: 8260B

Lab Reference #: NRE AZ14434 Project Name: Nasa White Sands Test Facility Project Number: 23EEHWMU.0007

Calibration Method: VOC022324Final

Level	Sequence Sample ID	Lab Sample ID	Nominal Spk	Spk/ISTD Ratio	File Name	Lab Standard ID	Analysis Batch	Date
1	CPTP02232401 - 10ppb	CPTP02232401	10	1	GCMS8-022324010.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 15:57
2	CPTP02232402 - 0.25ppb	CPTP02232402	0.25	0.025	GCMS8-022324005.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 13:59
3	CPTP02232403 - 0.5ppb	CPTP02232403	0.5	0.05	GCMS8-022324006.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 14:23
4	CPTP02232404 - 1ppb	CPTP02232404	1	0.1	GCMS8-022324007.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 14:47
5	CPTP02232405 - 2ppb	CPTP02232405	2	0.2	GCMS8-022324008.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 15:11
6	CPTP02232406 - 5ppb	CPTP02232406	5	0.5	GCMS8-022324009.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 15:34
7	CPTP02232407 - 20ppb	CPTP02232407	20	2	GCMS8-022324011.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 16:21
8	CPTP02232408 - 30ppb	CPTP02232408	30	3	GCMS8-022324012.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 16:44
9	CPTP02232409 - 40ppb	CPTP02232409	40	4	GCMS8-022324013.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 17:08
10	CPTP02232410 - 50ppb	CPTP02232410	50	5	GCMS8-022324014.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 17:32
11	CPTP02232411 - 100ppb	CPTP02232411	100	10	GCMS8-022324015.D	PAV 1150, 1153, 1144J	0223241	02/23/24 17:55

		Responses								Concentrations (ppb)							
Analyte (ISTD Referenced)	Fit Weight	Level 01 Level 09	Level 02 Level 10	Level 03 Level 11	Level 04 Level 12	Level 05	Level 06	Level 07	Level 08	Level 01 Level 09	Level 02 Level 10	Level 03 Level 11	Level 04 Level 12	Level 05	Level 06	Level 07	Level 08
trans-1,4-Dichloro-2-butene	Linear	17715		615	1601	3731	10111	38781	62555	10		0.5	1	2	5	20	30
(1,4-Dichlorobenzene-d4)	1/x^2	82759	99493							40	50						
1,2,3-Trichloropropane	Avg RF	25932	731	1715	2494	4860	13244	53846	81844	10	0.25	0.5	1	2	5	20	30
(1,4-Dichlorobenzene-d4)	1	109442	132248							40	50						
Bromobenzene	Avg RF	64457	1404	3387	6409	13347	32892	132370	205847	10	0.25	0.5	1	2	5	20	30
(1,4-Dichlorobenzene-d4)	1	274159	336789							40	50						
n-Propylbenzene	Avg RF	299833	6442	13796	26831	59754	155635	576500	919185	10	0.25	0.5	1	2	5	20	30
(1,4-Dichlorobenzene-d4)	1	1287911	1623237							40	50						
2-Chlorotoluene	Avg RF	62574	1689	2629	6069	12596	30969	124405	192006	10	0.25	0.5	1	2	5	20	30
(1,4-Dichlorobenzene-d4)	1	261869	320076							40	50						
1,3,5-Trimethylbenzene	Avg RF	209809	4068	8991	19109	41021	106027	418531	660206	10	0.25	0.5	1	2	5	20	30
(1,4-Dichlorobenzene-d4)	1	912683	1137442							40	50						
4-Chlorotoluene	Avg RF	205267	4126	10457	20692	41958	108654	410365	651125	10	0.25	0.5	1	2	5	20	30
(1,4-Dichlorobenzene-d4)	1	872047	1064994							40	50						
tert-Butylbenzene	Avg RF	51884		2814	5287	10368	28285	102874	162025	10		0.5	1	2	5	20	30
(1,4-Dichlorobenzene-d4)	1	229631	289549							40	50						
1,2,4-Trimethylbenzene	Avg RF	213308	4282	9556	20041	39678	112154	427926	668925	10	0.25	0.5	1	2	5	20	30
(1,4-Dichlorobenzene-d4)	1	922575	1131621							40	50						
Pentachloroethane	Avg RF	37155		1826	3306	6757	19058	80518	129069	10		0.5	1	2	5	20	30
(1,4-Dichlorobenzene-d4)	1	174043	214221							40	50						
sec-Butylbenzene	Avg RF	260072	5496	12202	24139	50306	134788	509046	809557	10	0.25	0.5	1	2	5	20	30
(1,4-Dichlorobenzene-d4)	1	1142708	1452005							40	50						
4-Isopropyltoluene	Avg RF	224952		10362	19519	42718	118851	440784	707662	10		0.5	1	2	5	20	30
(1,4-Dichlorobenzene-d4)	1	988368	1252969							40	50						
1,3-Dichlorobenzene	Avg RF	125197	3315	6640	12373	26375	65191	253005	392004	10	0.25	0.5	1	2	5	20	30
(1,4-Dichlorobenzene-d4)	1	527862	640567							40	50						
1,4-Dichlorobenzene	Avg RF	128292	3299	6823	13511	25766	67942	253340	394120	10	0.25	0.5	1	2	5	20	30
(1,4-Dichlorobenzene-d4)	1	541727	647503							40	50						
n-Butylbenzene	Avg RF	111918		4906	10553	21353	56743	216245	359804	10		0.5	1	2	5	20	30
(1,4-Dichlorobenzene-d4)	1	502152	647224							40	50						

Volatile Organic Analysis Initial Calibration Data

Lab Name: Orange Coast Analytical (Alliance TG) - Phoenix, AZ Analysis Method: 8260B

Lab Reference #: NRE AZ14434 Project Name: Nasa White Sands Test Facility Project Number: 23EEHWMU.0007

Calibration Method: VOC022324Final

Level	Sequence Sample ID	Lab Sample ID	Nominal Spk	Spk/ISTD Ratio	File Name	Lab Standard ID	Analysis Batch	Date
1	CPTP02232401 - 10ppb	CPTP02232401	10	1	GCMS8-022324010.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 15:57
2	CPTP02232402 - 0.25ppb	CPTP02232402	0.25	0.025	GCMS8-022324005.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 13:59
3	CPTP02232403 - 0.5ppb	CPTP02232403	0.5	0.05	GCMS8-022324006.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 14:23
4	CPTP02232404 - 1ppb	CPTP02232404	1	0.1	GCMS8-022324007.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 14:47
5	CPTP02232405 - 2ppb	CPTP02232405	2	0.2	GCMS8-022324008.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,	0223241	02/23/24 15:11
6	CPTP02232406 - 5ppb	CPTP02232406	5	0.5	GCMS8-022324009.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 15:34
7	CPTP02232407 - 20ppb	CPTP02232407	20	2	GCMS8-022324011.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 16:21
8	CPTP02232408 - 30ppb	CPTP02232408	30	3	GCMS8-022324012.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 16:44
9	CPTP02232409 - 40ppb	CPTP02232409	40	4	GCMS8-022324013.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 17:08
10	CPTP02232410 - 50ppb	CPTP02232410	50	5	GCMS8-022324014.D	PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B	0223241	02/23/24 17:32
11	CPTP02232411 - 100ppb	CPTP02232411	100	10	GCMS8-022324015.D	PAV 1150, 1153, 1144J	0223241	02/23/24 17:55

		Responses								Concentrations (ppb)							
Analyte (ISTD Referenced)	Fit Weight	Level 01	Level 02	Level 03	Level 04	Level 05	Level 06	Level 07	Level 08	Level 01	Level 02	Level 03	Level 04	Level 05	Level 06	Level 07	Level 08
		Level 09	Level 10	Level 11	Level 12					Level 09	Level 10	Level 11	Level 12				
1,2-Dichlorobenzene	Avg RF	121482	2828	6137	11931	23919	64032	244502	383353	10	0.25	0.5	1	2	5	20	30
(1,4-Dichlorobenzene-d4)	1	511779	626701							40	50						
1,2-Dibromo-3-chloropropane	Avg RF	14424		646	1367	2500	7549	30671	47503	10		0.5	1	2	5	20	30
(1,4-Dichlorobenzene-d4)	1	62499	79191							40	50						
1,2,4-Trichlorobenzene	Avg RF	79245	2268	3923	7871	16056	38627	163758	262390	10	0.25	0.5	1	2	5	20	30
(1,4-Dichlorobenzene-d4)	1	363261	442220							40	50						
Hexachlorobutadiene	Avg RF	29492	702	1318	2731	6454	13517	53571	93879	10	0.25	0.5	1	2	5	20	30
(1,4-Dichlorobenzene-d4)	1	132020								40							
Naphthalene	Avg RF	238453		10015	21611	44641	118507	517724	790869	10		0.5	1	2	5	20	30
(1,4-Dichlorobenzene-d4)	1	1080525	1307433							40	50						
1,2,3-Trichlorobenzene	Avg RF	78317	1916	4548	7559	15494	40042	160356	249937	10	0.25	0.5	1	2	5	20	30
(1,4-Dichlorobenzene-d4)	1	340891	415801							40	50						

8260 Quantitation Review Report

C:\msdchem\1\data\2024\02-FEB\022324\GCMS8-022324004.D

CB / BFB 02/23/24 004

Sample Name: CBTP0223241 + BFB - Updated Tune
Data File Name: GCMS8-022324004.D
Date Acquired: 02/23/24 13:20
Vial Number: 1
Sample Multiplier: 1
Misc Info: PAV 1150, 1149

Operator:
Data File Path: C:\msdchem\1\data\2024\02-FEB\02232
Instrument Method: VOC092623 INSTRUMENT SCAN.M
Quant. Method: VOC022324Final
Last Result Mod: 02/26/24 13:18
Last Cal Update: 02/26/24 12:39
Last Cal Mod: 02/26/24 12:39

#	Internal Standard	Response
1)	Pentafluorobenzene	125,257
42)	1,4-Difluorobenzene	198,909
50)	Chlorobenzene-d5	181,626
74)	1,4-Dichlorobenzene-d4	98,855

#	Surrogate	% Rec	P/F	Water Range
35)	Dibromofluoromethane	**106**	P	51-135
56)	Toluene-d8	**110**	P	62-130
76)	4-Bromofluorobenzene	**112**	P	51-135

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
1)	Pentafluorobenzene		10	-	-	6.25	0.01	-	100	125,257	168	-		-		-	
2)	Dichlorodifluoromethane		NR	ND	<0.28	(1.38)	-	-	0		85	87	0.00 | 34.5	-		-	
3)	Chloromethane		NR	ND	<0.37	(1.54)	-	-	0		50	52	0.00 | 31.3	-		-	
4)	Vinyl chloride		NR	ND	<0.35	(1.66)	-	-	0		62	64	0.00 | 30.5	-		-	
5)	Bromomethane		NR	ND	<0.18	(1.97)	-	-	0		94	96	0.00 | 88.5	-		-	
6)	Chloroethane		NR	ND	<0.39	(2.06)	-	-	0		64	66	0.00 | 34.3	-		-	
7)	Trichlorofluoromethane		NR	ND	<0.39	(2.35)	-	-	0		101	103	0.00 | 61.6	66	0.00 | 12.7	-	
8)	Diethyl ether		NR	ND	<0.40	(2.65)	-	-	0		74	45	0.00 | 103	59	0.00 | 129	-	
9)	1,1-Dichloroethene		NR	ND	<0.43	(2.90)	-	-	0		96	61	0.00 | 139	63	0.00 | 47.0	-	
10)	Freon 113		No Cal.	-	-	(2.90)	-	-	0		101	151	0.00 | 82.4	103	0.00 | 64.1	153	0.00 | 53.1
11)	Acetone		0.011492	ND-	<0.90	3.03	0.06	P	**51**	592	58	43	177 | 266	-		-	
12)	Iodomethane		NR	ND	<0.37	(3.06)	-	-	0		142	127	0.00 | 40.6	141	0.00 | 12.9	-	
13)	Carbon disulfide		0.019737	ND	<0.34	3.12	0.00	**Inc**	75	340	76	78	**0.00 | 9.20**	-		-	
14)	Allyl chloride		NR	ND	<0.29	(3.33)	-	-	0		76	78	0.00 | 30.7	41	0.00 | 283	39	0.00 | 175
15)	Methylene chloride		-0.24975	ND-	<1.1	3.49	0.00	P	94	7,570	84	49	116 | 121	86	53.9 | 64.4	51	37.0 | 36.5
16)	t-Butanol (TBA)		No Cal.	-	-	(3.70)	-	-	0		59	57	0.00 | 8.40	-		-	
17)	Acrylonitrile		NR	ND	<0.43	(3.81)	-	-	0		52	53	0.00 | 120	51	0.00 | 41.7	-	
18)	Methyl t-butyl ether (MTBE)		NR	ND	<0.58	(3.85)	-	-	0		73	57	0.00 | 23.3	-		-	
19)	trans-1,2-Dichloroethene		NR	ND	<0.33	(3.83)	-	-	0		96	61	0.00 | 137	98	0.00 | 65.3	-	
20)	n-Hexane		No Cal.	-	-	(4.22)	-	-	0		57	43	0.00 | 64.9	41	0.00 | 72.0	56	0.00 | 47.3
21)	1,1-Dichloroethane		NR	ND	<0.37	(4.41)	-	-	0		63	65	0.00 | 33.7	83	0.00 | 15.0	-	
22)	Vinyl acetate		NR	ND	<0.68	(4.52)	-	-	0		86	43	0.00 | 949	-		-	
23)	2-chloro-1,3-butadiene		No Cal.	-	-	(4.54)	-	-	0		53	88	0.00 | 58.3	52	0.00 | 23.5	-	
24)	Diisopropyl ether (DIPE)		No Cal.	-	-	(4.57)	-	-	0		45	43	0.00 | 38.9	87	0.00 | 24.3	-	
25)	Ethyl t-butyl ether (ETBE)		No Cal.	-	-	(5.12)	-	-	0		59	57	0.00 | 31.8	87	0.00 | 34.1	-	
26)	2-Butanone (MEK)		NR	ND	<0.44	(5.35)	-	-	0		72	43	0.00 | 353	57	0.00 | 29.9	-	
27)	cis-1,2-Dichloroethene		NR	ND	<0.29	(5.29)	-	-	0		96	61	0.00 | 132	98	0.00 | 56.2	-	
28)	2,2-Dichloropropane		NR	ND	<0.35	(5.28)	-	-	0		77	97	0.00 | 22.0	79	0.00 | 30.5	-	
29)	Propionitrile		NR	ND	<1.0	(5.46)	-	-	0		54	52	0.00 | 11.3	55	0.00 | 15.7	-	
30)	Methyl acrylate		NR	ND	<0.38	(5.51)	-	-	0		55	85	0.00 | 17.1	-		-	
31)	Methacrylonitrile		NR	ND	<0.43	(5.67)	-	-	0		67	41	0.00 | 147	39	0.00 | 83.1	52	0.00 | 37.0
32)	Bromochloromethane		NR	ND	<0.36	(5.66)	-	-	0		128	49	0.00 | 167	130	0.00 | 134	-	
33)	Chloroform		NR	ND	<0.34	(5.83)	-	-	0		83	85	0.00 | 66.3	-		-	
34)	Tetrahydrofuran		NR	ND	<0.93	(5.74)	-	-	0		72	71	0.00 | 96.8	42	0.00 | 241	-	
35)	Dibromofluoromethane (S)		10.616	Sur	-	6.10	0.00	P	98	54,357	113	111	99.7 | 102	192	22.3 | 22.1	81	15.2 | 14.3
36)	1,1,1-Trichloroethane		NR	ND	<0.34	(6.10)	-	-	0		97	99	0.00 | 60.3	61	0.00 | 38.9	63	0.00 | 14.3
37)	1-Chlorobutane	x	No Cal.	-	-	(6.30)	-	-	90		56	49	0.00 | 3.40	-		-	
38)	1,1-Dichloropropene		NR	ND	<0.29	(6.39)	-	-	0		75	39	0.00 | 55.5	110	0.00 | 36.4	77	0.00 | 31.4
39)	Carbon tetrachloride		NR	ND	<0.44	(6.38)	-	-	0		117	119	0.00 | 100	-		-	
40)	Benzene		NR	ND	<0.21	(6.75)	-	-	0		78	51	0.00 | 15.3	-		-	
41)	1,2-Dichloroethane		NR	ND	<0.38	(6.81)	-	-	0		62	98	0.00 | 12.3	-		-	
42)	1,4-Difluorobenzene		10	-	-	7.56	0.00	-	100	198,909	114	-		-		-	
43)	t- Amyl methyl ether (TAME)		No Cal.	-	-	(7.05)	-	-	0		73	55	0.00 | 37.9	87	0.00 | 22.4	-	
44)	Trichloroethene		NR	ND	<0.33	(8.03)	-	-	0		95	132	0.00 | 115	130	0.00 | 113	97	0.00 | 64.2
45)	1,2-Dichloropropane		NR	ND	<0.34	(8.46)	-	-	0		63	112	0.00 | 5.70	76	0.00 | 47.7	-	

For analyst review assistance only.

8260 Quantitation Review Report

C:\msdchem\1\data\2024\02-FEB\022324\GCMS8-022324004.D

CB / BFB 02/23/24 004

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
46)	Methyl methacrylate		NR	ND	<0.36	(8.77)	-	-	0		69	41	0.00 | 133	100	0.00 | 40.0	39	0.00 | 64.9
47)	Dibromomethane		NR	ND	<0.37	(8.65)	-	-	0		93	174	0.00 | 107	95	0.00 | 82.1	-	
48)	Bromodichloromethane		NR	ND	<0.33	(8.94)	-	-	0		83	85	0.00 | 64.1	127	0.00 | 8.90	-	
49)	2-nitro-propane		NR	ND	<0.27	(9.26)	-	-	0		43	39	0.00 | 28.5	-		-	
50)	Chlorobenzene-d5		10	-	-	11.04	0.01	P	94	181,626	117	82	49.3 | 54.8	119	29.5 | 31.9	54	19.0 | 22.3
51)	Chloromethyl cyanide		No Cal.	-	-	(9.38)	-	-	0		75	48	0.00 | 39.0	40	0.00 | 44.5	-	
52)	2-Chloroethyl vinyl ether		NR	ND	<0.25	(9.38)	-	-	0		63	65	0.00 | 30.2	106	0.00 | 31.4	-	
53)	cis-1,3-Dichloropropene		NR	ND	<0.26	(9.51)	-	-	0		75	77	0.00 | 33.4	39	0.00 | 47.1	110	0.00 | 21.7
54)	4-Methyl-2-pentanone	x	NR	ND	<0.31	(9.71)	-	-	**1**		58	41	0.00 | 52.2	100	0.00 | 44.0	85	0.00 | 42.0
55)	1,1-Dichloro-2-propanone		No Cal.	-	-	(9.71)	-	-	0		83	63	0.00 | 56.4	91	0.00 | 22.8	-	
56)	Toluene-d8 (S)		11.038	Sur	-	9.79	0.01	P	98	196,425	98	100	70.2 | 71.5	42	11.3 | 12.7	70	10.9 | 11.3
57)	Toluene		NR	ND	<0.37	(9.85)	-	-	0		92	91	0.00 | 168	65	0.00 | 18.5	39	0.00 | 16.3
58)	trans-1,3-Dichloropropene		NR	ND	<0.30	(10.10)	-	-	0		75	77	0.00 | 30.2	39.1	0.00 | 43.2	110	0.00 | 24.5
59)	Ethyl methacrylate		NR	ND	<0.32	(10.22)	-	-	0		69	41	0.00 | 69.2	99	0.00 | 18.5	86	0.00 | 16.1
60)	1,1,2-Trichloroethane		NR	ND	<0.33	(10.26)	-	-	0		83	97	0.00 | 125	61	0.00 | 70.3	85	0.00 | 59.8
61)	1,3-Dichloropropane		NR	ND	<0.26	(10.40)	-	-	0		76	41	0.00 | 61.7	78	0.00 | 32.5	39	0.00 | 22.8
62)	2-Hexanone		NR	ND	<0.31	(10.50)	-	-	0		43	58	0.00 | 59.4	57	0.00 | 21.2	100	0.00 | 16.0
63)	Tetrachloroethene		NR	ND	<0.31	(10.36)	-	-	0		164	166	0.00 | 127	129	0.00 | 88.5	131	0.00 | 84.5
64)	Dibromochloromethane		NR	ND	<0.27	(10.59)	-	-	0		129	127	0.00 | 79.2	-		-	
65)	1,2-Dibromoethane		NR	ND	<0.32	(10.66)	-	-	0		107	109	0.00 | 89.0	188	0.00 | 2.80	-	
66)	Chlorobenzene		NR	ND	<0.23	(11.06)	-	-	0		112	77	0.00 | 61.4	114	0.00 | 33.1	-	
67)	1,1,1,2-Tetrachloroethane		NR	ND	<0.23	(11.13)	-	-	0		131	133	0.00 | 94.0	117	0.00 | 64.0	119	0.00 | 63.7
68)	Ethylbenzene	x	NR	ND	<0.25	(11.15)	-	-	**49**		91	106	0.00 | 32.6	51	0.00 | 7.80	-	
69)	m- & p-Xylenes		NR	ND	<0.39	(11.24)	-	-	0		106	91	0.00 | 188	105	0.00 | 41.4	77	0.00 | 24.3
70)	o-Xylene		NR	ND	<0.21	(11.51)	-	-	0		106	91	0.00 | 206	105	0.00 | 48.7	-	
71)	Styrene		NR	ND	<0.18	(11.52)	-	-	0		104	103	0.00 | 46.8	78	0.00 | 41.6	51	0.00 | 22.7
72)	Bromoform		NR	ND	<0.32	(11.65)	-	-	0		173	175	0.00 | 46.3	254	0.00 | 12.5	-	
73)	Isopropylbenzene		NR	ND	<0.21	(11.76)	-	-	0		105	120	0.00 | 27.0	77	0.00 | 14.5	79	0.00 | 11.8
74)	1,4-Dichlorobenzene-d4		10	-	-	12.57	0.00	P	99	98,855	152	115	55.4 | 55.2	150	158 | 157	-	
75)	cis-1,4-dichloro-2-butene		No Cal.	-	-	(11.81)	-	-	0		75	53	0.00 | 106	89	0.00 | 47.5	-	
76)	4-Bromofluorobenzene (S)		11.213	Sur	-	11.86	0.01	P	84	76,608	95	174	89.9 | 75.6	176	91.9 | 73.8	75	44.3 | 47.6
77)	1,1,2,2-Tetrachloroethane		NR	ND	<0.35	(11.96)	-	-	0		83	85	0.00 | 70.8	131	0.00 | 11.0	95	0.00 | 18.7
78)	trans-1,4-Dichloro-2-butene		NR	ND	<0.22	(11.99)	-	-	0		53	88	0.00 | 55.9	124	0.00 | 23.1	-	
79)	1,2,3-Trichloropropane		NR	ND	<0.37	(11.98)	-	-	0		110	75	0.00 | 269	39	0.00 | 79.2	-	
80)	Bromobenzene		NR	ND	<0.35	(11.96)	-	-	0		156	158	0.00 | 94.7	-		-	
81)	n-Propylbenzene		).002883(	ND	<0.29	12.02	-0.01	**Inc**	**61**	85	91	120	**0.00 | 23.6**	92	**0.00 | 11.4**	65	**0.00 | 9.90**
82)	2-Chlorotoluene		NR	ND	<0.30	(12.08)	-	-	0		126	91	0.00 | 289	63	0.00 | 36.0	-	
83)	4-Ethyltoluene	x	No Cal.	-	-	(12.09)	-	-	52		105	120	0.00 | 29.9	77	0.00 | 10.6	-	
84)	1,3,5-Trimethylbenzene		NR	ND	<0.26	(12.13)	-	-	0		105	120	0.00 | 50.6	119	0.00 | 11.0	77	0.00 | 12.6
85)	4-Chlorotoluene		).006207	ND	<0.26	12.14	0.00	**F**	**48**	128	91	126	**0.00 | 34.5**	63	**0.00 | 11.3**	-	
86)	tert-Butylbenzene		NR	ND	<0.26	(12.33)	-	-	0		134	119	0.00 | 340	91	0.00 | 215	-	
87)	1,2,4-Trimethylbenzene		).007277(	ND	<0.22	12.35	0.00	**F**	**27**	152	105	120	**0.00 | 50.1**	-		-	
88)	Pentachloroethane		NR	ND	<1.7	(12.35)	-	-	0		167	165	0.00 | 86.1	132	0.00 | 42.9	-	
89)	sec-Butylbenzene		).003330	ND	<0.21	12.46	0.00	**Inc**	**56**	86	105	134	**0.00 | 20.4**	-		-	
90)	4-Isopropyltoluene		).007322	ND	<0.20	12.54	-0.01	**Inc**	**49**	165	119	134	**0.00 | 28.5**	91	**0.00 | 22.4**	-	
91)	1,3-Dichlorobenzene		).009759(	ND	<0.27	12.53	0.00	**F**	**26**	126	146	148	**0.00 | 63.8**	111	**0.00 | 35.3**	-	
92)	1,4-Dichlorobenzene		0.030460	ND	<0.34	12.58	0.00	**F**	**30**	401	146	111	**145 | 37.8**	148	58.6 | 61.5	-	
93)	n-Butylbenzene		0.023989	ND	<0.24	12.78	0.01	**F**	**40**	271	92	91	**99.6 | 179**	134	**0.00 | 50.5**	-	
94)	1,2-Dichlorobenzene		).007591	ND	<0.30	12.80	0.00	**F**	**24**	93	146	148	**0.00 | 64.6**	111	**0.00 | 40.4**	-	
95)	Hexachloroethane		No Cal.	-	-	(12.95)	-	-	0		201	117	0.00 | 129	199	0.00 | 65.0	203	0.00 | 64.5
96)	1,2-Dibromo-3-chloropropane		NR	ND	<0.30	(13.24)	-	-	0		75	155	0.00 | 104	157	0.00 | 123	-	
97)	Nitrobenzene		No Cal.	-	-	(13.35)	-	-	0		123	51	0.00 | 62.1	77	0.00 | 146	-	
98)	1,2,4-Trichlorobenzene		0.058294	ND	<0.34	13.70	0.01	**F**	**18**	485	180	182	**0.00 | 97.2**	184	**0.00 | 29.6**	145	**0.00 | 30.6**
99)	Hexachlorobutadiene		NR	ND	<0.20	(13.78)	-	-	0		225	227	0.00 | 59.6	260	0.00 | 22.3	223	0.00 | 59.4
100	Naphthalene		0.028188	ND	<0.31	13.84	0.01	**Inc**	**69**	678	128	127	**0.00 | 12.5**	129	**0.00 | 11.6**	-	
101	1,2,3-Trichlorobenzene		0.02595	ND	<0.35	13.97	0.00	**Inc**	74	210	180	182	84.6 | 91.8	184	**0.00 | 29.8**	145	**0.00 | 29.8**

Uses lowest known RLs; project RLs may be higher. Qualitative P/F based only on output ratios at apex and may not reflect full peak or analyst review.

For analyst review assistance only.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324004.D
Acq On : 23 Feb 2024 13:20
Operator :
Sample : CBTP0223241 + BFB - Updated Tune
Misc : PAV 1150, 1149
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 26 12:49:14 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	6.251	168	125257	10.00	ppb		0.01
42) 1,4-Difluorobenzene	7.563	114	198909	10.00	ppb		0.00
50) Chlorobenzene-d5	11.041	117	181626	10.00	ppb		0.00
74) 1,4-Dichlorobenzene-d4	12.569	152	98855	10.00	ppb		0.00
System Monitoring Compounds							
35) Dibromofluoromethane (S)	6.099	113	54357	10.62	ppb		0.00
Spiked Amount 10.000			Recovery = 106.20%				
56) Toluene-d8 (S)	9.791	98	196425	11.04	ppb		0.00
Spiked Amount 10.000			Recovery = 110.40%				
76) 4-Bromofluorobenzene (S)	11.860	95	76608	11.21	ppb		0.00
Spiked Amount 10.000			Recovery = 112.10%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.			
3) Chloromethane	0.000		0	N.D.			
4) Vinyl chloride	0.000		0	N.D.			
5) Bromomethane	0.000		0	N.D.			
6) Chloroethane	0.000		0	N.D.			
7) Trichlorofluoromethane	0.000		0	N.D.			
8) Diethyl ether	0.000		0	N.D.			
9) 1,1-Dichloroethene	0.000		0	N.D.			
10) Freon 113	0.000		0	N.D.			
11) Acetone	3.028	58	592	-0.0115	ppb	#	51
12) Iodomethane	0.000		0	N.D.			
13) Carbon disulfide	3.119	76	340	0.0197	ppb		75
14) Allyl chloride	0.000		0	N.D.			
15) Methylene chloride	3.485	84	7570	-0.2497	ppb		94
16) t-Butanol (TBA)	0.000		0	N.D.			
17) Acrylonitrile	0.000		0	N.D.			
18) Methyl t-butyl ether (...	0.000		0	N.D.			
19) trans-1,2-Dichloroethene	0.000		0	N.D.			
20) n-Hexane	0.000		0	N.D.			
21) 1,1-Dichloroethane	0.000		0	N.D.			
22) Vinyl acetate	0.000		0	N.D.			
23) 2-chloro-1,3-butadiene	0.000		0	N.D.			
24) Diisopropyl ether (DIPE)	0.000		0	N.D.			
25) Ethyl t-butyl ether (E...	0.000		0	N.D.			
26) 2-Butanone (MEK)	0.000		0	N.D.			
27) cis-1,2-Dichloroethene	0.000		0	N.D.			
28) 2,2-Dichloropropane	0.000		0	N.D.			
29) Propionitrile	0.000		0	N.D.			
30) Methyl acrylate	0.000		0	N.D.			
31) Methacrylonitrile	0.000		0	N.D.			
32) Bromochloromethane	0.000		0	N.D.			
33) Chloroform	0.000		0	N.D.			
34) Tetrahydrofuran	0.000		0	N.D.			
36) 1,1,1-Trichloroethane	0.000		0	N.D.			
37) 1-Chlorobutane	0.000		0	N.D.	d		
38) 1,1-Dichloropropene	0.000		0	N.D.			
39) Carbon tetrachloride	0.000		0	N.D.			
40) Benzene	0.000		0	N.D.			
41) 1,2-Dichloroethane	0.000		0	N.D.			
43) t- Amyl methyl ether (...	0.000		0	N.D.			
44) Trichloroethene	0.000		0	N.D.			
45) 1,2-Dichloropropane	0.000		0	N.D.			
46) Methyl methacrylate	0.000		0	N.D.			

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324004.D
Acq On : 23 Feb 2024 13:20
Operator :
Sample : CBTP0223241 + BFB - Updated Tune
Misc : PAV 1150, 1149
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 26 12:49:14 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

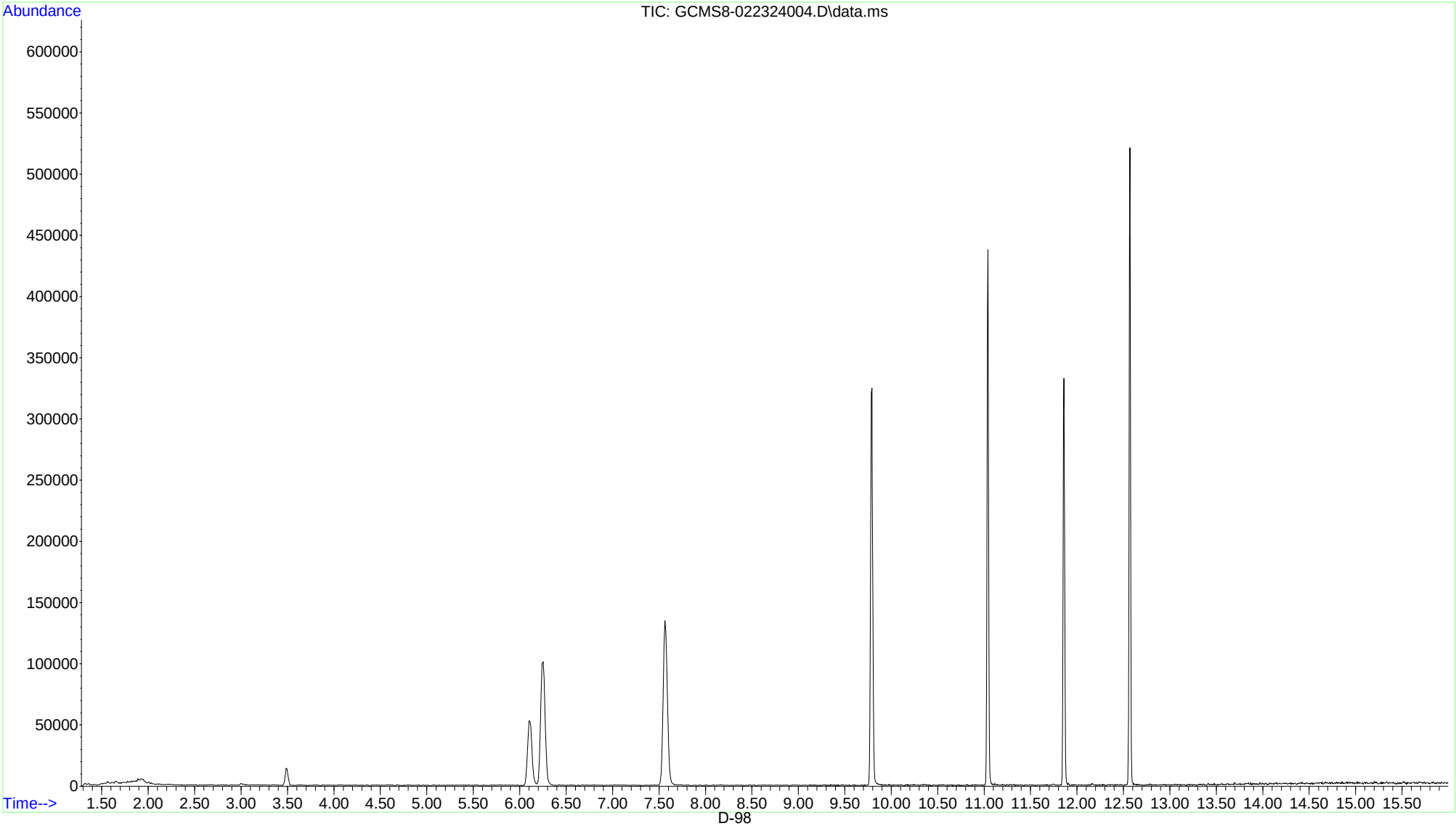
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
47) Dibromomethane	0.000		0	N.D.			
48) Bromodichloromethane	0.000		0	N.D.			
49) 2-nitro-propane	0.000		0	N.D.			
51) Chloromethyl cyanide	0.000		0	N.D.			
52) 2-Chloroethyl vinyl ether	0.000		0	N.D.			
53) cis-1,3-Dichloropropene	0.000		0	N.D.			
54) 4-Methyl-2-pentanone	0.000		0	N.D. d			
55) 1,1-Dichloro-2-propanone	0.000		0	N.D.			
57) Toluene	0.000		0	N.D.			
58) trans-1,3-Dichloropropene	0.000		0	N.D.			
59) Ethyl methacrylate	0.000		0	N.D.			
60) 1,1,2-Trichloroethane	0.000		0	N.D.			
61) 1,3-Dichloropropane	0.000		0	N.D.			
62) 2-Hexanone	0.000		0	N.D.			
63) Tetrachloroethene	0.000		0	N.D.			
64) Dibromochloromethane	0.000		0	N.D.			
65) 1,2-Dibromoethane	0.000		0	N.D.			
66) Chlorobenzene	0.000		0	N.D.			
67) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.			
68) Ethylbenzene	0.000		0	N.D. d			
69) m- & p-Xylenes	0.000		0	N.D.			
70) o-Xylene	0.000		0	N.D.			
71) Styrene	0.000		0	N.D.			
72) Bromoform	0.000		0	N.D.			
73) Isopropylbenzene	0.000		0	N.D.			
75) cis-1,4-dichloro-2-butene	0.000		0	N.D.			
77) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.			
78) trans-1,4-Dichloro-2-b...	0.000		0	N.D.			
79) 1,2,3-Trichloropropane	0.000		0	N.D.			
80) Bromobenzene	0.000		0	N.D.			
81) n-Propylbenzene	12.018	91	85	0.0029	ppb		61
82) 2-Chlorotoluene	0.000		0	N.D.			
83) 4-Ethyltoluene	0.000		0	N.D. d			
84) 1,3,5-Trimethylbenzene	0.000		0	N.D.			
85) 4-Chlorotoluene	12.144	91	128	0.0062	ppb	#	48
86) tert-Butylbenzene	0.000		0	N.D.			
87) 1,2,4-Trimethylbenzene	12.354	105	152	0.0073	ppb	#	27
88) Pentachloroethane	0.000		0	N.D.			
89) sec-Butylbenzene	12.459	105	86	0.0033	ppb		56
90) 4-Isopropyltoluene	12.538	119	165	0.0073	ppb		49
91) 1,3-Dichlorobenzene	12.533	146	126	0.0098	ppb	#	26
92) 1,4-Dichlorobenzene	12.580	146	401	0.0305	ppb	#	30
93) n-Butylbenzene	12.785	92	271	0.0240	ppb	#	40
94) 1,2-Dichlorobenzene	12.800	146	93	0.0076	ppb	#	24
95) Hexachloroethane	0.000		0	N.D.			
96) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.			
97) Nitrobenzene	0.000		0	N.D.			
98) 1,2,4-Trichlorobenzene	13.704	180	485	0.0583	ppb	#	18
99) Hexachlorobutadiene	0.000		0	N.D.			
100) Naphthalene	13.840	128	678	0.0282	ppb		69
101) 1,2,3-Trichlorobenzene	13.972	180	210	0.0259	ppb		74

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324004.D
Acq On : 23 Feb 2024 13:20
Operator :
Sample : CBTP0223241 + BFB - Updated Tune
Misc : PAV 1150, 1149
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 26 12:49:14 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration



D-98

8260 Quantitation Review Report

C:\msdchem\1\data\2024\02-FEB\022324\GCMS8-022324005.D **CP** 02/23/24 005

Sample Name: CPTP02232402 - 0.25ppb
Data File Name: GCMS8-022324005.D
Date Acquired: 02/23/24 13:59
Vial Number: 4
Sample Multiplier: 1
Misc Info: PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,

Operator:
Data File Path: C:\msdchem\1\data\2024\02-FEB\02232
Instrument Method: VOC092623 INSTRUMENT SCAN.M
Quant. Method: VOC022324Final
Last Result Mod: 02/26/24 12:49
Last Cal Update: 02/26/24 12:39
Last Cal Mod: 02/26/24 12:39

#	Internal Standard	Response
1)	Pentafluorobenzene	126,016
42)	1,4-Difluorobenzene	200,613
50)	Chlorobenzene-d5	176,339
74)	1,4-Dichlorobenzene-d4	98,445

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
1)	Pentafluorobenzene		10	-	-	6.25	0.01	-	100	126,016	168	-		-		-	
2)	Dichlorodifluoromethane		0.099415	ND	<0.28	1.39	0.01	**F**	**40**	662	85	87	**0.00 | 34.5**	-		-	
3)	Chloromethane		0.24925	ND	<0.37	1.54	0.00	**F**	**43**	2,179	50	52	**0.00 | 31.3**	-		-	
4)	Vinyl chloride		0.2446	ND	<0.35	1.65	0.00	P	96	1,894	62	64	28.1 | 30.5	-		-	
5)	**Bromomethane**		**0.25589**	QL	**0.26**	1.97	0.00	P	91	1,273	94	96	80.0 | 88.5	-		-	
6)	Chloroethane		0.25878	QL-	<0.39	2.07	0.01	**F**	**40**	1,287	64	66	**0.00 | 34.3**	-		-	
7)	Trichlorofluoromethane		0.25401	QL-	<0.39	2.34	-0.01	**Inc**	78	2,192	101	103	46.8 | 61.6	66	**0.00 | 12.7**	-	
8)	Diethyl ether		0.16773	ND	<0.40	2.66	0.01	**F**	**47**	645	74	45	**0.00 | 103**	59	112 | 129	-	
9)	1,1-Dichloroethene		0.16705	ND	<0.43	2.91	0.01	**F**	73	892	96	61	124 | 139	63	**0.00 | 47.0**	-	
10)	Freon 113		No Cal.	-	-	(2.90)	-	-	0		101	151	0.00 | 82.4	103	0.00 | 64.1	153	0.00 | 53.1
11)	Acetone		-0.37429	ND-	<0.90	3.01	0.04	P	94	353	58	43	277 | 266	-		-	
12)	Iodomethane		0.20773	ND	<0.37	3.07	0.01	**Inc**	88	2,104	142	127	43.9 | 40.6	141	**0.00 | 12.9**	-	
13)	Carbon disulfide		0.25262	QL-	<0.34	3.12	0.00	**Inc**	75	4,378	76	78	**0.00 | 9.20**	-		-	
14)	Allyl chloride		0.11963	ND	<0.29	3.33	0.00	**F**	79	421	76	78	**0.00 | 30.7**	41	228 | 283	39	171 | 175
15)	Methylene chloride		0.24445	ND	<1.1	3.50	0.01	P	91	10,908	84	49	110 | 121	86	69.7 | 64.4	51	40.9 | 36.5
16)	t-Butanol (TBA)		No Cal.	-	-	(3.70)	-	-	0		59	57	0.00 | 8.40	-		-	
17)	Acrylonitrile		NR	ND	<0.43	(3.81)	-	-	0		52	53	0.00 | 120	51	0.00 | 41.7	-	
18)	Methyl t-butyl ether (MTBE)		0.18721	ND	<0.58	3.86	0.01	**Inc**	**52**	3,408	73	57	**0.00 | 23.3**	-		-	
19)	trans-1,2-Dichloroethene		0.21581	ND	<0.33	3.84	0.01	P	79	1,333	96	61	114 | 137	98	46.0 | 65.3	-	
20)	n-Hexane		No Cal.	-	-	(4.22)	-	-	0		57	43	0.00 | 64.9	41	0.00 | 72.0	56	0.00 | 47.3
21)	1,1-Dichloroethane		0.19433	ND	<0.37	4.42	0.01	**Inc**	77	2,158	63	65	43.8 | 33.7	83	**0.00 | 15.0**	-	
22)	Vinyl acetate		NR	ND	<0.68	(4.52)	-	-	0		86	43	0.00 | 949	-		-	
23)	2-chloro-1,3-butadiene		No Cal.	-	-	(4.54)	-	-	0		53	88	0.00 | 58.3	52	0.00 | 23.5	-	
24)	Diisopropyl ether (DIPE)		No Cal.	-	-	(4.57)	-	-	0		45	43	0.00 | 38.9	87	0.00 | 24.3	-	
25)	Ethyl t-butyl ether (ETBE)		No Cal.	-	-	(5.12)	-	-	0		59	57	0.00 | 31.8	87	0.00 | 34.1	-	
26)	2-Butanone (MEK)		NR	ND	<0.44	(5.35)	-	-	0		72	43	0.00 | 353	57	0.00 | 29.9	-	
27)	cis-1,2-Dichloroethene		0.23503	ND	<0.29	5.29	0.00	**F**	**66**	1,612	96	61	**81.0 | 132**	98	46.9 | 56.2	-	
28)	2,2-Dichloropropane		0.23004	ND	<0.35	5.29	0.01	**F**	**48**	2,022	77	97	**0.00 | 22.0**	79	**0.00 | 30.5**	-	
29)	Propionitrile		NR	ND	<1.0	(5.46)	-	-	0		54	52	0.00 | 11.3	55	0.00 | 15.7	-	
30)	Methyl acrylate		0.26704	ND	<0.38	5.57	0.06	**Inc**	**61**	207	55	85	**0.00 | 17.1**	-		-	
31)	Methacrylonitrile		NR	ND	<0.43	(5.67)	-	-	0		67	41	0.00 | 147	39	0.00 | 83.1	52	0.00 | 37.0
32)	Bromochloromethane		0.13052	ND	<0.36	5.67	0.01	**F**	**54**	442	128	49	116 | 167	130	**66.3 | 134**	-	
33)	Chloroform		0.22188	ND	<0.34	5.82	-0.01	P	87	2,390	83	85	55.8 | 66.3	-		-	
34)	Tetrahydrofuran		NR	ND	<0.93	(5.74)	-	-	0		72	71	0.00 | 96.8	42	0.00 | 241	-	
35)	Dibromofluoromethane (S)		0.14715	ND	<	6.11	0.01	**F**	**54**	758	113	111	**150 | 102**	192	**0.00 | 22.1**	81	**0.00 | 14.3**
36)	1,1,1-Trichloroethane		0.21262	ND	<0.34	6.10	0.00	**Inc**	72	1,971	97	99	43.9 | 60.3	61	60.5 | 38.9	63	**0.00 | 14.3**
37)	1-Chlorobutane		No Cal.	-	-	6.31	0.01	Inc	90	2,927	56	49	**0.00 | 3.40**	-		-	
38)	1,1-Dichloropropene		0.24985	ND	<0.29	6.39	0.00	**F**	**62**	1,822	75	39	47.6 | 55.5	110	**0.00 | 36.4**	77	**0.00 | 31.4**
39)	Carbon tetrachloride		0.17716	ND	<0.44	6.39	0.01	P	85	1,382	117	119	115 | 100	-		-	
40)	**Benzene**		**0.24309**	MDL	**0.24**	6.76	0.01	P	91	5,862	78	51	19.3 | 15.3	-		-	
41)	1,2-Dichloroethane		0.20252	ND	<0.38	6.80	-0.01	**Inc**	**69**	1,506	62	98	**0.00 | 12.3**	-		-	
42)	1,4-Difluorobenzene		10	-	-	7.57	0.01	-	100	200,613	114	-		-		-	
43)	t- Amyl methyl ether (TAME)		No Cal.	-	-	(7.05)	-	-	0		73	55	0.00 | 37.9	87	0.00 | 22.4	-	
44)	Trichloroethene		0.18369	ND	<0.33	8.04	0.01	**F**	**60**	1,039	95	132	104 | 115	130	**62.1 | 113**	97	**0.00 | 64.2**
45)	1,2-Dichloropropane		0.17052	ND	<0.34	8.46	0.00	**F**	**35**	970	63	112	**0.00 | 5.70**	76	**0.00 | 47.7**	-	

For analyst review assistance only.

8260 Quantitation Review Report

C:\msdchem\1\data\2024\02-FEB\022324\GCMS8-022324005.D **CP** 02/23/24 005

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
46)	**Methyl methacrylate**		**0.50723**	MDL	**0.51**	8.80	0.03	**F**	**4**	791	69	41	**0.00 | 133**	100	**0.00 | 40.0**	39	**0.00 | 64.9**
47)	Dibromomethane		0.22799	ND	<0.37	8.66	0.01	**F**	**25**	825	93	174	**43.3 | 107**	95	**0.00 | 82.1**	-	
48)	Bromodichloromethane		0.22303	ND	<0.33	8.95	0.01	**Inc**	94	1,633	83	85	66.9 | 64.1	127	**0.00 | 8.90**	-	
49)	2-nitro-propane		0.052821	ND	<0.27	9.27	0.01	**Inc**	**46**	91	43	39	**0.00 | 28.5**	-		-	
50)	Chlorobenzene-d5		10	-	-	11.04	0.01	P	97	176,339	117	82	56.2 | 54.8	119	31.6 | 31.9	54	18.8 | 22.3
51)	Chloromethyl cyanide		No Cal.	-	-	(9.38)	-	-	0		75	48	0.00 | 39.0	40	0.00 | 44.5	-	
52)	2-Chloroethyl vinyl ether		0.17967	ND	<0.25	9.41	0.03	**F**	**44**	685	63	65	**0.00 | 30.2**	106	**0.00 | 31.4**	-	
53)	cis-1,3-Dichloropropene		0.21277	ND	<0.26	9.51	0.00	**Inc**	88	1,829	75	77	32.2 | 33.4	39	45.2 | 47.1	110	**0.00 | 21.7**
54)	4-Methyl-2-pentanone		0.23757	ND	<0.31	9.72	0.00	**F**	**30**	165	58	41	**0.00 | 52.2**	100	**0.00 | 44.0**	85	**0.00 | 42.0**
55)	1,1-Dichloro-2-propanone		No Cal.	-	-	(9.71)	-	-	0		83	63	0.00 | 56.4	91	0.00 | 22.8	-	
56)	Toluene-d8 (S)		0.25246	Sur	-	9.79	0.01	**Inc**	**67**	4,362	98	100	41.9 | 71.5	42	20.9 | 12.7	70	**0.00 | 11.3**
57)	Toluene		0.23977	ND	<0.37	9.86	0.01	P	85	3,360	92	91	145 | 168	65	12.4 | 18.5	39	17.1 | 16.3
58)	trans-1,3-Dichloropropene		0.24307	ND	<0.30	10.11	0.01	**Inc**	**65**	1,895	75	77	18.5 | 30.2	39.1	19.6 | 43.2	110	**0.00 | 24.5**
59)	Ethyl methacrylate		0.16533	ND	<0.32	10.23	0.01	**Inc**	**68**	1,183	69	41	46.5 | 69.2	99	**0.00 | 18.5**	86	**0.00 | 16.1**
60)	1,1,2-Trichloroethane		0.1553	ND	<0.33	10.27	0.01	**F**	**63**	650	83	97	144 | 125	61	**101 | 70.3**	85	**0.00 | 59.8**
61)	1,3-Dichloropropane		0.23797	ND	<0.26	10.41	0.00	P	87	2,182	76	41	53.8 | 61.7	78	20.0 | 32.5	39	19.3 | 22.8
62)	**2-Hexanone**		**0.32321**	MDL	**0.32**	10.52	0.02	**F**	**35**	148	43	58	**0.00 | 59.4**	57	**0.00 | 21.2**	100	**0.00 | 16.0**
63)	Tetrachloroethene		0.2626	QL-	<0.31	10.37	0.01	**F**	77	1,254	164	166	**86.3 | 127**	129	109 | 88.5	131	78.0 | 84.5
64)	Dibromochloromethane		0.19421	ND	<0.27	10.59	0.00	P	73	1,066	129	127	55.7 | 79.2	-		-	
65)	1,2-Dibromoethane		0.19540	ND	<0.32	10.67	0.01	**Inc**	71	1,008	107	109	61.6 | 89.0	188	**0.00 | 2.80**	-	
66)	**Chlorobenzene**		**0.24482**	MDL	**0.24**	11.06	0.00	P	86	3,648	112	77	73.0 | 61.4	114	26.0 | 33.1	-	
67)	**1,1,1,2-Tetrachloroethane**		**0.23324**	MDL	**0.23**	11.13	0.00	P	83	1,286	131	133	72.8 | 94.0	117	44.0 | 64.0	119	64.4 | 63.7
68)	Ethylbenzene		0.23942	ND	<0.25	11.15	0.00	P	81	6,132	91	106	20.0 | 32.6	51	10.2 | 7.80	-	
69)	**m- & p-Xylenes**		**0.46376**	MDL	**0.46**	11.24	0.00	P	98	4,633	106	91	186 | 188	105	41.9 | 41.4	77	20.3 | 24.3
70)	**o-Xylene**		**0.25385**	QL	**0.25**	11.52	0.01	P	**67**	2,592	106	91	150 | 206	105	34.9 | 48.7	-	
71)	**Styrene**		**0.21023**	MDL	**0.21**	11.52	0.00	P	87	3,252	104	103	59.8 | 46.8	78	41.2 | 41.6	51	34.0 | 22.7
72)	Bromoform		0.30436	ND	<0.32	11.65	0.00	**Inc**	**65**	390	173	175	69.9 | 46.3	254	**0.00 | 12.5**	-	
73)	**Isopropylbenzene**		**0.23152**	MDL	**0.23**	11.76	0.00	P	91	5,746	105	120	19.2 | 27.0	77	13.4 | 14.5	79	11.2 | 11.8
74)	1,4-Dichlorobenzene-d4		10	-	-	12.57	0.00	P	98	98,445	152	115	54.3 | 55.2	150	160 | 157	-	
75)	cis-1,4-dichloro-2-butene		No Cal.	-	-	(11.81)	-	-	0		75	53	0.00 | 106	89	0.00 | 47.5	-	
76)	4-Bromofluorobenzene (S)		0.31232	ND	<	11.86	0.01	P	84	2,125	95	174	51.7 | 75.6	176	65.3 | 73.8	75	44.5 | 47.6
77)	1,1,2,2-Tetrachloroethane		0.24617	ND	<0.35	11.96	0.00	**Inc**	**67**	1,829	83	85	45.4 | 70.8	131	**0.00 | 11.0**	95	**0.00 | 18.7**
78)	**trans-1,4-Dichloro-2-butene**		**0.34521**	MDL	**0.35**	11.99	0.01	**F**	**32**	290	53	88	**0.00 | 55.9**	124	**0.00 | 23.1**	-	
79)	1,2,3-Trichloropropane		0.26927	QL-	<0.37	11.99	0.01	P	**66**	731	110	75	194 | 269	39	87.8 | 79.2	-	
80)	Bromobenzene		0.21547	ND	<0.35	11.96	0.01	P	73	1,404	156	158	68.7 | 94.7	-		-	
81)	n-Propylbenzene		0.21946	ND	<0.29	12.02	0.00	P	95	6,442	91	120	26.3 | 23.6	92	14.2 | 11.4	65	11.0 | 9.90
82)	2-Chlorotoluene		0.27226	QL-	<0.30	12.08	0.00	P	**65**	1,689	126	91	214 | 289	63	33.4 | 36.0	-	
83)	4-Ethyltoluene		No Cal.	-	-	12.13	0.04	P	77	4,174	105	120	42.8 | 29.9	77	18.2 | 10.6	-	
84)	1,3,5-Trimethylbenzene		0.20004	ND	<0.26	12.13	0.00	P	89	4,068	105	120	42.8 | 50.6	119	13.8 | 11.0	77	18.2 | 12.6
85)	4-Chlorotoluene		0.20092	ND	<0.26	12.15	0.01	P	77	4,126	91	126	50.6 | 34.5	63	13.7 | 11.3	-	
86)	tert-Butylbenzene		0.19375	ND	<0.26	12.34	0.01	P	82	1,048	134	119	300 | 340	91	187 | 215	-	
87)	1,2,4-Trimethylbenzene		0.20587	ND	<0.22	12.36	0.00	P	87	4,282	105	120	41.0 | 50.1	-		-	
88)	Pentachloroethane		0.18515	ND	<1.7	12.35	0.01	**F**	**15**	712	167	165	**0.00 | 86.1**	132	**0.00 | 42.9**	-	
89)	**sec-Butylbenzene**		**0.21372**	MDL	**0.21**	12.46	0.01	P	97	5,496	105	134	21.6 | 20.4	-		-	
90)	4-Isopropyltoluene		0.18463	ND	<0.20	12.54	0.00	P	81	4,143	119	134	42.2 | 28.5	91	27.8 | 22.4	-	
91)	1,3-Dichlorobenzene		0.25782	QL-	<0.27	12.53	0.00	P	86	3,315	146	148	49.5 | 63.8	111	39.2 | 35.3	-	
92)	1,4-Dichlorobenzene		0.25164	QL-	<0.34	12.58	0.00	P	80	3,299	146	111	51.0 | 37.8	148	75.6 | 61.5	-	
93)	n-Butylbenzene		0.18862	ND	<0.24	12.78	0.00	P	81	2,122	92	91	149 | 179	134	57.6 | 50.5	-	
94)	1,2-Dichlorobenzene		0.23182	ND	<0.30	12.81	0.01	P	89	2,828	146	148	69.7 | 64.6	111	51.2 | 40.4	-	
95)	Hexachloroethane		No Cal.	-	-	12.95	0.00	F	66	509	201	117	114 | 129	199	41.8 | 65.0	203	**0.00 | 64.5**
96)	1,2-Dibromo-3-chloropropane		NR	ND	<0.30	(13.24)	-	-	0		75	155	0.00 | 104	157	0.00 | 123	-	
97)	Nitrobenzene		No Cal.	-	-	(13.35)	-	-	0		123	51	0.00 | 62.1	77	0.00 | 146	-	
98)	1,2,4-Trichlorobenzene		0.27374	QL-	<0.34	13.69	0.00	P	80	2,268	180	182	67.7 | 97.2	184	26.9 | 29.6	145	31.1 | 30.6
99)	**Hexachlorobutadiene**		**0.24357**	MDL	**0.24**	13.78	0.00	**Inc**	**68**	702	225	227	44.0 | 59.6	260	**0.00 | 22.3**	223	31.2 | 59.4
100	Naphthalene		0.19459	ND	<0.31	13.84	0.00	P	91	4,661	128	127	18.0 | 12.5	129	10.1 | 11.6	-	
101	1,2,3-Trichlorobenzene		0.23775	ND	<0.35	13.97	0.00	**F**	77	1,916	180	182	**59.5 | 91.8**	184	33.5 | 29.8	145	32.0 | 29.8

Uses lowest known RLs; project RLs may be higher. Qualitative P/F based only on output ratios at apex and may not reflect full peak or analyst review.

For analyst review assistance only.

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324005.D
Acq On : 23 Feb 2024 13:59
Operator :
Sample : CPTP02232402 - 0.25ppb
Misc : PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 26 12:49:25 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	6.251	168	126016	10.00	ppb		0.01
42) 1,4-Difluorobenzene	7.573	114	200613	10.00	ppb		0.01
50) Chlorobenzene-d5	11.041	117	176339	10.00	ppb		0.00
74) 1,4-Dichlorobenzene-d4	12.570	152	98445	10.00	ppb		0.00
System Monitoring Compounds							
35) Dibromofluoromethane (S)	6.109	113	758	0.15	ppb		0.00
Spiked Amount 10.000			Recovery =	1.50%			
56) Toluene-d8 (S)	9.791	98	4362	0.25	ppb		0.00
Spiked Amount 10.000			Recovery =	2.50%			
76) 4-Bromofluorobenzene (S)	11.861	95	2125	0.31	ppb		0.00
Spiked Amount 10.000			Recovery =	3.10%			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.391	85	662	0.0994	ppb	#	40
3) Chloromethane	1.543	50	2179	0.2492	ppb	#	43
4) Vinyl chloride	1.655	62	1894	0.2446	ppb		96
5) Bromomethane	1.970	94	1273	0.2559	ppb		91
6) Chloroethane	2.072	64	1287	0.2588	ppb	#	40
7) Trichlorofluoromethane	2.336	101	2192	0.2540	ppb		78
8) Diethyl ether	2.662	74	645	0.1677	ppb	#	47
9) 1,1-Dichloroethene	2.906	96	892	0.1670	ppb	#	73
10) Freon 113	0.000		0	N.D.			
11) Acetone	3.007	58	353	-0.3743	ppb		94
12) Iodomethane	3.068	142	2104	0.2077	ppb		88
13) Carbon disulfide	3.119	76	4378	0.2526	ppb		75
14) Allyl chloride	3.333	76	421	0.1196	ppb	#	79
15) Methylene chloride	3.496	84	10908	0.2444	ppb		91
16) t-Butanol (TBA)	0.000		0	N.D.			
17) Acrylonitrile	0.000		0	N.D.			
18) Methyl t-butyl ether (...	3.862	73	3408	0.1872	ppb		52
19) trans-1,2-Dichloroethene	3.841	96	1333	0.2158	ppb		79
20) n-Hexane	0.000		0	N.D.			
21) 1,1-Dichloroethane	4.421	63	2158	0.1943	ppb		77
22) Vinyl acetate	0.000		0	N.D.			
23) 2-chloro-1,3-butadiene	0.000		0	N.D.			
24) Diisopropyl ether (DIPE)	0.000		0	N.D.			
25) Ethyl t-butyl ether (E...	0.000		0	N.D.			
26) 2-Butanone (MEK)	0.000		0	N.D.			
27) cis-1,2-Dichloroethene	5.285	96	1612	0.2350	ppb	#	66
28) 2,2-Dichloropropane	5.285	77	2022	0.2300	ppb	#	48
29) Propionitrile	0.000		0	N.D.			
30) Methyl acrylate	5.570	55	207	0.2670	ppb		61
31) Methacrylonitrile	0.000		0	N.D.			
32) Bromochloromethane	5.672	128	442	0.1305	ppb	#	54
33) Chloroform	5.824	83	2390	0.2219	ppb		87
34) Tetrahydrofuran	0.000		0	N.D.			
36) 1,1,1-Trichloroethane	6.099	97	1971	0.2126	ppb		72
37) 1-Chlorobutane	6.312	56	2927	No Calib			
38) 1,1-Dichloropropene	6.394	75	1822	0.2499	ppb	#	62
39) Carbon tetrachloride	6.394	117	1382	0.1772	ppb		85
40) Benzene	6.760	78	5862	0.2431	ppb		91
41) 1,2-Dichloroethane	6.800	62	1506	0.2025	ppb		69
43) t- Amyl methyl ether (...	0.000		0	N.D.			
44) Trichloroethene	8.041	95	1039	0.1837	ppb	#	60
45) 1,2-Dichloropropane	8.458	63	970	0.1705	ppb	#	35
46) Methyl methacrylate	8.804	69	791	0.5072	ppb	#	4

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324005.D
Acq On : 23 Feb 2024 13:59
Operator :
Sample : CPTP02232402 - 0.25ppb
Misc : PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 26 12:49:25 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

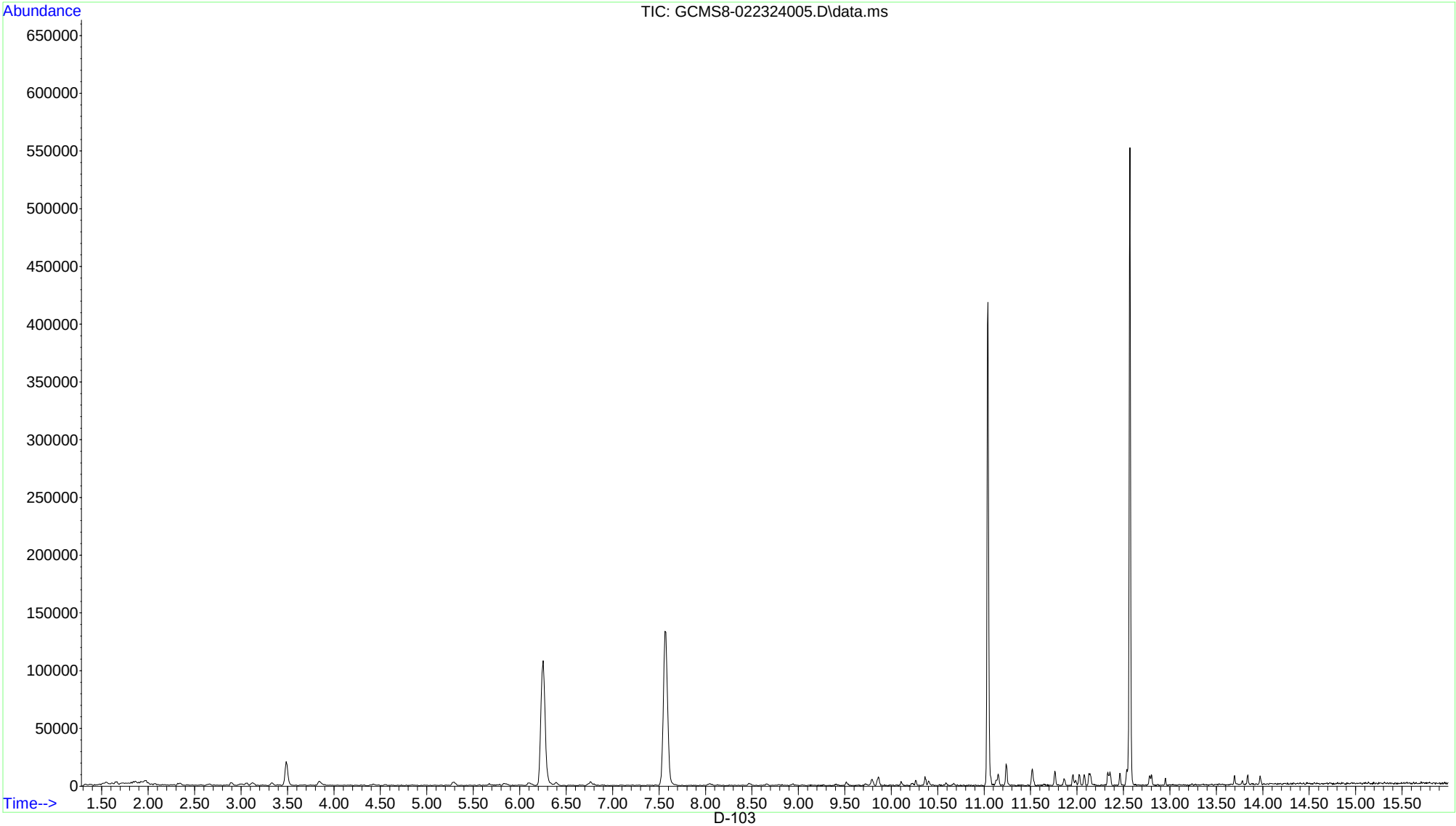
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
47) Dibromomethane	8.661	93	825	0.2280	ppb	#	25
48) Bromodichloromethane	8.946	83	1633	0.2230	ppb		94
49) 2-nitro-propane	9.272	43	91	0.0528	ppb		46
51) Chloromethyl cyanide	0.000		0	N.D.			
52) 2-Chloroethyl vinyl ether	9.408	63	685	0.1797	ppb	#	44
53) cis-1,3-Dichloropropene	9.513	75	1829	0.2128	ppb		88
54) 4-Methyl-2-pentanone	9.718	58	165	0.2376	ppb	#	30
55) 1,1-Dichloro-2-propanone	0.000		0	N.D.			
57) Toluene	9.860	92	3360	0.2398	ppb		85
58) trans-1,3-Dichloropropene	10.112	75	1895	0.2431	ppb		65
59) Ethyl methacrylate	10.227	69	1183	0.1653	ppb		68
60) 1,1,2-Trichloroethane	10.269	83	650	0.1553	ppb	#	63
61) 1,3-Dichloropropane	10.406	76	2182	0.2380	ppb		87
62) 2-Hexanone	10.521	43	148	0.3232	ppb	#	35
63) Tetrachloroethene	10.369	164	1254	0.2626	ppb	#	77
64) Dibromochloromethane	10.590	129	1066	0.1942	ppb		73
65) 1,2-Dibromoethane	10.669	107	1008	0.1954	ppb		71
66) Chlorobenzene	11.057	112	3648	0.2448	ppb		86
67) 1,1,1,2-Tetrachloroethane	11.125	131	1286	0.2332	ppb		83
68) Ethylbenzene	11.152	91	6132	0.2394	ppb		81
69) m- & p-Xylenes	11.241	106	4633	0.4638	ppb		98
70) o-Xylene	11.519	106	2592	0.2538	ppb	#	67
71) Styrene	11.525	104	3252	0.2102	ppb		87
72) Bromoform	11.645	173	390	0.3044	ppb		65
73) Isopropylbenzene	11.761	105	5746	0.2315	ppb		91
75) cis-1,4-dichloro-2-butene	0.000		0	N.D.			
77) 1,1,2,2-Tetrachloroethane	11.955	83	1829	0.2462	ppb		67
78) trans-1,4-Dichloro-2-b...	11.992	53	290	0.3452	ppb	#	32
79) 1,2,3-Trichloropropane	11.987	110	731	0.2693	ppb	#	66
80) Bromobenzene	11.960	156	1404	0.2155	ppb		73
81) n-Propylbenzene	12.023	91	6442	0.2195	ppb		95
82) 2-Chlorotoluene	12.076	126	1689	0.2723	ppb	#	65
83) 4-Ethyltoluene	12.128	105	4174	No Calib			
84) 1,3,5-Trimethylbenzene	12.128	105	4068	0.2000	ppb		89
85) 4-Chlorotoluene	12.149	91	4126	0.2009	ppb		77
86) tert-Butylbenzene	12.339	134	1048	0.1938	ppb	#	82
87) 1,2,4-Trimethylbenzene	12.360	105	4282	0.2059	ppb		87
88) Pentachloroethane	12.354	167	712	0.1851	ppb	#	15
89) sec-Butylbenzene	12.465	105	5496	0.2137	ppb		97
90) 4-Isopropyltoluene	12.543	119	4143	0.1846	ppb		81
91) 1,3-Dichlorobenzene	12.533	146	3315	0.2578	ppb		86
92) 1,4-Dichlorobenzene	12.580	146	3299	0.2516	ppb		80
93) n-Butylbenzene	12.780	92	2122	0.1886	ppb	#	81
94) 1,2-Dichlorobenzene	12.806	146	2828	0.2318	ppb		89
95) Hexachloroethane	12.953	201	509	No Calib	#		
96) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.			
97) Nitrobenzene	0.000		0	N.D.			
98) 1,2,4-Trichlorobenzene	13.693	180	2268	0.2737	ppb		80
99) Hexachlorobutadiene	13.777	225	702	0.2436	ppb		68
100) Naphthalene	13.835	128	4661	0.1946	ppb		91
101) 1,2,3-Trichlorobenzene	13.972	180	1916	0.2377	ppb	#	77

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324005.D
Acq On : 23 Feb 2024 13:59
Operator :
Sample : CPTP02232402 - 0.25ppb
Misc : PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 26 12:49:25 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration



D-103

8260 Quantitation Review Report

C:\msdchem\1\data\2024\02-FEB\022324\GCMS8-022324006.D **CP** 02/23/24 006

Sample Name: CPTP02232403 - 0.5ppb
Data File Name: GCMS8-022324006.D
Date Acquired: 02/23/24 14:23
Vial Number: 5
Sample Multiplier: 1
Misc Info: PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,

Operator:
Data File Path: C:\msdchem\1\data\2024\02-FEB\02232
Instrument Method: VOC092623 INSTRUMENT SCAN.M
Quant. Method: VOC022324Final
Last Result Mod: 02/26/24 12:49
Last Cal Update: 02/26/24 12:39
Last Cal Mod: 02/26/24 12:39

#	Internal Standard	Response
1)	Pentafluorobenzene	121,785
42)	1,4-Difluorobenzene	197,696
50)	Chlorobenzene-d5	175,923
74)	1,4-Dichlorobenzene-d4	100,102

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
1)	Pentafluorobenzene		10	-	-	6.25	0.01	-	100	121,785	168	-		-		-	
2)	**Dichlorodifluoromethane**		**0.43385**	MDL	**0.43**	1.39	0.01	P	98	2,792	85	87	35.5 | 34.5	-		-	
3)	**Chloromethane**		**0.54670**	QL	**0.55**	1.55	0.01	P	96	4,619	50	52	28.8 | 31.3	-		-	
4)	**Vinyl chloride**		**0.48775**	QL	**0.49**	1.67	0.01	P	**64**	3,650	62	64	50.4 | 30.5	-		-	
5)	**Bromomethane**		**0.55909**	QL	**0.56**	1.97	0.00	P	91	2,688	94	96	97.0 | 88.5	-		-	
6)	**Chloroethane**		**0.48187**	QL	**0.48**	2.07	0.01	P	82	2,316	64	66	44.6 | 34.3	-		-	
7)	**Trichlorofluoromethane**		**0.44402**	QL	**0.44**	2.35	0.00	**Inc**	85	3,703	101	103	70.4 | 61.6	66	**0.00 | 12.7**	-	
8)	**Diethyl ether**		**0.41384**	MDL	**0.41**	2.66	0.01	**F**	77	1,538	74	45	90.1 | 103	59	**92.3 | 129**	-	
9)	1,1-Dichloroethene		0.41586	ND	<0.43	2.91	0.01	P	96	2,146	96	61	144 | 139	63	44.5 | 47.0	-	
10)	Freon 113		No Cal.	-	-	(2.90)	-	-	0		101	151	0.00 | 82.4	103	0.00 | 64.1	153	0.00 | 53.1
11)	Acetone		0.50755	QL-	<0.90	3.00	0.03	P	**68**	911	58	43	208 | 266	-		-	
12)	**Iodomethane**		**0.49375**	QL	**0.49**	3.07	0.01	P	81	4,833	142	127	27.0 | 40.6	141	17.4 | 12.9	-	
13)	**Carbon disulfide**		**0.54613**	RL	**0.55**	3.13	0.01	P	99	9,147	76	78	8.89 | 9.20	-		-	
14)	**Allyl chloride**		**0.38046**	MDL	**0.38**	3.33	0.00	P	73	1,294	76	78	47.3 | 30.7	41	209 | 283	39	183 | 175
15)	Methylene chloride		0.52843	QL-	<1.1	3.50	0.01	P	98	12,370	84	49	121 | 121	86	60.2 | 64.4	51	38.3 | 36.5
16)	t-Butanol (TBA)		No Cal.	-	-	(3.70)	-	-	0		59	57	0.00 | 8.40	-		-	
17)	**Acrylonitrile**		**0.91695**	MDL	**0.92**	3.83	0.02	**F**	**57**	778	52	53	**81.9 | 120**	51	**0.00 | 41.7**	-	
18)	Methyl t-butyl ether (MTBE)		0.47054	ND	<0.58	3.87	0.02	P	95	8,278	73	57	25.5 | 23.3	-		-	
19)	**trans-1,2-Dichloroethene**		**0.5148**	RL	**0.51**	3.85	0.02	**F**	74	3,073	96	61	**94.5 | 137**	98	61.3 | 65.3	-	
20)	n-Hexane		No Cal.	-	-	(4.22)	-	-	0		57	43	0.00 | 64.9	41	0.00 | 72.0	56	0.00 | 47.3
21)	**1,1-Dichloroethane**		**0.51259**	RL	**0.51**	4.42	0.01	P	87	5,501	63	65	26.6 | 33.7	83	20.4 | 15.0	-	
22)	Vinyl acetate		NR	ND	<0.68	(4.52)	-	-	0		86	43	0.00 | 949	-		-	
23)	2-chloro-1,3-butadiene		No Cal.	-	-	(4.54)	-	-	0		53	88	0.00 | 58.3	52	0.00 | 23.5	-	
24)	Diisopropyl ether (DIPE)		No Cal.	-	-	(4.57)	-	-	0		45	43	0.00 | 38.9	87	0.00 | 24.3	-	
25)	Ethyl t-butyl ether (ETBE)		No Cal.	-	-	(5.12)	-	-	0		59	57	0.00 | 31.8	87	0.00 | 34.1	-	
26)	2-Butanone (MEK)		NR	ND	<0.44	(5.35)	-	-	0		72	43	0.00 | 353	57	0.00 | 29.9	-	
27)	**cis-1,2-Dichloroethene**		**0.44626**	QL	**0.45**	5.31	0.02	P	87	2,958	96	61	120 | 132	98	41.3 | 56.2	-	
28)	**2,2-Dichloropropane**		**0.50633**	RL	**0.51**	5.29	0.01	**Inc**	**63**	4,301	77	97	**0.00 | 22.0**	79	46.9 | 30.5	-	
29)	Propionitrile		NR	ND	<1.0	(5.46)	-	-	0		54	52	0.00 | 11.3	55	0.00 | 15.7	-	
30)	**Methyl acrylate**		**0.50383**	QL	**0.50**	5.56	0.05	**Inc**	**61**	1,639	55	85	**0.00 | 17.1**	-		-	
31)	Methacrylonitrile		0.24793	ND	<0.43	5.70	0.03	**F**	74	632	67	41	117 | 147	39	70.2 | 83.1	52	**0.00 | 37.0**
32)	**Bromochloromethane**		**0.42992**	MDL	**0.43**	5.66	0.00	**F**	**47**	1,407	128	49	**92.3 | 167**	130	**75.8 | 134**	-	
33)	**Chloroform**		**0.53544**	RL	**0.54**	5.84	0.01	P	93	5,574	83	85	61.1 | 66.3	-		-	
34)	Tetrahydrofuran		NR	ND	<0.93	(5.74)	-	-	0		72	71	0.00 | 96.8	42	0.00 | 241	-	
35)	Dibromofluoromethane (S)		0.44694	ND	<	6.12	0.02	**Inc**	79	2,225	113	111	88.1 | 102	192	**0.00 | 22.1**	81	**0.00 | 14.3**
36)	**1,1,1-Trichloroethane**		**0.50586**	RL	**0.51**	6.10	0.00	**Inc**	93	4,532	97	99	57.2 | 60.3	61	40.0 | 38.9	63	**0.00 | 14.3**
37)	1-Chlorobutane		No Cal.	-	-	6.31	0.01	**Inc**	90	5,757	56	49	**0.00 | 3.40**	-		-	
38)	**1,1-Dichloropropene**		**0.50160**	RL	**0.50**	6.40	0.01	P	79	3,535	75	39	27.6 | 55.5	110	40.3 | 36.4	77	28.1 | 31.4
39)	**Carbon tetrachloride**		**0.53667**	RL	**0.54**	6.38	0.00	P	90	4,046	117	119	90.3 | 100	-		-	
40)	**Benzene**		**0.47878**	QL	**0.48**	6.76	0.01	P	91	11,158	78	51	19.2 | 15.3	-		-	
41)	**1,2-Dichloroethane**		**0.46544**	QL	**0.47**	6.80	-0.01	**Inc**	**69**	3,345	62	98	**0.00 | 12.3**	-		-	
42)	1,4-Difluorobenzene		10	-	-	7.56	0.00	-	100	197,696	114	-		-		-	
43)	t- Amyl methyl ether (TAME)		No Cal.	-	-	(7.05)	-	-	0		73	55	0.00 | 37.9	87	0.00 | 22.4	-	
44)	**Trichloroethene**		**0.50304**	RL	**0.50**	8.03	0.00	**F**	**61**	2,804	95	132	**81.2 | 115**	130	**60.7 | 113**	97	35.8 | 64.2
45)	**1,2-Dichloropropane**		**0.45382**	MDL	**0.45**	8.48	0.02	**Inc**	91	2,544	63	112	**0.00 | 5.70**	76	42.5 | 47.7	-	

For analyst review assistance only.

8260 Quantitation Review Report

C:\msdchem\1\data\2024\02-FEB\022324\GCMS8-022324006.D **CP** 02/23/24 006

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
46)	Methyl methacrylate		0.63246	MDL	0.63	8.79	0.02	P	92	1,398	69	41	136 | 133	100	49.2 | 40.0	39	52.0 | 64.9
47)	Dibromomethane		0.44393	QL	0.44	8.65	0.00	P	83	1,583	93	174	84.6 | 107	95	72.0 | 82.1	-	
48)	Bromodichloromethane		0.44640	QL	0.45	8.95	0.01	Inc	94	3,221	83	85	61.6 | 64.1	127	**0.00 | 8.90**	-	
49)	2-nitro-propane		0.39641	MDL	0.4	9.27	0.01	P	56	673	43	39	51.9 | 28.5	-		-	
50)	Chlorobenzene-d5		10	-	-	11.04	0.01	P	98	175,923	117	82	54.0 | 54.8	119	32.6 | 31.9	54	18.6 | 22.3
51)	Chloromethyl cyanide		No Cal.	-	-	(9.38)	-	-	0		75	48	0.00 | 39.0	40	0.00 | 44.5	-	
52)	2-Chloroethyl vinyl ether		0.46325	MDL	0.46	9.41	0.03	F	44	1,762	63	65	**0.00 | 30.2**	106	**0.00 | 31.4**	-	
53)	cis-1,3-Dichloropropene		0.44637	QL	0.45	9.52	0.01	P	87	3,828	75	77	31.1 | 33.4	39	43.4 | 47.1	110	41.7 | 21.7
54)	4-Methyl-2-pentanone		0.51374	QL	0.51	9.72	0.00	F	58	929	58	41	51.5 | 52.2	100	**0.00 | 44.0**	85	**0.00 | 42.0**
55)	1,1-Dichloro-2-propanone		No Cal.	-	-	(9.71)	-	-	0		83	63	0.00 | 56.4	91	0.00 | 22.8	-	
56)	Toluene-d8 (S)		0.48297	Sur	-	9.79	0.00	P	86	8,325	98	100	60.9 | 71.5	42	19.7 | 12.7	70	17.6 | 11.3
57)	Toluene		0.48461	QL	0.48	9.86	0.01	P	88	6,775	92	91	186 | 168	65	18.9 | 18.5	39	17.4 | 16.3
58)	trans-1,3-Dichloropropene		0.42185	QL	0.42	10.11	0.01	P	95	3,281	75	77	28.3 | 30.2	39.1	37.9 | 43.2	110	24.7 | 24.5
59)	Ethyl methacrylate		0.46564	MDL	0.47	10.23	0.01	F	44	3,324	69	41	**17.4 | 69.2**	99	**0.00 | 18.5**	86	**0.00 | 16.1**
60)	1,1,2-Trichloroethane		0.43658	MDL	0.44	10.26	0.01	F	57	1,823	83	97	155 | 125	61	**113 | 70.3**	85	**111 | 59.8**
61)	1,3-Dichloropropane		0.47696	QL	0.48	10.41	0.00	P	90	4,363	76	41	62.6 | 61.7	78	45.6 | 32.5	39	16.5 | 22.8
62)	2-Hexanone		0.51482	QL	0.51	10.51	0.01	Inc	76	1,091	43	58	50.2 | 59.4	57	**0.00 | 21.2**	100	**0.00 | 16.0**
63)	Tetrachloroethene		0.5086	RL	0.51	10.36	0.00	F	61	2,423	164	166	**172 | 127**	129	**136 | 88.5**	131	107 | 84.5
64)	Dibromochloromethane		0.45782	MDL	0.46	10.59	0.00	P	78	2,507	129	127	60.3 | 79.2	-		-	
65)	1,2-Dibromoethane		0.46051	MDL	0.46	10.67	0.01	Inc	85	2,370	107	109	75.0 | 89.0	188	**0.00 | 2.80**	-	
66)	Chlorobenzene		0.51341	RL	0.51	11.06	0.00	P	97	7,632	112	77	60.8 | 61.4	114	29.4 | 33.1	-	
67)	1,1,1,2-Tetrachloroethane		0.46741	QL	0.47	11.13	0.01	F	85	2,571	131	133	90.5 | 94.0	117	**95.0 | 64.0**	119	68.9 | 63.7
68)	Ethylbenzene		0.49156	QL	0.49	11.15	0.00	P	89	12,560	91	106	26.3 | 32.6	51	10.7 | 7.80	-	
69)	m- & p-Xylenes		0.95661	QL	0.96	11.24	0.00	P	95	9,534	106	91	185 | 188	105	50.0 | 41.4	77	32.5 | 24.3
70)	o-Xylene		0.47679	QL	0.48	11.51	0.00	P	73	4,857	106	91	255 | 206	105	54.5 | 48.7	-	
71)	Styrene		0.4304	QL	0.43	11.52	0.00	P	72	6,642	104	103	70.1 | 46.8	78	59.0 | 41.6	51	29.2 | 22.7
72)	Bromoform		0.50681	RL	0.51	11.65	0.01	Inc	84	1,177	173	175	54.3 | 46.3	254	**0.00 | 12.5**	-	
73)	Isopropylbenzene		0.47767	QL	0.48	11.76	0.00	P	95	11,827	105	120	23.6 | 27.0	77	13.7 | 14.5	79	9.59 | 11.8
74)	1,4-Dichlorobenzene-d4		10	-	-	12.57	0.00	P	97	100,102	152	115	49.7 | 55.2	150	156 | 157	-	
75)	cis-1,4-dichloro-2-butene		No Cal.	-	-	(11.81)	-	-	0		75	53	0.00 | 106	89	0.00 | 47.5	-	
76)	4-Bromofluorobenzene (S)		0.49013	ND	<	11.86	0.00	P	92	3,391	95	174	67.3 | 75.6	176	72.9 | 73.8	75	59.1 | 47.6
77)	1,1,2,2-Tetrachloroethane		0.43217	QL	0.43	11.96	0.00	P	80	3,265	83	85	52.5 | 70.8	131	17.3 | 11.0	95	12.0 | 18.7
78)	trans-1,4-Dichloro-2-butene		0.50220	RL	0.50	12.00	0.01	F	28	615	53	88	**0.00 | 55.9**	124	52.6 | 23.1	-	
79)	1,2,3-Trichloropropane		0.62128	RL	0.62	11.98	0.00	F	42	1,715	110	75	**148 | 269**	39	53.3 | 79.2	-	
80)	Bromobenzene		0.51120	RL	0.51	11.96	0.00	P	85	3,387	156	158	79.9 | 94.7	-		-	
81)	n-Propylbenzene		0.46220	QL	0.46	12.02	0.00	P	97	13,796	91	120	25.6 | 23.6	92	13.2 | 11.4	65	9.97 | 9.90
82)	2-Chlorotoluene		0.41677	QL	0.42	12.08	0.00	P	89	2,629	126	91	308 | 289	63	22.9 | 36.0	-	
83)	4-Ethyltoluene		No Cal.	-	-	12.13	0.04	P	75	8,990	105	120	46.8 | 29.9	77	13.1 | 10.6	-	
84)	1,3,5-Trimethylbenzene		0.43480	QL	0.43	12.13	0.00	P	96	8,991	105	120	46.8 | 50.6	119	11.1 | 11.0	77	13.1 | 12.6
85)	4-Chlorotoluene		0.5008	RL	0.50	12.14	0.00	P	90	10,457	91	126	27.2 | 34.5	63	11.8 | 11.3	-	
86)	tert-Butylbenzene		0.51163	RL	0.51	12.33	0.00	P	86	2,814	134	119	312 | 340	91	191 | 215	-	
87)	1,2,4-Trimethylbenzene		0.45183	QL	0.45	12.36	0.00	P	93	9,556	105	120	54.9 | 50.1	-		-	
88)	Pentachloroethane		0.46698	ND	<1.7	12.35	0.00	P	91	1,826	167	165	74.7 | 86.1	132	44.2 | 42.9	-	
89)	sec-Butylbenzene		0.46665	QL	0.47	12.46	0.00	P	98	12,202	105	134	19.3 | 20.4	-		-	
90)	4-Isopropyltoluene		0.45414	MDL	0.45	12.54	0.00	P	92	10,362	119	134	22.5 | 28.5	91	20.8 | 22.4	-	
91)	1,3-Dichlorobenzene		0.50788	RL	0.51	12.53	0.00	P	90	6,640	146	148	73.3 | 63.8	111	39.1 | 35.3	-	
92)	1,4-Dichlorobenzene		0.51183	RL	0.51	12.58	0.00	P	82	6,823	146	111	53.4 | 37.8	148	71.4 | 61.5	-	
93)	n-Butylbenzene		0.42887	MDL	0.43	12.78	0.00	P	94	4,906	92	91	172 | 179	134	45.2 | 50.5	-	
94)	1,2-Dichlorobenzene		0.49473	QL	0.49	12.81	0.01	P	97	6,137	146	148	61.0 | 64.6	111	40.2 | 40.4	-	
95)	Hexachloroethane		No Cal.	-	-	12.95	-0.01	F	69	1,372	201	117	**91.9 | 129**	199	37.8 | 65.0	203	45.5 | 64.5
96)	1,2-Dibromo-3-chloropropane		0.4385	MDL	0.44	13.24	0.00	F	32	646	75	155	**0.00 | 104**	157	**78.7 | 123**	-	
97)	Nitrobenzene		No Cal.	-	-	(13.35)	-	-	0		123	51	0.00 | 62.1	77	0.00 | 146	-	
98)	1,2,4-Trichlorobenzene		0.46565	QL	0.47	13.69	0.00	P	90	3,923	180	182	108 | 97.2	184	37.5 | 29.6	145	30.2 | 30.6
99)	Hexachlorobutadiene		0.44974	QL	0.45	13.78	0.00	P	89	1,318	225	227	70.4 | 59.6	260	22.1 | 22.3	223	50.0 | 59.4
100	Naphthalene		0.41119	MDL	0.41	13.84	0.00	P	94	10,015	128	127	16.6 | 12.5	129	12.1 | 11.6	-	
101	1,2,3-Trichlorobenzene		0.55499	RL	0.55	13.97	0.00	P	76	4,548	180	182	64.8 | 91.8	184	19.2 | 29.8	145	20.6 | 29.8

Uses lowest known RLs; project RLs may be higher. Qualitative P/F based only on output ratios at apex and may not reflect full peak or analyst review.

For analyst review assistance only.

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324006.D
Acq On : 23 Feb 2024 14:23
Operator :
Sample : CPTP02232403 - 0.5ppb
Misc : PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 26 12:49:36 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	6.251	168	121785	10.00	ppb		0.01
42) 1,4-Difluorobenzene	7.563	114	197696	10.00	ppb		0.00
50) Chlorobenzene-d5	11.041	117	175923	10.00	ppb		0.00
74) 1,4-Dichlorobenzene-d4	12.570	152	100102	10.00	ppb		0.00
System Monitoring Compounds							
35) Dibromofluoromethane (S)	6.119	113	2225	0.45	ppb		0.02
Spiked Amount 10.000			Recovery =	4.50%			
56) Toluene-d8 (S)	9.786	98	8325	0.48	ppb		0.00
Spiked Amount 10.000			Recovery =	4.80%			
76) 4-Bromofluorobenzene (S)	11.855	95	3391	0.49	ppb		0.00
Spiked Amount 10.000			Recovery =	4.90%			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.391	85	2792	0.4339	ppb		98
3) Chloromethane	1.553	50	4619	0.5467	ppb		96
4) Vinyl chloride	1.665	62	3650	0.4878	ppb		64
5) Bromomethane	1.970	94	2688	0.5591	ppb		91
6) Chloroethane	2.072	64	2316	0.4819	ppb		82
7) Trichlorofluoromethane	2.346	101	3703	0.4440	ppb		85
8) Diethyl ether	2.662	74	1538	0.4138	ppb	#	77
9) 1,1-Dichloroethene	2.906	96	2146	0.4159	ppb		96
10) Freon 113	0.000		0	N.D.			
11) Acetone	2.997	58	911	0.5076	ppb	#	68
12) Iodomethane	3.068	142	4833	0.4938	ppb		81
13) Carbon disulfide	3.129	76	9147	0.5461	ppb		99
14) Allyl chloride	3.333	76	1294	0.3805	ppb	#	73
15) Methylene chloride	3.496	84	12370	0.5284	ppb		98
16) t-Butanol (TBA)	0.000		0	N.D.			
17) Acrylonitrile	3.831	52	778	0.9170	ppb	#	57
18) Methyl t-butyl ether (...	3.872	73	8278	0.4705	ppb		95
19) trans-1,2-Dichloroethene	3.851	96	3073	0.5148	ppb	#	74
20) n-Hexane	0.000		0	N.D.			
21) 1,1-Dichloroethane	4.421	63	5501	0.5126	ppb		87
22) Vinyl acetate	0.000		0	N.D.			
23) 2-chloro-1,3-butadiene	0.000		0	N.D.			
24) Diisopropyl ether (DIPE)	0.000		0	N.D.			
25) Ethyl t-butyl ether (E...	0.000		0	N.D.			
26) 2-Butanone (MEK)	0.000		0	N.D.			
27) cis-1,2-Dichloroethene	5.306	96	2958	0.4463	ppb		87
28) 2,2-Dichloropropane	5.285	77	4301	0.5063	ppb		63
29) Propionitrile	0.000		0	N.D.			
30) Methyl acrylate	5.560	55	1639	0.5038	ppb		61
31) Methacrylonitrile	5.702	67	632	0.2479	ppb	#	74
32) Bromochloromethane	5.662	128	1407	0.4299	ppb	#	47
33) Chloroform	5.845	83	5574	0.5354	ppb		93
34) Tetrahydrofuran	0.000		0	N.D.			
36) 1,1,1-Trichloroethane	6.099	97	4532	0.5059	ppb		93
37) 1-Chlorobutane	6.312	56	5757	No Calib			
38) 1,1-Dichloropropene	6.404	75	3535	0.5016	ppb		79
39) Carbon tetrachloride	6.383	117	4046	0.5367	ppb		90
40) Benzene	6.760	78	11158	0.4788	ppb		91
41) 1,2-Dichloroethane	6.800	62	3345	0.4654	ppb		69
43) t- Amyl methyl ether (...	0.000		0	N.D.			
44) Trichloroethene	8.031	95	2804	0.5030	ppb	#	61
45) 1,2-Dichloropropane	8.478	63	2544	0.4538	ppb		91
46) Methyl methacrylate	8.794	69	1398	0.6325	ppb		92

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324006.D
Acq On : 23 Feb 2024 14:23
Operator :
Sample : CPTP02232403 - 0.5ppb
Misc : PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 26 12:49:36 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

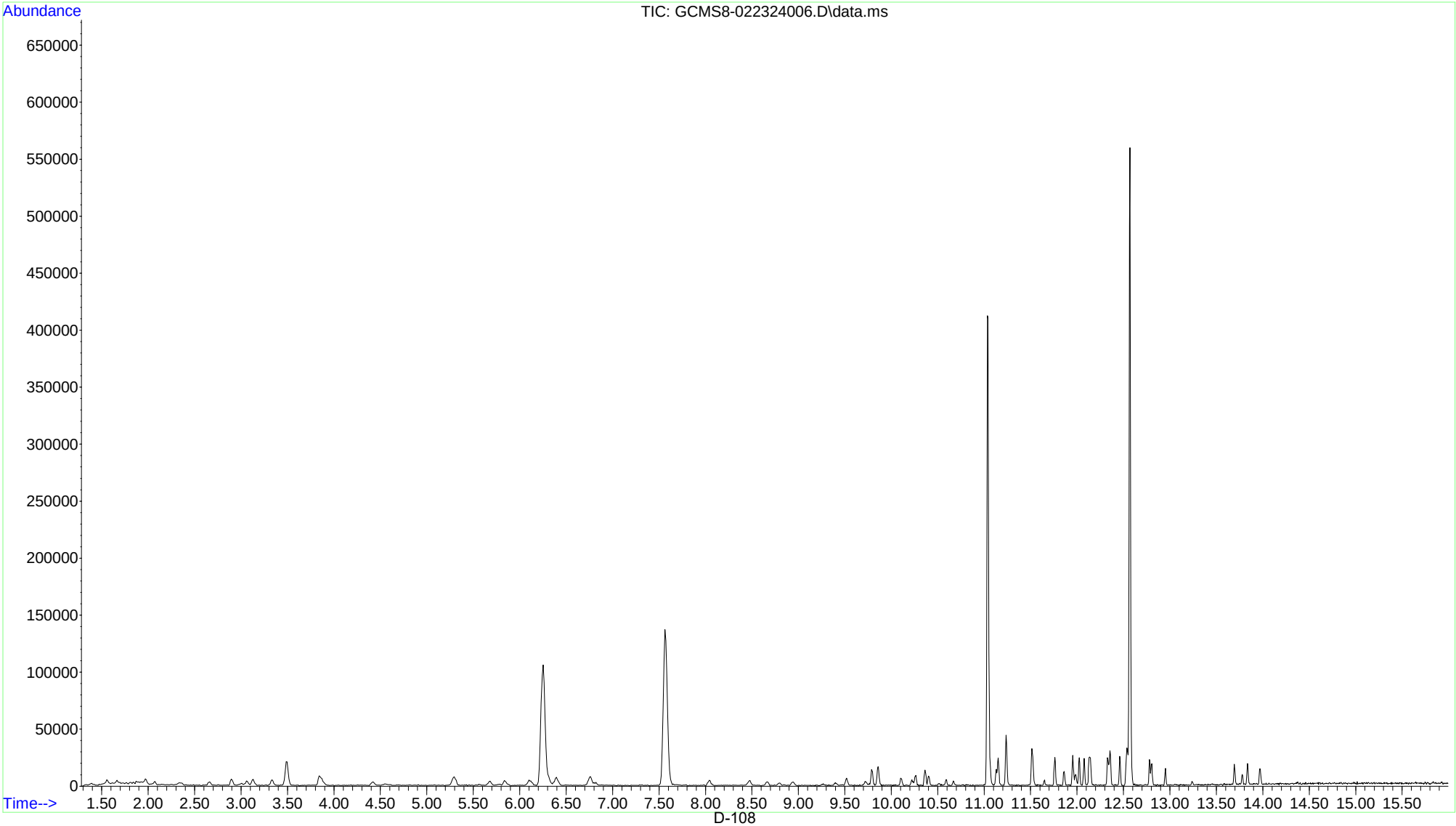
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
47) Dibromomethane	8.651	93	1583	0.4439	ppb		83
48) Bromodichloromethane	8.946	83	3221	0.4464	ppb		94
49) 2-nitro-propane	9.266	43	673	0.3964	ppb		56
51) Chloromethyl cyanide	0.000		0	N.D.			
52) 2-Chloroethyl vinyl ether	9.408	63	1762	0.4633	ppb	#	44
53) cis-1,3-Dichloropropene	9.518	75	3828	0.4464	ppb		87
54) 4-Methyl-2-pentanone	9.718	58	929	0.5137	ppb	#	58
55) 1,1-Dichloro-2-propanone	0.000		0	N.D.			
57) Toluene	9.860	92	6775	0.4846	ppb		88
58) trans-1,3-Dichloropropene	10.107	75	3281	0.4219	ppb		95
59) Ethyl methacrylate	10.227	69	3324	0.4656	ppb	#	44
60) 1,1,2-Trichloroethane	10.264	83	1823	0.4366	ppb	#	57
61) 1,3-Dichloropropane	10.406	76	4363	0.4770	ppb		90
62) 2-Hexanone	10.511	43	1091	0.5148	ppb		76
63) Tetrachloroethene	10.364	164	2423	0.5086	ppb	#	61
64) Dibromochloromethane	10.590	129	2507	0.4578	ppb		78
65) 1,2-Dibromoethane	10.668	107	2370	0.4605	ppb		85
66) Chlorobenzene	11.057	112	7632	0.5134	ppb		97
67) 1,1,1,2-Tetrachloroethane	11.131	131	2571	0.4674	ppb	#	85
68) Ethylbenzene	11.152	91	12560	0.4916	ppb		89
69) m- & p-Xylenes	11.236	106	9534	0.9566	ppb		95
70) o-Xylene	11.514	106	4857	0.4768	ppb	#	73
71) Styrene	11.524	104	6642	0.4304	ppb		72
72) Bromoform	11.651	173	1177	0.5068	ppb		84
73) Isopropylbenzene	11.761	105	11827	0.4777	ppb		95
75) cis-1,4-dichloro-2-butene	0.000		0	N.D.			
77) 1,1,2,2-Tetrachloroethane	11.955	83	3265	0.4322	ppb		80
78) trans-1,4-Dichloro-2-b...	11.997	53	615	0.5022	ppb	#	28
79) 1,2,3-Trichloropropane	11.981	110	1715	0.6213	ppb	#	42
80) Bromobenzene	11.955	156	3387	0.5112	ppb		85
81) n-Propylbenzene	12.023	91	13796	0.4622	ppb		97
82) 2-Chlorotoluene	12.076	126	2629	0.4168	ppb		89
83) 4-Ethyltoluene	12.128	105	8990	No Calib			
84) 1,3,5-Trimethylbenzene	12.128	105	8991	0.4348	ppb		96
85) 4-Chlorotoluene	12.144	91	10457	0.5008	ppb		90
86) tert-Butylbenzene	12.333	134	2814	0.5116	ppb		86
87) 1,2,4-Trimethylbenzene	12.359	105	9556	0.4518	ppb		93
88) Pentachloroethane	12.349	167	1826	0.4670	ppb		91
89) sec-Butylbenzene	12.459	105	12202	0.4666	ppb		98
90) 4-Isopropyltoluene	12.543	119	10362	0.4541	ppb		92
91) 1,3-Dichlorobenzene	12.533	146	6640	0.5079	ppb		90
92) 1,4-Dichlorobenzene	12.580	146	6823	0.5118	ppb		82
93) n-Butylbenzene	12.780	92	4906	0.4289	ppb		94
94) 1,2-Dichlorobenzene	12.806	146	6137	0.4947	ppb		97
95) Hexachloroethane	12.948	201	1372	No Calib	#		
96) 1,2-Dibromo-3-chloropr...	13.242	75	646	0.4385	ppb	#	32
97) Nitrobenzene	0.000		0	N.D.			
98) 1,2,4-Trichlorobenzene	13.693	180	3923	0.4656	ppb		90
99) Hexachlorobutadiene	13.777	225	1318	0.4497	ppb		89
100) Naphthalene	13.835	128	10015	0.4112	ppb		94
101) 1,2,3-Trichlorobenzene	13.972	180	4548	0.5550	ppb		76

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324006.D
Acq On : 23 Feb 2024 14:23
Operator :
Sample : CPTP02232403 - 0.5ppb
Misc : PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 26 12:49:36 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration



D-108

8260 Quantitation Review Report

C:\msdchem\1\data\2024\02-FEB\022324\GCMS8-022324007.D **CP** 02/23/24 007

Sample Name: CPTP02232404 - 1ppb
Data File Name: GCMS8-022324007.D
Date Acquired: 02/23/24 14:47
Vial Number: 6
Sample Multiplier: 1
Misc Info: PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,

Operator:
Data File Path: C:\msdchem\1\data\2024\02-FEB\02232
Instrument Method: VOC092623 INSTRUMENT SCAN.M
Quant. Method: VOC022324Final
Last Result Mod: 02/26/24 12:49
Last Cal Update: 02/26/24 12:39
Last Cal Mod: 02/26/24 12:39

#	Internal Standard	Response
1)	Pentafluorobenzene	127,248
42)	1,4-Difluorobenzene	199,732
50)	Chlorobenzene-d5	176,987
74)	1,4-Dichlorobenzene-d4	100,322

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
1)	Pentafluorobenzene		10	-	-	6.25	0.01	-	100	127,248	168	-		-		-	
2)	**Dichlorodifluoromethane**		**0.88994**	QL	**0.89**	1.39	0.01	P	91	5,984	85	87	39.4 | 34.5	-		-	
3)	**Chloromethane**		**1.0230**	QL	**1.0**	1.55	0.01	P	92	9,031	50	52	27.1 | 31.3	-		-	
4)	**Vinyl chloride**		**1.0018**	RL	**1.0**	1.68	0.02	P	93	7,833	62	64	26.8 | 30.5	-		-	
5)	**Bromomethane**		**1.0274**	QL	**1.0**	1.98	0.01	P	75	5,161	94	96	112 | 88.5	-		-	
6)	**Chloroethane**		**1.0317**	QL	**1.0**	2.07	0.01	P	93	5,181	64	66	30.2 | 34.3	-		-	
7)	**Trichlorofluoromethane**		**0.95618**	QL	**0.96**	2.36	0.01	**Inc**	79	8,332	101	103	75.6 | 61.6	66	**0.00 | 12.7**	-	
8)	**Diethyl ether**		**1.0566**	QL	**1.1**	2.66	0.01	P	91	4,103	74	45	84.7 | 103	59	127 | 129	-	
9)	**1,1-Dichloroethene**		**1.0440**	RL	**1.0**	2.91	0.01	P	98	5,629	96	61	140 | 139	63	42.5 | 47.0	-	
10)	Freon 113		No Cal.	-	-	(2.90)	-	-	0		101	151	0.00 | 82.4	103	0.00 | 64.1	153	0.00 | 53.1
11)	**Acetone**		**0.99502**	QL	**1.0**	3.00	0.03	P	85	1,281	58	43	239 | 266	-		-	
12)	**Iodomethane**		**0.99634**	RL	**1.0**	3.07	0.01	P	97	10,190	142	127	37.8 | 40.6	141	12.9 | 12.9	-	
13)	**Carbon disulfide**		**0.97131**	RL	**0.97**	3.13	0.01	P	99	16,998	76	78	9.50 | 9.20	-		-	
14)	**Allyl chloride**		**0.97335**	MDL	**0.97**	3.34	0.01	P	91	3,459	76	78	30.9 | 30.7	41	256 | 283	39	172 | 175
15)	Methylene chloride		0.98111	QL-	<1.1	3.50	0.01	P	95	15,970	84	49	119 | 121	86	59.3 | 64.4	51	27.2 | 36.5
16)	t-Butanol (TBA)		No Cal.	-	-	(3.70)	-	-	0		59	57	0.00 | 8.40	-		-	
17)	**Acrylonitrile**		**1.0120**	QL	**1.0**	3.83	0.02	**F**	79	1,016	52	53	114 | 120	51	**0.00 | 41.7**	-	
18)	**Methyl t-butyl ether (MTBE)**		**0.97319**	QL	**0.97**	3.87	0.02	P	89	17,889	73	57	28.5 | 23.3	-		-	
19)	**trans-1,2-Dichloroethene**		**0.91709**	RL	**0.92**	3.85	0.02	P	82	5,720	96	61	120 | 137	98	85.2 | 65.3	-	
20)	n-Hexane		No Cal.	-	-	(4.22)	-	-	0		57	43	0.00 | 64.9	41	0.00 | 72.0	56	0.00 | 47.3
21)	**1,1-Dichloroethane**		**1.0187**	RL	**1.0**	4.42	0.01	P	91	11,423	63	65	39.5 | 33.7	83	12.3 | 15.0	-	
22)	**Vinyl acetate**		**1.0625**	QL	**1.1**	4.54	0.02	P	**45**	974	86	43	714 | 949	-		-	
23)	2-chloro-1,3-butadiene		No Cal.	-	-	(4.54)	-	-	0		53	88	0.00 | 58.3	52	0.00 | 23.5	-	
24)	Diisopropyl ether (DIPE)		No Cal.	-	-	(4.57)	-	-	0		45	43	0.00 | 38.9	87	0.00 | 24.3	-	
25)	Ethyl t-butyl ether (ETBE)		No Cal.	-	-	(5.12)	-	-	0		59	57	0.00 | 31.8	87	0.00 | 34.1	-	
26)	2-Butanone (MEK)		NR	ND	<0.44	(5.35)	-	-	0		72	43	0.00 | 353	57	0.00 | 29.9	-	
27)	**cis-1,2-Dichloroethene**		**0.95297**	RL	**0.95**	5.30	0.01	P	88	6,600	96	61	113 | 132	98	59.5 | 56.2	-	
28)	**2,2-Dichloropropane**		**0.96738**	RL	**0.97**	5.29	0.01	P	97	8,586	77	97	19.1 | 22.0	79	30.3 | 30.5	-	
29)	**Propionitrile**		**1.1161**	MDL	**1.1**	5.52	0.06	**F**	**1**	158	54	52	**0.00 | 11.3**	55	**257 | 15.7**	-	
30)	**Methyl acrylate**		**1.0088**	QL	**1.0**	5.54	0.03	**Inc**	**61**	4,919	55	85	**0.00 | 17.1**	-		-	
31)	**Methacrylonitrile**		**0.82410**	MDL	**0.82**	5.69	0.02	P	**54**	2,195	67	41	228 | 147	39	58.2 | 83.1	52	45.2 | 37.0
32)	**Bromochloromethane**		**1.0794**	RL	**1.1**	5.67	0.01	P	91	3,691	128	49	152 | 167	130	126 | 134	-	
33)	**Chloroform**		**0.95614**	RL	**0.96**	5.84	0.01	P	81	10,400	83	85	81.7 | 66.3	-		-	
34)	Tetrahydrofuran		0.75112	ND	<0.93	5.77	0.03	P	89	822	72	71	75.7 | 96.8	42	230 | 241	-	
35)	Dibromofluoromethane (S)		0.9699	Sur	-	6.12	0.02	**Inc**	85	5,045	113	111	88.4 | 102	192	17.2 | 22.1	81	**0.00 | 14.3**
36)	**1,1,1-Trichloroethane**		**1.0359**	RL	**1.0**	6.10	0.00	P	90	9,697	97	99	66.1 | 60.3	61	29.1 | 38.9	63	17.1 | 14.3
37)	1-Chlorobutane		No Cal.	-	-	6.32	0.02	Inc	90	13,956	56	49	**0.00 | 3.40**	-		-	
38)	**1,1-Dichloropropene**		**1.0595**	RL	**1.1**	6.39	0.00	P	94	7,802	75	39	54.0 | 55.5	110	35.6 | 36.4	77	21.7 | 31.4
39)	**Carbon tetrachloride**		**1.0001**	RL	**1.0**	6.38	0.00	P	84	7,878	117	119	84.3 | 100	-		-	
40)	**Benzene**		**1.0059**	RL	**1.0**	6.76	0.01	P	83	24,494	78	51	22.2 | 15.3	-		-	
41)	**1,2-Dichloroethane**		**0.98693**	RL	**0.99**	6.81	0.00	**Inc**	**69**	7,411	62	98	**0.00 | 12.3**	-		-	
42)	1,4-Difluorobenzene		10	-	-	7.57	0.01	-	100	199,732	114	-		-		-	
43)	t- Amyl methyl ether (TAME)		No Cal.	-	-	(7.05)	-	-	0		73	55	0.00 | 37.9	87	0.00 | 22.4	-	
44)	**Trichloroethene**		**0.99281**	RL	**0.99**	8.04	0.01	P	89	5,591	95	132	126 | 115	130	116 | 113	97	85.1 | 64.2
45)	**1,2-Dichloropropane**		**0.97203**	RL	**0.97**	8.47	0.01	**Inc**	96	5,505	63	112	**0.00 | 5.70**	76	46.2 | 47.7	-	

For analyst review assistance only.

8260 Quantitation Review Report

C:\msdchem\1\data\2024\02-FEB\022324\GCMS8-022324007.D **CP** 02/23/24 **007**

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
46)	**Methyl methacrylate**		**1.0392**	QL	**1.0**	8.78	0.01	P	78	3,442	69	41	164 | 133	100	30.7 | 40.0	39	79.9 | 64.9
47)	**Dibromomethane**		**0.97928**	RL	**0.98**	8.66	0.01	P	95	3,528	93	174	109 | 107	95	90.8 | 82.1	-	
48)	**Bromodichloromethane**		**0.95957**	RL	**0.96**	8.94	0.00	P	98	6,995	83	85	65.8 | 64.1	127	9.51 | 8.90	-	
49)	**2-nitro-propane**		**0.86986**	MDL	**0.87**	9.27	0.01	P	**61**	1,492	43	39	49.4 | 28.5	-		-	
50)	Chlorobenzene-d5		10	-	-	11.04	0.01	P	99	176,987	117	82	54.6 | 54.8	119	31.6 | 31.9	54	21.2 | 22.3
51)	Chloromethyl cyanide		No Cal.	-	-	(9.38)	-	-	0		75	48	0.00 | 39.0	40	0.00 | 44.5	-	
52)	**2-Chloroethyl vinyl ether**		**0.92094**	QL	**0.92**	9.40	0.02	P	95	3,524	63	65	30.4 | 30.2	106	25.7 | 31.4	-	
53)	**cis-1,3-Dichloropropene**		**0.97848**	RL	**0.98**	9.52	0.01	P	97	8,442	75	77	36.0 | 33.4	39	45.5 | 47.1	110	22.8 | 21.7
54)	**4-Methyl-2-pentanone**		**1.0084**	QL	**1.0**	9.72	0.01	P	77	2,312	58	41	67.6 | 52.2	100	29.9 | 44.0	85	26.6 | 42.0
55)	1,1-Dichloro-2-propanone		No Cal.	-	-	(9.71)	-	-	0		83	63	0.00 | 56.4	91	0.00 | 22.8	-	
56)	Toluene-d8 (S)		0.95736	Sur	-	9.79	0.01	P	94	16,602	98	100	75.2 | 71.5	42	18.3 | 12.7	70	13.5 | 11.3
57)	**Toluene**		**1.0051**	RL	**1.0**	9.86	0.01	P	99	14,137	92	91	167 | 168	65	18.7 | 18.5	39	13.2 | 16.3
58)	**trans-1,3-Dichloropropene**		**0.91365**	RL	**0.91**	10.10	0.00	P	95	7,149	75	77	33.8 | 30.2	39.1	47.9 | 43.2	110	24.1 | 24.5
59)	**Ethyl methacrylate**		**0.82877**	QL	**0.83**	10.23	0.01	P	90	5,952	69	41	77.6 | 69.2	99	18.0 | 18.5	86	8.54 | 16.1
60)	**1,1,2-Trichloroethane**		**1.0360**	RL	**1.0**	10.26	0.00	**F**	75	4,352	83	97	**85.5 | 125**	61	47.8 | 70.3	85	59.5 | 59.8
61)	**1,3-Dichloropropane**		**1.0274**	RL	**1.0**	10.40	0.00	P	82	9,455	76	41	41.6 | 61.7	78	40.1 | 32.5	39	20.5 | 22.8
62)	**2-Hexanone**		**1.0128**	QL	**1.0**	10.51	0.01	P	90	3,564	43	58	48.2 | 59.4	57	20.2 | 21.2	100	14.4 | 16.0
63)	**Tetrachloroethene**		**1.0607**	RL	**1.1**	10.36	-0.01	P	90	5,084	164	166	112 | 127	129	86.1 | 88.5	131	71.8 | 84.5
64)	**Dibromochloromethane**		**0.93283**	RL	**0.93**	10.59	0.00	P	87	5,139	129	127	68.0 | 79.2	-		-	
65)	**1,2-Dibromoethane**		**0.98502**	RL	**0.99**	10.67	0.01	P	77	5,100	107	109	67.5 | 89.0	188	5.99 | 2.80	-	
66)	**Chlorobenzene**		**1.0001**	RL	**1.0**	11.06	0.01	P	96	14,956	112	77	62.9 | 61.4	114	37.7 | 33.1	-	
67)	**1,1,1,2-Tetrachloroethane**		**0.95232**	RL	**0.95**	11.13	0.01	P	88	5,270	131	133	104 | 94.0	117	50.4 | 64.0	119	56.4 | 63.7
68)	**Ethylbenzene**		**0.99573**	RL	**1.0**	11.15	0.00	P	90	25,596	91	106	28.5 | 32.6	51	14.9 | 7.80	-	
69)	**m- & p-Xylenes**		**1.8912**	RL	**1.9**	11.24	0.00	P	91	18,963	106	91	201 | 188	105	50.1 | 41.4	77	26.6 | 24.3
70)	**o-Xylene**		**1.0146**	RL	**1.0**	11.51	0.00	P	76	10,398	106	91	171 | 206	105	29.3 | 48.7	-	
71)	**Styrene**		**0.94083**	RL	**0.94**	11.52	0.00	P	95	14,607	104	103	43.2 | 46.8	78	40.7 | 41.6	51	26.8 | 22.7
72)	**Bromoform**		**1.0472**	RL	**1.0**	11.65	0.01	**Inc**	90	3,300	173	175	43.4 | 46.3	254	**0.00 | 12.5**	-	
73)	**Isopropylbenzene**		**0.93619**	RL	**0.94**	11.76	0.00	P	99	23,320	105	120	26.7 | 27.0	77	14.4 | 14.5	79	13.3 | 11.8
74)	1,4-Dichlorobenzene-d4		10	-	-	12.57	0.00	P	96	100,322	152	115	55.8 | 55.2	150	150 | 157	-	
75)	cis-1,4-dichloro-2-butene		No Cal.	-	-	(11.81)	-	-	0		75	53	0.00 | 106	89	0.00 | 47.5	-	
76)	4-Bromofluorobenzene (S)		0.99456	Sur	-	11.86	0.01	P	89	6,896	95	174	92.6 | 75.6	176	80.9 | 73.8	75	49.1 | 47.6
77)	**1,1,2,2-Tetrachloroethane**		**0.94459**	RL	**0.94**	11.95	0.00	P	97	7,152	83	85	68.6 | 70.8	131	15.6 | 11.0	95	18.3 | 18.7
78)	**trans-1,4-Dichloro-2-butene**		**0.98403**	RL	**0.98**	11.99	0.01	P	86	1,601	53	88	61.4 | 55.9	124	37.6 | 23.1	-	
79)	**1,2,3-Trichloropropane**		**0.9015**	RL	**0.90**	11.98	0.00	P	**63**	2,494	110	75	196 | 269	39	57.3 | 79.2	-	
80)	**Bromobenzene**		**0.9652**	RL	**0.97**	11.95	0.00	P	88	6,409	156	158	107 | 94.7	-		-	
81)	**n-Propylbenzene**		**0.89694**	RL	**0.9**	12.02	0.00	P	95	26,831	91	120	27.2 | 23.6	92	9.35 | 11.4	65	9.58 | 9.90
82)	**2-Chlorotoluene**		**0.95999**	RL	**0.96**	12.08	0.00	P	80	6,069	126	91	249 | 289	63	41.4 | 36.0	-	
83)	4-Ethyltoluene		No Cal.	-	-	12.13	0.04	P	82	19,108	105	120	41.5 | 29.9	77	13.1 | 10.6	-	
84)	**1,3,5-Trimethylbenzene**		**0.92208**	RL	**0.92**	12.13	0.00	P	91	19,109	105	120	41.5 | 50.6	119	10.1 | 11.0	77	13.1 | 12.6
85)	**4-Chlorotoluene**		**0.98879**	RL	**0.99**	12.14	0.00	P	92	20,692	91	126	28.9 | 34.5	63	12.0 | 11.3	-	
86)	**tert-Butylbenzene**		**0.95916**	RL	**0.96**	12.33	0.00	P	92	5,287	134	119	328 | 340	91	195 | 215	-	
87)	**1,2,4-Trimethylbenzene**		**0.94551**	RL	**0.95**	12.36	0.00	P	90	20,041	105	120	43.3 | 50.1	-		-	
88)	Pentachloroethane		0.84361	QL-	<1.7	12.35	0.00	P	73	3,306	167	165	110 | 86.1	132	61.3 | 42.9	-	
89)	**sec-Butylbenzene**		**0.92114**	RL	**0.92**	12.46	0.00	P	90	24,139	105	134	25.0 | 20.4	-		-	
90)	**4-Isopropyltoluene**		**0.85359**	RL	**0.85**	12.54	0.00	P	95	19,519	119	134	26.7 | 28.5	91	19.5 | 22.4	-	
91)	**1,3-Dichlorobenzene**		**0.94431**	RL	**0.94**	12.53	0.00	P	98	12,373	146	148	63.4 | 63.8	111	37.8 | 35.3	-	
92)	**1,4-Dichlorobenzene**		**1.0113**	RL	**1.0**	12.59	0.01	P	94	13,511	146	111	41.3 | 37.8	148	66.5 | 61.5	-	
93)	**n-Butylbenzene**		**0.92048**	RL	**0.92**	12.78	0.00	P	92	10,553	92	91	168 | 179	134	43.8 | 50.5	-	
94)	**1,2-Dichlorobenzene**		**0.95971**	RL	**0.96**	12.81	0.01	P	87	11,931	146	148	54.9 | 64.6	111	31.2 | 40.4	-	
95)	Hexachloroethane		No Cal.	-	-	12.95	0.00	F	64	2,774	201	117	**85.4 | 129**	199	41.4 | 65.0	203	35.0 | 64.5
96)	**1,2-Dibromo-3-chloropropane**		**0.92587**	QL	**0.93**	13.24	-0.01	**F**	**59**	1,367	75	155	**56.6 | 104**	157	**82.2 | 123**	-	
97)	Nitrobenzene		No Cal.	-	-	(13.35)	-	-	0		123	51	0.00 | 62.1	77	0.00 | 146	-	
98)	**1,2,4-Trichlorobenzene**		**0.93221**	RL	**0.93**	13.69	0.00	P	92	7,871	180	182	103 | 97.2	184	27.8 | 29.6	145	20.9 | 30.6
99)	**Hexachlorobutadiene**		**0.92984**	RL	**0.93**	13.78	0.00	P	77	2,731	225	227	83.6 | 59.6	260	31.0 | 22.3	223	71.4 | 59.4
100	**Naphthalene**		**0.88536**	RL	**0.89**	13.84	0.00	P	95	21,611	128	127	10.9 | 12.5	129	9.36 | 11.6	-	
101	**1,2,3-Trichlorobenzene**		**0.92040**	RL	**0.92**	13.98	0.00	P	88	7,559	180	182	76.4 | 91.8	184	26.0 | 29.8	145	26.4 | 29.8

Uses lowest known RLs; project RLs may be higher. Qualitative P/F based only on output ratios at apex and may not reflect full peak or analyst review.

For analyst review assistance only.

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324007.D
Acq On : 23 Feb 2024 14:47
Operator :
Sample : CPTP02232404 - 1ppb
Misc : PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 26 12:49:46 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	6.251	168	127248	10.00	ppb		0.01
42) 1,4-Difluorobenzene	7.573	114	199732	10.00	ppb		0.01
50) Chlorobenzene-d5	11.041	117	176987	10.00	ppb		0.00
74) 1,4-Dichlorobenzene-d4	12.569	152	100322	10.00	ppb		0.00
System Monitoring Compounds							
35) Dibromofluoromethane (S)	6.119	113	5045	0.97	ppb		0.02
Spiked Amount 10.000			Recovery =	9.70%			
56) Toluene-d8 (S)	9.791	98	16602	0.96	ppb		0.00
Spiked Amount 10.000			Recovery =	9.60%			
76) 4-Bromofluorobenzene (S)	11.860	95	6896	0.99	ppb		0.00
Spiked Amount 10.000			Recovery =	9.90%			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.390	85	5984	0.8899	ppb		91
3) Chloromethane	1.553	50	9031	1.0230	ppb		92
4) Vinyl chloride	1.675	62	7833	1.0018	ppb		93
5) Bromomethane	1.980	94	5161	1.0274	ppb		75
6) Chloroethane	2.072	64	5181	1.0317	ppb		93
7) Trichlorofluoromethane	2.356	101	8332	0.9562	ppb		79
8) Diethyl ether	2.662	74	4103	1.0566	ppb		91
9) 1,1-Dichloroethene	2.906	96	5629	1.0440	ppb		98
10) Freon 113	0.000		0	N.D.			
11) Acetone	2.997	58	1281	0.9950	ppb		85
12) Iodomethane	3.068	142	10190	0.9963	ppb		97
13) Carbon disulfide	3.129	76	16998	0.9713	ppb		99
14) Allyl chloride	3.343	76	3459	0.9734	ppb		91
15) Methylene chloride	3.495	84	15970	0.9811	ppb		95
16) t-Butanol (TBA)	0.000		0	N.D.			
17) Acrylonitrile	3.831	52	1016	1.0120	ppb	#	79
18) Methyl t-butyl ether (...	3.872	73	17889	0.9732	ppb		89
19) trans-1,2-Dichloroethene	3.851	96	5720	0.9171	ppb		82
20) n-Hexane	0.000		0	N.D.			
21) 1,1-Dichloroethane	4.421	63	11423	1.0187	ppb		91
22) Vinyl acetate	4.543	86	974	1.0625	ppb	#	45
23) 2-chloro-1,3-butadiene	0.000		0	N.D.			
24) Diisopropyl ether (DIPE)	0.000		0	N.D.			
25) Ethyl t-butyl ether (E...	0.000		0	N.D.			
26) 2-Butanone (MEK)	0.000		0	N.D.			
27) cis-1,2-Dichloroethene	5.295	96	6600	0.9530	ppb		88
28) 2,2-Dichloropropane	5.285	77	8586	0.9674	ppb		97
29) Propionitrile	5.519	54	158	1.1161	ppb	#	1
30) Methyl acrylate	5.539	55	4919	1.0088	ppb		61
31) Methacrylonitrile	5.692	67	2195	0.8241	ppb	#	54
32) Bromochloromethane	5.672	128	3691	1.0794	ppb		91
33) Chloroform	5.844	83	10400	0.9561	ppb		81
34) Tetrahydrofuran	5.773	72	822	0.7511	ppb		89
36) 1,1,1-Trichloroethane	6.099	97	9697	1.0359	ppb		90
37) 1-Chlorobutane	6.322	56	13956	No Calib			
38) 1,1-Dichloropropene	6.394	75	7802	1.0595	ppb		94
39) Carbon tetrachloride	6.383	117	7878	1.0001	ppb		84
40) Benzene	6.760	78	24494	1.0059	ppb		83
41) 1,2-Dichloroethane	6.810	62	7411	0.9869	ppb		69
43) t- Amyl methyl ether (...	0.000		0	N.D.			
44) Trichloroethene	8.041	95	5591	0.9928	ppb		89
45) 1,2-Dichloropropane	8.468	63	5505	0.9720	ppb		96
46) Methyl methacrylate	8.783	69	3442	1.0392	ppb	#	78

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324007.D
Acq On : 23 Feb 2024 14:47
Operator :
Sample : CPTP02232404 - 1ppb
Misc : PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 26 12:49:46 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

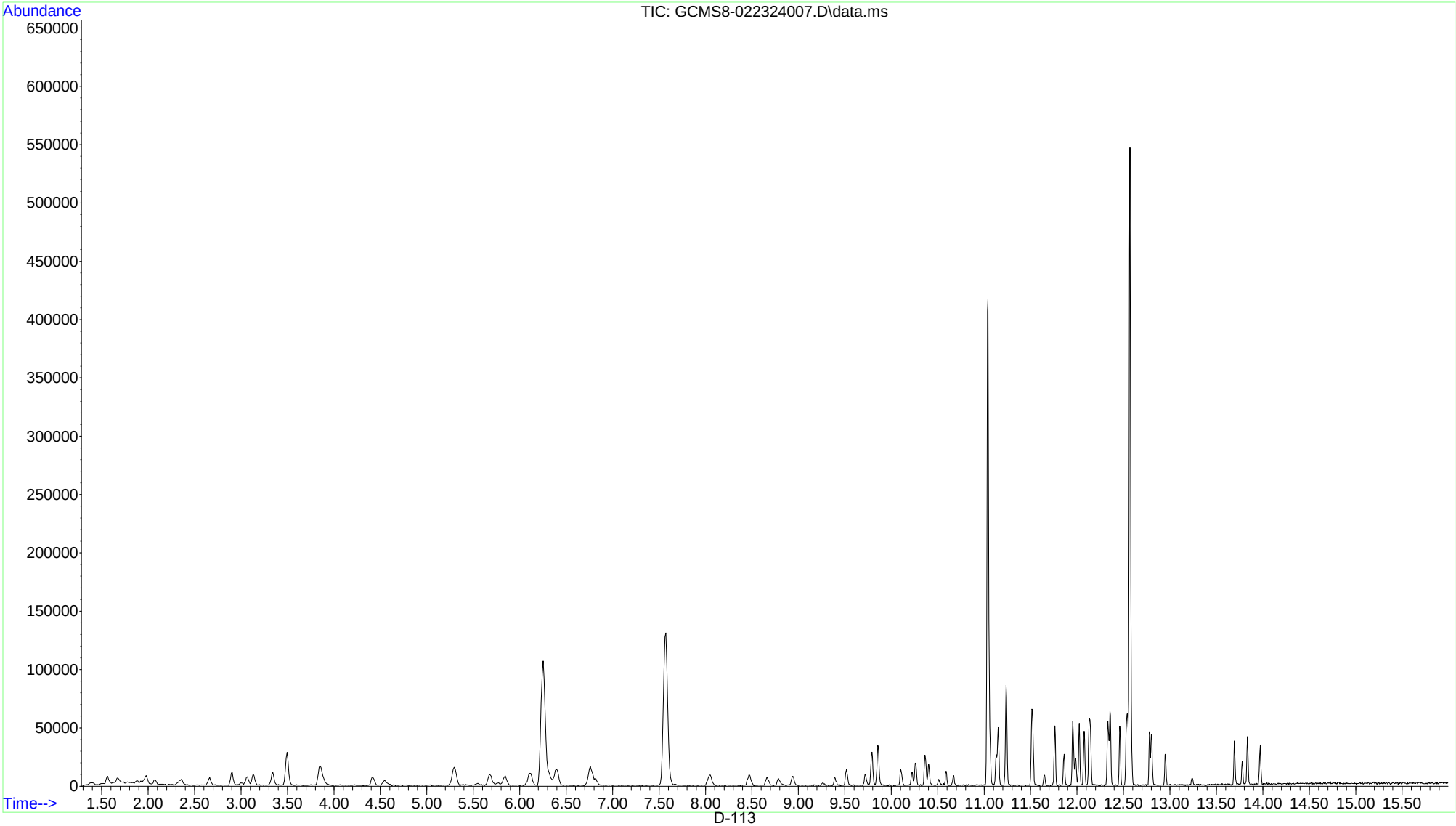
Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
47) Dibromomethane	8.661	93	3528	0.9793 ppb		95
48) Bromodichloromethane	8.936	83	6995	0.9596 ppb		98
49) 2-nitro-propane	9.266	43	1492	0.8699 ppb		61
51) Chloromethyl cyanide	0.000		0	N.D.		
52) 2-Chloroethyl vinyl ether	9.397	63	3524	0.9209 ppb		95
53) cis-1,3-Dichloropropene	9.518	75	8442	0.9785 ppb		97
54) 4-Methyl-2-pentanone	9.723	58	2312	1.0084 ppb		77
55) 1,1-Dichloro-2-propanone	0.000		0	N.D.		
57) Toluene	9.860	92	14137	1.0051 ppb		99
58) trans-1,3-Dichloropropene	10.101	75	7149	0.9137 ppb		95
59) Ethyl methacrylate	10.227	69	5952	0.8288 ppb		90
60) 1,1,2-Trichloroethane	10.264	83	4352	1.0360 ppb	#	75
61) 1,3-Dichloropropane	10.400	76	9455	1.0274 ppb		82
62) 2-Hexanone	10.511	43	3564	1.0128 ppb		90
63) Tetrachloroethene	10.358	164	5084	1.0607 ppb		90
64) Dibromochloromethane	10.590	129	5139	0.9328 ppb		87
65) 1,2-Dibromoethane	10.668	107	5100	0.9850 ppb		77
66) Chlorobenzene	11.062	112	14956	1.0001 ppb		96
67) 1,1,1,2-Tetrachloroethane	11.130	131	5270	0.9523 ppb		88
68) Ethylbenzene	11.151	91	25596	0.9957 ppb		90
69) m- & p-Xylenes	11.236	106	18963	1.8912 ppb		91
70) o-Xylene	11.514	106	10398	1.0146 ppb	#	76
71) Styrene	11.524	104	14607	0.9408 ppb		95
72) Bromoform	11.650	173	3300	1.0472 ppb		90
73) Isopropylbenzene	11.761	105	23320	0.9362 ppb		99
75) cis-1,4-dichloro-2-butene	0.000		0	N.D.		
77) 1,1,2,2-Tetrachloroethane	11.955	83	7152	0.9446 ppb		97
78) trans-1,4-Dichloro-2-b...	11.992	53	1601	0.9840 ppb		86
79) 1,2,3-Trichloropropane	11.981	110	2494	0.9015 ppb	#	63
80) Bromobenzene	11.955	156	6409	0.9652 ppb		88
81) n-Propylbenzene	12.023	91	26831	0.8969 ppb		95
82) 2-Chlorotoluene	12.081	126	6069	0.9600 ppb	#	80
83) 4-Ethyltoluene	12.128	105	19108	No Calib		
84) 1,3,5-Trimethylbenzene	12.128	105	19109	0.9221 ppb		91
85) 4-Chlorotoluene	12.144	91	20692	0.9888 ppb		92
86) tert-Butylbenzene	12.333	134	5287	0.9592 ppb		92
87) 1,2,4-Trimethylbenzene	12.359	105	20041	0.9455 ppb		90
88) Pentachloroethane	12.349	167	3306	0.8436 ppb		73
89) sec-Butylbenzene	12.459	105	24139	0.9211 ppb		90
90) 4-Isopropyltoluene	12.543	119	19519	0.8536 ppb		95
91) 1,3-Dichlorobenzene	12.533	146	12373	0.9443 ppb		98
92) 1,4-Dichlorobenzene	12.585	146	13511	1.0113 ppb		94
93) n-Butylbenzene	12.779	92	10553	0.9205 ppb		92
94) 1,2-Dichlorobenzene	12.806	146	11931	0.9597 ppb		87
95) Hexachloroethane	12.953	201	2774	No Calib	#	
96) 1,2-Dibromo-3-chloropr...	13.236	75	1367	0.9259 ppb	#	59
97) Nitrobenzene	0.000		0	N.D.		
98) 1,2,4-Trichlorobenzene	13.693	180	7871	0.9322 ppb		92
99) Hexachlorobutadiene	13.777	225	2731	0.9298 ppb		77
100) Naphthalene	13.835	128	21611	0.8854 ppb		95
101) 1,2,3-Trichlorobenzene	13.977	180	7559	0.9204 ppb		88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324007.D
Acq On : 23 Feb 2024 14:47
Operator :
Sample : CPTP02232404 - 1ppb
Misc : PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 26 12:49:46 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration



D-113

8260 Quantitation Review Report

C:\msdchem\1\data\2024\02-FEB\022324\GCMS8-022324008.D **CP** 02/23/24 008

Sample Name: CPTP02232405 - 2ppb
Data File Name: GCMS8-022324008.D
Date Acquired: 02/23/24 15:11
Vial Number: 7
Sample Multiplier: 1
Misc Info: PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,

Operator:
Data File Path: C:\msdchem\1\data\2024\02-FEB\02232
Instrument Method: VOC092623 INSTRUMENT SCAN.M
Quant. Method: VOC022324Final
Last Result Mod: 02/26/24 12:49
Last Cal Update: 02/26/24 12:39
Last Cal Mod: 02/26/24 12:39

#	Internal Standard	Response
1)	Pentafluorobenzene	126,730
42)	1,4-Difluorobenzene	199,292
50)	Chlorobenzene-d5	181,107
74)	1,4-Dichlorobenzene-d4	99,044

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
1)	Pentafluorobenzene		10	-	-	6.25	0.01	-	100	126,730	168	-		-		-	
2)	**Dichlorodifluoromethane**		**1.7531**	QL	**1.8**	1.39	0.01	P	82	11,740	85	87	24.1 | 34.5	-		-	
3)	**Chloromethane**		**1.9557**	QL	**2.0**	1.55	0.01	P	95	17,194	50	52	34.1 | 31.3	-		-	
4)	**Vinyl chloride**		**1.8708**	RL	**1.9**	1.67	0.01	P	84	14,568	62	64	39.0 | 30.5	-		-	
5)	**Bromomethane**		**2.0881**	QL	**2.1**	1.98	0.01	P	82	10,447	94	96	105 | 88.5	-		-	
6)	**Chloroethane**		**1.9254**	QL	**1.9**	2.07	0.01	P	87	9,630	64	66	26.6 | 34.3	-		-	
7)	**Trichlorofluoromethane**		**1.7811**	QL	**1.8**	2.35	0.00	P	97	15,457	101	103	59.5 | 61.6	66	11.4 | 12.7	-	
8)	**Diethyl ether**		**1.9264**	QL	**1.9**	2.65	0.00	P	84	7,450	74	45	129 | 103	59	139 | 129	-	
9)	**1,1-Dichloroethene**		**1.9989**	RL	**2.0**	2.90	0.00	P	75	10,734	96	61	176 | 139	63	53.6 | 47.0	-	
10)	Freon 113		No Cal.	-	-	(2.90)	-	-	0		101	151	0.00 | 82.4	103	0.00 | 64.1	153	0.00 | 53.1
11)	**Acetone**		**1.9530**	QL	**2.0**	3.00	0.03	P	70	1,920	58	43	320 | 266	-		-	
12)	**Iodomethane**		**1.9130**	RL	**1.9**	3.06	0.00	P	99	19,485	142	127	40.2 | 40.6	141	14.2 | 12.9	-	
13)	**Carbon disulfide**		**1.8072**	RL	**1.8**	3.13	0.01	P	100	31,497	76	78	9.16 | 9.20	-		-	
14)	**Allyl chloride**		**1.7363**	RL	**1.7**	3.34	0.01	P	80	6,145	76	78	37.0 | 30.7	41	227 | 283	39	165 | 175
15)	**Methylene chloride**		**2.0145**	QL	**2.0**	3.50	0.01	P	100	22,828	84	49	122 | 121	86	64.2 | 64.4	51	36.9 | 36.5
16)	t-Butanol (TBA)		No Cal.	-	-	(3.70)	-	-	0		59	57	0.00 | 8.40	-		-	
17)	**Acrylonitrile**		**2.0004**	QL	**2.0**	3.83	0.02	P	92	3,115	52	53	129 | 120	51	35.5 | 41.7	-	
18)	**Methyl t-butyl ether (MTBE)**		**1.9328**	RL	**1.9**	3.86	0.01	P	94	35,383	73	57	20.5 | 23.3	-		-	
19)	**trans-1,2-Dichloroethene**		**2.0450**	RL	**2.0**	3.84	0.01	P	86	12,703	96	61	116 | 137	98	60.9 | 65.3	-	
20)	n-Hexane		No Cal.	-	-	(4.22)	-	-	0		57	43	0.00 | 64.9	41	0.00 | 72.0	56	0.00 | 47.3
21)	**1,1-Dichloroethane**		**1.9485**	RL	**1.9**	4.41	0.00	P	95	21,760	63	65	30.0 | 33.7	83	14.2 | 15.0	-	
22)	**Vinyl acetate**		**1.7997**	QL	**1.8**	4.54	0.02	P	**1**	2,017	86	43	525 | 949	-		-	
23)	2-chloro-1,3-butadiene		No Cal.	-	-	(4.54)	-	-	0		53	88	0.00 | 58.3	52	0.00 | 23.5	-	
24)	Diisopropyl ether (DIPE)		No Cal.	-	-	(4.57)	-	-	0		45	43	0.00 | 38.9	87	0.00 | 24.3	-	
25)	Ethyl t-butyl ether (ETBE)		No Cal.	-	-	(5.12)	-	-	0		59	57	0.00 | 31.8	87	0.00 | 34.1	-	
26)	2-Butanone (MEK)		NR	ND	<0.44	(5.35)	-	-	0		72	43	0.00 | 353	57	0.00 | 29.9	-	
27)	**cis-1,2-Dichloroethene**		**1.9343**	RL	**1.9**	5.30	0.01	P	92	13,342	96	61	124 | 132	98	65.1 | 56.2	-	
28)	**2,2-Dichloropropane**		**1.9601**	RL	**2.0**	5.28	0.00	P	96	17,326	77	97	17.8 | 22.0	79	30.4 | 30.5	-	
29)	**Propionitrile**		**2.0285**	QL	**2.0**	5.48	0.02	**Inc**	**66**	1,213	54	52	**0.00 | 11.3**	55	**0.00 | 15.7**	-	
30)	**Methyl acrylate**		**1.9417**	QL	**1.9**	5.54	0.03	P	96	10,798	55	85	18.8 | 17.1	-		-	
31)	**Methacrylonitrile**		**1.7673**	QL	**1.8**	5.67	0.00	P	91	4,688	67	41	160 | 147	39	85.2 | 83.1	52	46.4 | 37.0
32)	**Bromochloromethane**		**1.8446**	RL	**1.8**	5.67	0.01	P	86	6,282	128	49	148 | 167	130	117 | 134	-	
33)	**Chloroform**		**1.9442**	RL	**1.9**	5.84	0.01	P	86	21,061	83	85	54.8 | 66.3	-		-	
34)	**Tetrahydrofuran**		**1.1854**	MDL	**1.2**	5.75	0.01	P	83	1,292	72	71	116 | 96.8	42	269 | 241	-	
35)	Dibromofluoromethane (S)		1.9338	Sur	-	6.10	0.00	P	94	10,018	113	111	106 | 102	192	16.6 | 22.1	81	16.4 | 14.3
36)	**1,1,1-Trichloroethane**		**1.8997**	RL	**1.9**	6.11	0.01	P	95	17,710	97	99	56.0 | 60.3	61	36.2 | 38.9	63	13.1 | 14.3
37)	1-Chlorobutane		No Cal.	-	-	6.31	0.01	P	97	24,033	56	49	4.25 | 3.40	-		-	
38)	**1,1-Dichloropropene**		**1.8603**	RL	**1.9**	6.39	0.00	P	92	13,643	75	39	61.8 | 55.5	110	31.1 | 36.4	77	28.4 | 31.4
39)	**Carbon tetrachloride**		**1.7571**	RL	**1.8**	6.38	0.00	P	89	13,785	117	119	112 | 100	-		-	
40)	**Benzene**		**1.9515**	RL	**2.0**	6.76	0.01	P	94	47,326	78	51	13.0 | 15.3	-		-	
41)	**1,2-Dichloroethane**		**1.9584**	RL	**2.0**	6.81	0.00	P	90	14,646	62	98	8.35 | 12.3	-		-	
42)	1,4-Difluorobenzene		10	-	-	7.56	0.00	-	100	199,292	114	-		-		-	
43)	t- Amyl methyl ether (TAME)		No Cal.	-	-	(7.05)	-	-	0		73	55	0.00 | 37.9	87	0.00 | 22.4	-	
44)	**Trichloroethene**		**2.0069**	RL	**2.0**	8.03	0.00	**F**	80	11,277	95	132	**83.2 | 115**	130	97.7 | 113	97	52.3 | 64.2
45)	**1,2-Dichloropropane**		**2.0034**	RL	**2.0**	8.47	0.01	P	91	11,321	63	112	11.5 | 5.70	76	52.7 | 47.7	-	

For analyst review assistance only.

8260 Quantitation Review Report

C:\msdchem\1\data\2024\02-FEB\022324\GCMS8-022324008.D **CP** 02/23/24 008

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
46)	**Methyl methacrylate**		**1.8908**	QL	**1.9**	8.77	0.00	P	94	7,674	69	41	122 | 133	100	40.4 | 40.0	39	62.8 | 64.9
47)	**Dibromomethane**		**2.0430**	RL	**2.0**	8.65	0.00	P	88	7,344	93	174	103 | 107	95	61.7 | 82.1	-	
48)	**Bromodichloromethane**		**1.8347**	RL	**1.8**	8.94	0.00	P	91	13,345	83	85	70.4 | 64.1	127	13.4 | 8.90	-	
49)	**2-nitro-propane**		**1.6162**	QL	**1.6**	9.26	0.00	P	94	2,766	43	39	31.6 | 28.5	-		-	
50)	Chlorobenzene-d5		10	-	-	11.04	0.01	P	95	181,107	117	82	51.5 | 54.8	119	30.5 | 31.9	54	18.4 | 22.3
51)	Chloromethyl cyanide		No Cal.	-	-	9.39	0.01	**F**	**34**	307	75	48	**0.00 | 39.0**	40	**0.00 | 44.5**	-	
52)	**2-Chloroethyl vinyl ether**		**1.8579**	QL	**1.9**	9.38	0.00	P	85	7,275	63	65	24.6 | 30.2	106	20.6 | 31.4	-	
53)	**cis-1,3-Dichloropropene**		**1.7961**	RL	**1.8**	9.51	0.00	P	91	15,857	75	77	25.7 | 33.4	39	45.3 | 47.1	110	29.7 | 21.7
54)	**4-Methyl-2-pentanone**		**1.8146**	QL	**1.8**	9.72	0.01	P	93	4,663	58	41	55.3 | 52.2	100	37.8 | 44.0	85	45.9 | 42.0
55)	1,1-Dichloro-2-propanone		No Cal.	-	-	(9.71)	-	-	0		83	63	0.00 | 56.4	91	0.00 | 22.8	-	
56)	Toluene-d8 (S)		1.9027	Sur	-	9.79	0.00	P	80	33,764	98	100	50.7 | 71.5	42	13.4 | 12.7	70	8.39 | 11.3
57)	**Toluene**		**1.9296**	RL	**1.9**	9.85	0.00	P	87	27,772	92	91	149 | 168	65	13.3 | 18.5	39	13.8 | 16.3
58)	**trans-1,3-Dichloropropene**		**1.7581**	RL	**1.8**	10.11	0.01	P	92	14,077	75	77	30.4 | 30.2	39.1	50.2 | 43.2	110	18.8 | 24.5
59)	**Ethyl methacrylate**		**1.7729**	QL	**1.8**	10.22	0.01	P	95	13,029	69	41	64.6 | 69.2	99	19.9 | 18.5	86	14.1 | 16.1
60)	**1,1,2-Trichloroethane**		**1.9231**	RL	**1.9**	10.26	0.00	P	86	8,267	83	97	99.1 | 125	61	71.9 | 70.3	85	68.3 | 59.8
61)	**1,3-Dichloropropane**		**1.8921**	RL	**1.9**	10.41	0.00	P	97	17,818	76	41	64.3 | 61.7	78	31.5 | 32.5	39	21.4 | 22.8
62)	**2-Hexanone**		**1.7508**	QL	**1.8**	10.51	0.01	P	89	7,388	43	58	50.7 | 59.4	57	19.0 | 21.2	100	9.73 | 16.0
63)	**Tetrachloroethene**		**1.8457**	RL	**1.8**	10.36	0.00	P	94	9,052	164	166	133 | 127	129	97.1 | 88.5	131	80.6 | 84.5
64)	**Dibromochloromethane**		**1.7877**	RL	**1.8**	10.59	0.00	P	98	10,078	129	127	77.8 | 79.2	-		-	
65)	**1,2-Dibromoethane**		**1.7623**	RL	**1.8**	10.67	0.01	P	88	9,337	107	109	101 | 89.0	188	5.82 | 2.80	-	
66)	**Chlorobenzene**		**1.9009**	RL	**1.9**	11.06	0.01	P	97	29,090	112	77	58.3 | 61.4	114	32.4 | 33.1	-	
67)	**1,1,1,2-Tetrachloroethane**		**1.8523**	RL	**1.9**	11.13	0.00	P	95	10,489	131	133	91.2 | 94.0	117	73.4 | 64.0	119	64.0 | 63.7
68)	**Ethylbenzene**		**1.9290**	RL	**1.9**	11.15	0.00	P	99	50,741	91	106	32.6 | 32.6	51	9.61 | 7.80	-	
69)	**m- & p-Xylenes**		**3.8483**	RL	**3.8**	11.24	0.00	P	90	39,484	106	91	205 | 188	105	45.1 | 41.4	77	26.6 | 24.3
70)	**o-Xylene**		**1.9491**	RL	**1.9**	11.51	0.00	P	88	20,440	106	91	191 | 206	105	36.7 | 48.7	-	
71)	**Styrene**		**1.8022**	RL	**1.8**	11.52	0.00	P	92	28,632	104	103	52.3 | 46.8	78	43.6 | 41.6	51	30.8 | 22.7
72)	**Bromoform**		**1.7708**	RL	**1.8**	11.65	0.00	P	96	6,276	173	175	47.8 | 46.3	254	8.22 | 12.5	-	
73)	**Isopropylbenzene**		**1.8566**	RL	**1.9**	11.76	0.00	P	97	47,323	105	120	25.8 | 27.0	77	16.8 | 14.5	79	11.7 | 11.8
74)	1,4-Dichlorobenzene-d4		10	-	-	12.57	0.00	P	100	99,044	152	115	55.1 | 55.2	150	157 | 157	-	
75)	cis-1,4-dichloro-2-butene		No Cal.	-	-	11.81	0.01	**F**	**7**	255	75	53	**0.00 | 106**	89	**0.00 | 47.5**	-	
76)	4-Bromofluorobenzene (S)		1.9724	Sur	-	11.86	0.01	P	95	13,502	95	174	76.5 | 75.6	176	82.5 | 73.8	75	48.6 | 47.6
77)	**1,1,2,2-Tetrachloroethane**		**1.9371**	RL	**1.9**	11.96	0.00	P	86	14,480	83	85	56.6 | 70.8	131	8.18 | 11.0	95	16.4 | 18.7
78)	**trans-1,4-Dichloro-2-butene**		**2.0499**	RL	**2.0**	11.99	0.00	P	82	3,731	53	88	41.2 | 55.9	124	28.8 | 23.1	-	
79)	**1,2,3-Trichloropropane**		**1.7794**	RL	**1.8**	11.98	0.00	P	96	4,860	110	75	274 | 269	39	72.2 | 79.2	-	
80)	**Bromobenzene**		**2.0360**	RL	**2.0**	11.96	0.00	P	94	13,347	156	158	89.3 | 94.7	-		-	
81)	**n-Propylbenzene**		**2.0233**	RL	**2.0**	12.02	0.00	P	99	59,754	91	120	23.6 | 23.6	92	11.2 | 11.4	65	10.8 | 9.90
82)	**2-Chlorotoluene**		**2.0181**	RL	**2.0**	12.08	0.00	P	99	12,596	126	91	292 | 289	63	35.7 | 36.0	-	
83)	4-Ethyltoluene		No Cal.	-	-	12.08	-0.01	**Inc**	**52**	127	105	120	**0.00 | 29.9**	77	**0.00 | 10.6**	-	
84)	**1,3,5-Trimethylbenzene**		**2.0050**	RL	**2.0**	12.13	0.00	P	97	41,021	105	120	52.1 | 50.6	119	13.5 | 11.0	77	14.3 | 12.6
85)	**4-Chlorotoluene**		**2.0309**	RL	**2.0**	12.14	0.00	P	94	41,958	91	126	31.4 | 34.5	63	14.0 | 11.3	-	
86)	**tert-Butylbenzene**		**1.9052**	RL	**1.9**	12.33	0.00	P	85	10,368	134	119	381 | 340	91	228 | 215	-	
87)	**1,2,4-Trimethylbenzene**		**1.8961**	RL	**1.9**	12.36	0.00	P	94	39,678	105	120	53.9 | 50.1	-		-	
88)	**Pentachloroethane**		**1.7465**	QL	**1.7**	12.35	0.00	P	88	6,757	167	165	79.4 | 86.1	132	57.2 | 42.9	-	
89)	**sec-Butylbenzene**		**1.9444**	RL	**1.9**	12.46	0.00	P	99	50,306	105	134	20.7 | 20.4	-		-	
90)	**4-Isopropyltoluene**		**1.8922**	RL	**1.9**	12.54	0.00	P	95	42,718	119	134	25.2 | 28.5	91	20.2 | 22.4	-	
91)	**1,3-Dichlorobenzene**		**2.0389**	RL	**2.0**	12.53	0.00	P	95	26,375	146	148	58.1 | 63.8	111	35.6 | 35.3	-	
92)	**1,4-Dichlorobenzene**		**1.9535**	RL	**2.0**	12.58	0.00	P	95	25,766	146	111	39.5 | 37.8	148	56.2 | 61.5	-	
93)	**n-Butylbenzene**		**1.8865**	RL	**1.9**	12.78	0.00	P	92	21,353	92	91	167 | 179	134	53.3 | 50.5	-	
94)	**1,2-Dichlorobenzene**		**1.9488**	RL	**1.9**	12.80	0.00	P	96	23,919	146	148	64.3 | 64.6	111	35.0 | 40.4	-	
95)	Hexachloroethane		No Cal.	-	-	12.95	0.00	**F**	81	5,293	201	117	**87.8 | 129**	199	62.4 | 65.0	203	64.8 | 64.5
96)	**1,2-Dibromo-3-chloropropane**		**1.7151**	RL	**1.7**	13.24	0.00	P	88	2,500	75	155	86.0 | 104	157	115 | 123	-	
97)	Nitrobenzene		No Cal.	-	-	(13.35)	-	-	0		123	51	0.00 | 62.1	77	0.00 | 146	-	
98)	**1,2,4-Trichlorobenzene**		**1.9262**	RL	**1.9**	13.69	0.00	P	93	16,056	180	182	104 | 97.2	184	31.9 | 29.6	145	23.5 | 30.6
99)	**Hexachlorobutadiene**		**2.2258**	RL	**2.2**	13.78	0.01	P	92	6,454	225	227	50.6 | 59.6	260	22.0 | 22.3	223	54.9 | 59.4
100	**Naphthalene**		**1.8524**	RL	**1.9**	13.84	0.00	P	98	44,641	128	127	12.2 | 12.5	129	10.4 | 11.6	-	
101	**1,2,3-Trichlorobenzene**		**1.9109**	RL	**1.9**	13.97	0.00	P	90	15,494	180	182	103 | 91.8	184	34.7 | 29.8	145	32.3 | 29.8

Uses lowest known RLs; project RLs may be higher. Qualitative P/F based only on output ratios at apex and may not reflect full peak or analyst review.

For analyst review assistance only.

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324008.D
Acq On : 23 Feb 2024 15:11
Operator :
Sample : CPTP02232405 - 2ppb
Misc : PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 26 12:49:51 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	6.251	168	126730	10.00	ppb		0.01
42) 1,4-Difluorobenzene	7.563	114	199292	10.00	ppb		0.00
50) Chlorobenzene-d5	11.041	117	181107	10.00	ppb		0.00
74) 1,4-Dichlorobenzene-d4	12.569	152	99044	10.00	ppb		0.00
System Monitoring Compounds							
35) Dibromofluoromethane (S)	6.099	113	10018	1.93	ppb		0.00
Spiked Amount 10.000			Recovery = 19.30%				
56) Toluene-d8 (S)	9.786	98	33764	1.90	ppb		0.00
Spiked Amount 10.000			Recovery = 19.00%				
76) 4-Bromofluorobenzene (S)	11.861	95	13502	1.97	ppb		0.00
Spiked Amount 10.000			Recovery = 19.70%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.391	85	11740	1.7531	ppb		82
3) Chloromethane	1.553	50	17194	1.9557	ppb		95
4) Vinyl chloride	1.665	62	14568	1.8708	ppb		84
5) Bromomethane	1.980	94	10447	2.0881	ppb		82
6) Chloroethane	2.072	64	9630	1.9254	ppb		87
7) Trichlorofluoromethane	2.346	101	15457	1.7811	ppb		97
8) Diethyl ether	2.651	74	7450	1.9264	ppb		84
9) 1,1-Dichloroethene	2.896	96	10734	1.9989	ppb	#	75
10) Freon 113	0.000		0	N.D.			
11) Acetone	2.997	58	1920	1.9530	ppb	#	70
12) Iodomethane	3.058	142	19485	1.9130	ppb		99
13) Carbon disulfide	3.129	76	31497	1.8072	ppb		100
14) Allyl chloride	3.343	76	6145	1.7363	ppb	#	80
15) Methylene chloride	3.495	84	22828	2.0145	ppb		100
16) t-Butanol (TBA)	0.000		0	N.D.			
17) Acrylonitrile	3.831	52	3115	2.0004	ppb		92
18) Methyl t-butyl ether (...	3.862	73	35383	1.9328	ppb		94
19) trans-1,2-Dichloroethene	3.841	96	12703	2.0450	ppb		86
20) n-Hexane	0.000		0	N.D.			
21) 1,1-Dichloroethane	4.411	63	21760	1.9485	ppb		95
22) Vinyl acetate	4.543	86	2017	1.7997	ppb	#	1
23) 2-chloro-1,3-butadiene	0.000		0	N.D.			
24) Diisopropyl ether (DIPE)	0.000		0	N.D.			
25) Ethyl t-butyl ether (E...	0.000		0	N.D.			
26) 2-Butanone (MEK)	0.000		0	N.D.			
27) cis-1,2-Dichloroethene	5.295	96	13342	1.9343	ppb		92
28) 2,2-Dichloropropane	5.275	77	17326	1.9601	ppb		96
29) Propionitrile	5.478	54	1213	2.0285	ppb		66
30) Methyl acrylate	5.539	55	10798	1.9417	ppb		96
31) Methacrylonitrile	5.672	67	4688	1.7673	ppb		91
32) Bromochloromethane	5.672	128	6282	1.8446	ppb		86
33) Chloroform	5.844	83	21061	1.9442	ppb		86
34) Tetrahydrofuran	5.753	72	1292	1.1854	ppb		83
36) 1,1,1-Trichloroethane	6.109	97	17710	1.8997	ppb		95
37) 1-Chlorobutane	6.312	56	24033	No Calib			
38) 1,1-Dichloropropene	6.394	75	13643	1.8603	ppb		92
39) Carbon tetrachloride	6.383	117	13785	1.7571	ppb		89
40) Benzene	6.760	78	47326	1.9515	ppb		94
41) 1,2-Dichloroethane	6.811	62	14646	1.9584	ppb		90
43) t- Amyl methyl ether (...	0.000		0	N.D.			
44) Trichloroethene	8.031	95	11277	2.0069	ppb	#	80
45) 1,2-Dichloropropane	8.468	63	11321	2.0034	ppb		91
46) Methyl methacrylate	8.773	69	7674	1.8908	ppb		94

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324008.D
Acq On : 23 Feb 2024 15:11
Operator :
Sample : CPTP02232405 - 2ppb
Misc : PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 26 12:49:51 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

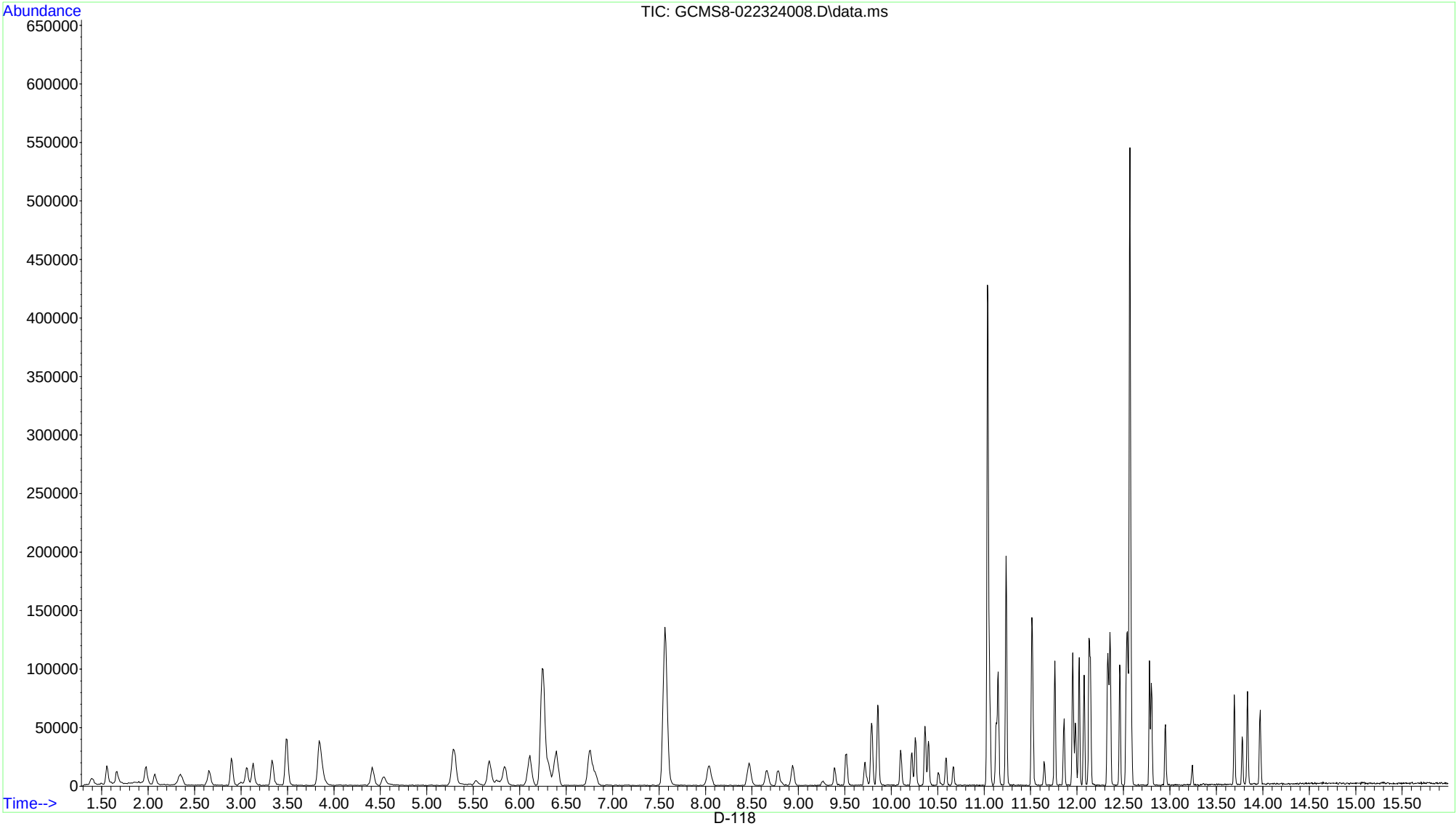
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
47) Dibromomethane	8.651	93	7344	2.0430	ppb		88
48) Bromodichloromethane	8.936	83	13345	1.8347	ppb		91
49) 2-nitro-propane	9.261	43	2766	1.6162	ppb		94
51) Chloromethyl cyanide	9.392	75	307	No Calib	#		
52) 2-Chloroethyl vinyl ether	9.382	63	7275	1.8579	ppb		85
53) cis-1,3-Dichloropropene	9.513	75	15857	1.7961	ppb		91
54) 4-Methyl-2-pentanone	9.723	58	4663	1.8146	ppb		93
55) 1,1-Dichloro-2-propanone	0.000		0	N.D.			
57) Toluene	9.854	92	27772	1.9296	ppb		87
58) trans-1,3-Dichloropropene	10.107	75	14077	1.7581	ppb		92
59) Ethyl methacrylate	10.222	69	13029	1.7729	ppb		95
60) 1,1,2-Trichloroethane	10.259	83	8267	1.9231	ppb		86
61) 1,3-Dichloropropane	10.406	76	17818	1.8921	ppb		97
62) 2-Hexanone	10.506	43	7388	1.7508	ppb		89
63) Tetrachloroethene	10.364	164	9052	1.8457	ppb		94
64) Dibromochloromethane	10.590	129	10078	1.7877	ppb		98
65) 1,2-Dibromoethane	10.668	107	9337	1.7623	ppb		88
66) Chlorobenzene	11.062	112	29090	1.9009	ppb		97
67) 1,1,1,2-Tetrachloroethane	11.125	131	10489	1.8523	ppb		95
68) Ethylbenzene	11.152	91	50741	1.9290	ppb		99
69) m- & p-Xylenes	11.236	106	39484	3.8483	ppb		90
70) o-Xylene	11.514	106	20440	1.9491	ppb		88
71) Styrene	11.524	104	28632	1.8022	ppb		92
72) Bromoform	11.645	173	6276	1.7708	ppb		96
73) Isopropylbenzene	11.761	105	47323	1.8566	ppb		97
75) cis-1,4-dichloro-2-butene	11.813	75	255	No Calib	#		
77) 1,1,2,2-Tetrachloroethane	11.955	83	14480	1.9371	ppb		86
78) trans-1,4-Dichloro-2-b...	11.987	53	3731	2.0499	ppb		82
79) 1,2,3-Trichloropropane	11.981	110	4860	1.7794	ppb		96
80) Bromobenzene	11.955	156	13347	2.0360	ppb		94
81) n-Propylbenzene	12.023	91	59754	2.0233	ppb		99
82) 2-Chlorotoluene	12.076	126	12596	2.0181	ppb		99
83) 4-Ethyltoluene	12.081	105	127	No Calib			
84) 1,3,5-Trimethylbenzene	12.128	105	41021	2.0050	ppb		97
85) 4-Chlorotoluene	12.144	91	41958	2.0309	ppb		94
86) tert-Butylbenzene	12.333	134	10368	1.9052	ppb	#	85
87) 1,2,4-Trimethylbenzene	12.359	105	39678	1.8961	ppb		94
88) Pentachloroethane	12.349	167	6757	1.7465	ppb		88
89) sec-Butylbenzene	12.459	105	50306	1.9444	ppb		99
90) 4-Isopropyltoluene	12.543	119	42718	1.8922	ppb		95
91) 1,3-Dichlorobenzene	12.533	146	26375	2.0389	ppb		95
92) 1,4-Dichlorobenzene	12.580	146	25766	1.9535	ppb		95
93) n-Butylbenzene	12.780	92	21353	1.8865	ppb		92
94) 1,2-Dichlorobenzene	12.801	146	23919	1.9488	ppb		96
95) Hexachloroethane	12.953	201	5293	No Calib	#		
96) 1,2-Dibromo-3-chloropr...	13.242	75	2500	1.7151	ppb		88
97) Nitrobenzene	0.000		0	N.D.			
98) 1,2,4-Trichlorobenzene	13.693	180	16056	1.9262	ppb		93
99) Hexachlorobutadiene	13.783	225	6454	2.2258	ppb		92
100) Naphthalene	13.835	128	44641	1.8524	ppb		98
101) 1,2,3-Trichlorobenzene	13.972	180	15494	1.9109	ppb		90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324008.D
Acq On : 23 Feb 2024 15:11
Operator :
Sample : CPTP02232405 - 2ppb
Misc : PAV 1150, 1153, 1144J, 1142F, 1143D, 1152,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 26 12:49:51 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration



D-118

8260 Quantitation Review Report

C:\msdchem\1\data\2024\02-FEB\022324\GCMS8-022324009.D **CP** 02/23/24 009

Sample Name: CPTP02232406 - 5ppb
Data File Name: GCMS8-022324009.D
Date Acquired: 02/23/24 15:34
Vial Number: 8
Sample Multiplier: 1
Misc Info: PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B

Operator:
Data File Path: C:\msdchem\1\data\2024\02-FEB\02232
Instrument Method: VOC092623 INSTRUMENT SCAN.M
Quant. Method: VOC022324Final
Last Result Mod: 02/26/24 12:49
Last Cal Update: 02/26/24 12:39
Last Cal Mod: 02/26/24 12:39

#	Internal Standard	Response
1)	Pentafluorobenzene	128,031
42)	1,4-Difluorobenzene	212,594
50)	Chlorobenzene-d5	186,433
74)	1,4-Dichlorobenzene-d4	102,129

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
1)	Pentafluorobenzene		10	-	-	6.25	0.01	-	100	128,031	168	-		-		-	
2)	**Dichlorodifluoromethane**		**4.4078**	RL	**4.4**	1.38	0.00	P	98	29,821	85	87	33.5 | 34.5	-		-	
3)	**Chloromethane**		**4.6255**	QL	**4.6**	1.54	0.00	P	97	41,084	50	52	33.1 | 31.3	-		-	
4)	**Vinyl chloride**		**4.5614**	RL	**4.6**	1.65	0.00	P	97	35,885	62	64	32.4 | 30.5	-		-	
5)	**Bromomethane**		**4.5837**	QL	**4.6**	1.97	0.00	P	94	23,168	94	96	82.8 | 88.5	-		-	
6)	**Chloroethane**		**4.9434**	QL	**4.9**	2.06	0.00	P	93	24,978	64	66	38.2 | 34.3	-		-	
7)	**Trichlorofluoromethane**		**4.6119**	RL	**4.6**	2.35	0.00	P	93	40,435	101	103	56.6 | 61.6	66	9.52 | 12.7	-	
8)	**Diethyl ether**		**4.6404**	RL	**4.6**	2.65	0.00	P	95	18,130	74	45	96.8 | 103	59	133 | 129	-	
9)	**1,1-Dichloroethene**		**4.8307**	RL	**4.8**	2.90	0.00	P	93	26,207	96	61	150 | 139	63	48.8 | 47.0	-	
10)	Freon 113		No Cal.	-	-	(2.90)	-	-	0		101	151	0.00 | 82.4	103	0.00 | 64.1	153	0.00 | 53.1
11)	**Acetone**		**4.5766**	QL	**4.6**	3.00	0.03	P	99	3,722	58	43	267 | 266	-		-	
12)	**Iodomethane**		**4.9771**	RL	**5.0**	3.06	0.00	P	96	51,216	142	127	38.4 | 40.6	141	14.7 | 12.9	-	
13)	**Carbon disulfide**		**4.6748**	RL	**4.7**	3.12	0.00	P	99	82,312	76	78	8.78 | 9.20	-		-	
14)	**Allyl chloride**		**4.7567**	RL	**4.8**	3.33	0.00	P	91	17,008	76	78	30.0 | 30.7	41	268 | 283	39	159 | 175
15)	**Methylene chloride**		**4.7351**	QL	**4.7**	3.49	0.00	P	98	41,476	84	49	123 | 121	86	67.0 | 64.4	51	38.4 | 36.5
16)	t-Butanol (TBA)		No Cal.	-	-	(3.70)	-	-	0		59	57	0.00 | 8.40	-		-	
17)	**Acrylonitrile**		**4.6714**	QL	**4.7**	3.81	0.00	P	89	8,889	52	53	105 | 120	51	40.5 | 41.7	-	
18)	**Methyl t-butyl ether (MTBE)**		**4.8482**	RL	**4.8**	3.86	0.01	P	96	89,667	73	57	21.5 | 23.3	-		-	
19)	**trans-1,2-Dichloroethene**		**4.7864**	RL	**4.8**	3.83	0.00	P	95	30,037	96	61	133 | 137	98	60.3 | 65.3	-	
20)	n-Hexane		No Cal.	-	-	(4.22)	-	-	0		57	43	0.00 | 64.9	41	0.00 | 72.0	56	0.00 | 47.3
21)	**1,1-Dichloroethane**		**4.8343**	RL	**4.8**	4.41	0.00	P	95	54,542	63	65	30.0 | 33.7	83	14.6 | 15.0	-	
22)	**Vinyl acetate**		**4.6466**	RL	**4.6**	4.53	0.01	P	**69**	6,122	86	43	816 | 949	-		-	
23)	2-chloro-1,3-butadiene		No Cal.	-	-	(4.54)	-	-	0		53	88	0.00 | 58.3	52	0.00 | 23.5	-	
24)	Diisopropyl ether (DIPE)		No Cal.	-	-	4.51	-0.06	**F**	**1**	369	45	43	**4010 | 38.9**	87	**0.00 | 24.3**	-	
25)	Ethyl t-butyl ether (ETBE)		No Cal.	-	-	(5.12)	-	-	0		59	57	0.00 | 31.8	87	0.00 | 34.1	-	
26)	**2-Butanone (MEK)**		**4.8862**	RL	**4.9**	5.36	0.01	P	95	3,413	72	43	362 | 353	57	26.8 | 29.9	-	
27)	**cis-1,2-Dichloroethene**		**4.9560**	RL	**5.0**	5.30	0.01	P	91	34,535	96	61	121 | 132	98	63.6 | 56.2	-	
28)	**2,2-Dichloropropane**		**4.9255**	RL	**4.9**	5.28	0.00	P	91	43,986	77	97	27.8 | 22.0	79	34.0 | 30.5	-	
29)	**Propionitrile**		**4.7178**	QL	**4.7**	5.47	0.01	**Inc**	**66**	4,369	54	52	**0.00 | 11.3**	55	**0.00 | 15.7**	-	
30)	**Methyl acrylate**		**4.7781**	QL	**4.8**	5.51	0.00	P	87	29,029	55	85	22.8 | 17.1	-		-	
31)	**Methacrylonitrile**		**4.4875**	QL	**4.5**	5.67	0.00	P	92	12,026	67	41	159 | 147	39	86.3 | 83.1	52	41.8 | 37.0
32)	**Bromochloromethane**		**4.9931**	RL	**5.0**	5.67	0.01	P	85	17,179	128	49	140 | 167	130	125 | 134	-	
33)	**Chloroform**		**4.8661**	RL	**4.9**	5.83	0.00	P	95	53,254	83	85	70.2 | 66.3	-		-	
34)	**Tetrahydrofuran**		**4.5346**	MDL	**4.5**	5.75	0.01	P	76	4,993	72	71	78.7 | 96.8	42	196 | 241	-	
35)	Dibromofluoromethane (S)		4.9335	Sur	-	6.10	0.00	P	97	25,820	113	111	101 | 102	192	16.7 | 22.1	81	15.5 | 14.3
36)	**1,1,1-Trichloroethane**		**4.7647**	RL	**4.8**	6.10	0.00	P	97	44,876	97	99	63.2 | 60.3	61	41.1 | 38.9	63	13.9 | 14.3
37)	1-Chlorobutane		No Cal.	-	-	6.30	0.00	P	97	61,022	56	49	4.34 | 3.40	-		-	
38)	**1,1-Dichloropropene**		**4.8746**	RL	**4.9**	6.38	-0.01	P	94	36,115	75	39	52.7 | 55.5	110	32.3 | 36.4	77	26.4 | 31.4
39)	**Carbon tetrachloride**		**4.8271**	RL	**4.8**	6.38	0.00	P	95	38,258	117	119	95.3 | 100	-		-	
40)	**Benzene**		**4.8910**	RL	**4.9**	6.75	0.00	P	99	119,832	78	51	15.0 | 15.3	-		-	
41)	**1,2-Dichloroethane**		**5.1509**	RL	**5.2**	6.80	-0.01	P	95	38,917	62	98	14.2 | 12.3	-		-	
42)	1,4-Difluorobenzene		10	-	-	7.56	0.00	-	100	212,594	114	-		-		-	
43)	t- Amyl methyl ether (TAME)		No Cal.	-	-	(7.05)	-	-	0		73	55	0.00 | 37.9	87	0.00 | 22.4	-	
44)	**Trichloroethene**		**4.7226**	RL	**4.7**	8.03	0.00	P	93	28,308	95	132	99.6 | 115	130	112 | 113	97	61.0 | 64.2
45)	**1,2-Dichloropropane**		**4.7574**	RL	**4.8**	8.47	0.01	P	97	28,678	63	112	5.75 | 5.70	76	45.8 | 47.7	-	

For analyst review assistance only.

8260 Quantitation Review Report

C:\msdchem\1\data\2024\02-FEB\022324\GCMS8-022324009.D **CP** 02/23/24 009

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
46)	**Methyl methacrylate**		**4.6845**	QL	**4.7**	8.77	0.00	P	87	23,023	69	41	120 | 133	100	31.5 | 40.0	39	52.6 | 64.9
47)	**Dibromomethane**		**4.7906**	RL	**4.8**	8.66	0.01	P	95	18,370	93	174	113 | 107	95	78.1 | 82.1	-	
48)	**Bromodichloromethane**		**4.8272**	RL	**4.8**	8.94	0.00	P	95	37,455	83	85	68.4 | 64.1	127	9.24 | 8.90	-	
49)	**2-nitro-propane**		**4.8108**	QL	**4.8**	9.26	0.00	P	92	8,783	43	39	32.9 | 28.5	-		-	
50)	Chlorobenzene-d5		10	-	-	11.04	0.01	P	99	186,433	117	82	54.5 | 54.8	119	32.8 | 31.9	54	21.3 | 22.3
51)	Chloromethyl cyanide		No Cal.	-	-	9.38	0.00	P	82	1,039	75	48	46.2 | 39.0	40	60.1 | 44.5	-	
52)	**2-Chloroethyl vinyl ether**		**4.8145**	QL	**4.8**	9.39	0.01	P	95	19,406	63	65	26.3 | 30.2	106	33.4 | 31.4	-	
53)	**cis-1,3-Dichloropropene**		**5.0628**	RL	**5.1**	9.51	-0.01	P	98	46,012	75	77	30.5 | 33.4	39	46.9 | 47.1	110	21.3 | 21.7
54)	**4-Methyl-2-pentanone**		**4.5975**	RL	**4.6**	9.71	0.00	P	93	12,963	58	41	56.3 | 52.2	100	34.2 | 44.0	85	42.4 | 42.0
55)	1,1-Dichloro-2-propanone		No Cal.	-	-	9.71	0.00	Inc	61	620	83	63	82.5 | 56.4	91	**0.00 | 22.8**	-	
56)	Toluene-d8 (S)		4.8046	Sur	-	9.79	0.00	P	93	87,766	98	100	64.3 | 71.5	42	11.6 | 12.7	70	11.6 | 11.3
57)	**Toluene**		**4.9473**	RL	**4.9**	9.85	0.00	P	90	73,297	92	91	152 | 168	65	18.1 | 18.5	39	14.6 | 16.3
58)	**trans-1,3-Dichloropropene**		**4.9380**	RL	**4.9**	10.10	0.00	P	98	40,700	75	77	31.4 | 30.2	39.1	42.5 | 43.2	110	25.4 | 24.5
59)	**Ethyl methacrylate**		**5.0062**	RL	**5.0**	10.22	0.00	P	91	37,872	69	41	78.9 | 69.2	99	16.8 | 18.5	86	15.6 | 16.1
60)	**1,1,2-Trichloroethane**		**4.9174**	RL	**4.9**	10.26	0.00	P	98	21,760	83	97	122 | 125	61	71.8 | 70.3	85	59.8 | 59.8
61)	**1,3-Dichloropropane**		**4.9362**	RL	**4.9**	10.40	0.00	P	94	47,852	76	41	55.7 | 61.7	78	31.0 | 32.5	39	18.9 | 22.8
62)	**2-Hexanone**		**4.8112**	RL	**4.8**	10.51	0.01	P	96	23,573	43	58	55.7 | 59.4	57	20.8 | 21.2	100	16.8 | 16.0
63)	**Tetrachloroethene**		**4.9181**	RL	**4.9**	10.36	0.00	P	91	24,830	164	166	116 | 127	129	81.0 | 88.5	131	77.0 | 84.5
64)	**Dibromochloromethane**		**4.6562**	RL	**4.7**	10.59	0.00	P	100	27,020	129	127	78.9 | 79.2	-		-	
65)	**1,2-Dibromoethane**		**4.8892**	RL	**4.9**	10.67	0.01	P	98	26,665	107	109	91.2 | 89.0	188	5.22 | 2.80	-	
66)	**Chlorobenzene**		**4.9683**	RL	**5.0**	11.06	0.00	P	98	78,268	112	77	62.6 | 61.4	114	31.4 | 33.1	-	
67)	**1,1,1,2-Tetrachloroethane**		**4.8158**	RL	**4.8**	11.13	0.01	P	98	28,072	131	133	90.4 | 94.0	117	64.2 | 64.0	119	63.2 | 63.7
68)	**Ethylbenzene**		**4.9445**	RL	**4.9**	11.15	0.00	P	96	133,886	91	106	29.8 | 32.6	51	8.68 | 7.80	-	
69)	**m- & p-Xylenes**		**10.007**	RL	**10**	11.24	0.00	P	99	105,694	106	91	188 | 188	105	43.0 | 41.4	77	24.9 | 24.3
70)	**o-Xylene**		**4.8067**	RL	**4.8**	11.51	0.00	P	98	51,890	106	91	209 | 206	105	45.1 | 48.7	-	
71)	**Styrene**		**4.9602**	RL	**5.0**	11.52	0.00	P	98	81,121	104	103	48.6 | 46.8	78	43.1 | 41.6	51	22.3 | 22.7
72)	**Bromoform**		**4.6329**	RL	**4.6**	11.65	0.00	P	97	18,265	173	175	47.4 | 46.3	254	9.27 | 12.5	-	
73)	**Isopropylbenzene**		**4.9441**	RL	**4.9**	11.76	0.00	P	98	129,726	105	120	27.5 | 27.0	77	15.5 | 14.5	79	9.77 | 11.8
74)	1,4-Dichlorobenzene-d4		10	-	-	12.57	0.00	P	97	102,129	152	115	57.3 | 55.2	150	162 | 157	-	
75)	cis-1,4-dichloro-2-butene		No Cal.	-	-	11.81	0.01	F	49	566	75	53	**63.2 | 106**	89	**0.00 | 47.5**	-	
76)	4-Bromofluorobenzene (S)		4.9318	Sur	-	11.86	0.00	P	87	34,812	95	174	61.1 | 75.6	176	59.9 | 73.8	75	49.5 | 47.6
77)	**1,1,2,2-Tetrachloroethane**		**5.1852**	RL	**5.2**	11.96	0.00	P	84	39,967	83	85	53.1 | 70.8	131	9.64 | 11.0	95	17.5 | 18.7
78)	**trans-1,4-Dichloro-2-butene**		**5.0608**	RL	**5.1**	11.99	0.00	P	84	10,111	53	88	42.6 | 55.9	124	17.8 | 23.1	-	
79)	**1,2,3-Trichloropropane**		**4.7026**	RL	**4.7**	11.98	0.00	P	92	13,244	110	75	254 | 269	39	73.6 | 79.2	-	
80)	**Bromobenzene**		**4.8659**	RL	**4.9**	11.96	0.00	P	95	32,892	156	158	89.6 | 94.7	-		-	
81)	**n-Propylbenzene**		**5.1107**	RL	**5.1**	12.02	0.00	P	99	155,635	91	120	23.0 | 23.6	92	10.3 | 11.4	65	9.79 | 9.90
82)	**2-Chlorotoluene**		**4.8120**	RL	**4.8**	12.08	0.00	P	81	30,969	126	91	329 | 289	63	39.1 | 36.0	-	
83)	4-Ethyltoluene		No Cal.	-	-	12.08	-0.01	F	65	702	105	120	37.3 | 29.9	77	**46.6 | 10.6**	-	
84)	**1,3,5-Trimethylbenzene**		**5.0257**	RL	**5.0**	12.13	0.00	P	99	106,027	105	120	50.5 | 50.6	119	13.6 | 11.0	77	13.5 | 12.6
85)	**4-Chlorotoluene**		**5.1003**	RL	**5.1**	12.14	0.00	P	98	108,654	91	126	33.4 | 34.5	63	12.5 | 11.3	-	
86)	**tert-Butylbenzene**		**5.0406**	RL	**5.0**	12.33	0.00	P	86	28,285	134	119	381 | 340	91	225 | 215	-	
87)	**1,2,4-Trimethylbenzene**		**5.1977**	RL	**5.2**	12.36	0.00	P	92	112,154	105	120	44.9 | 50.1	-		-	
88)	**Pentachloroethane**		**4.7771**	RL	**4.8**	12.35	0.00	P	92	19,058	167	165	83.6 | 86.1	132	55.0 | 42.9	-	
89)	**sec-Butylbenzene**		**5.0525**	RL	**5.1**	12.46	0.00	P	95	134,788	105	134	18.2 | 20.4	-		-	
90)	**4-Isopropyltoluene**		**5.1055**	RL	**5.1**	12.54	0.00	P	95	118,851	119	134	25.7 | 28.5	91	20.3 | 22.4	-	
91)	**1,3-Dichlorobenzene**		**4.8873**	RL	**4.9**	12.53	0.00	P	94	65,191	146	148	57.3 | 63.8	111	33.7 | 35.3	-	
92)	**1,4-Dichlorobenzene**		**4.9955**	RL	**5.0**	12.59	0.01	P	96	67,942	146	111	33.2 | 37.8	148	63.5 | 61.5	-	
93)	**n-Butylbenzene**		**4.8618**	RL	**4.9**	12.78	0.00	P	98	56,743	92	91	178 | 179	134	45.6 | 50.5	-	
94)	**1,2-Dichlorobenzene**		**5.0595**	RL	**5.1**	12.80	0.00	P	95	64,032	146	148	61.3 | 64.6	111	44.5 | 40.4	-	
95)	Hexachloroethane		No Cal.	-	-	12.95	0.00	P	96	13,655	201	117	134 | 129	199	65.7 | 65.0	203	68.1 | 64.5
96)	**1,2-Dibromo-3-chloropropane**		**5.0225**	RL	**5.0**	13.24	-0.01	F	70	7,549	75	155	**63.2 | 104**	157	97.7 | 123	-	
97)	Nitrobenzene		No Cal.	-	-	13.35	0.00	P	81	531	123	51	52.7 | 62.1	77	174 | 146	-	
98)	**1,2,4-Trichlorobenzene**		**4.4939**	RL	**4.5**	13.69	0.00	P	98	38,627	180	182	95.6 | 97.2	184	28.7 | 29.6	145	28.7 | 30.6
99)	**Hexachlorobutadiene**		**4.5208**	RL	**4.5**	13.78	0.00	P	94	13,517	225	227	62.0 | 59.6	260	28.7 | 22.3	223	63.2 | 59.4
100	**Naphthalene**		**4.7691**	RL	**4.8**	13.84	0.00	P	99	118,507	128	127	12.7 | 12.5	129	10.7 | 11.6	-	
101	**1,2,3-Trichlorobenzene**		**4.7894**	RL	**4.8**	13.97	0.00	P	99	40,042	180	182	92.7 | 91.8	184	28.8 | 29.8	145	29.2 | 29.8

Uses lowest known RLs; project RLs may be higher. Qualitative P/F based only on output ratios at apex and may not reflect full peak or analyst review.

For analyst review assistance only.

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324009.D
Acq On : 23 Feb 2024 15:34
Operator :
Sample : CPTP02232406 - 5ppb
Misc : PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 26 12:49:56 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	6.251	168	128031	10.00	ppb		0.01
42) 1,4-Difluorobenzene	7.563	114	212594	10.00	ppb		0.00
50) Chlorobenzene-d5	11.041	117	186433	10.00	ppb		0.00
74) 1,4-Dichlorobenzene-d4	12.570	152	102129	10.00	ppb		0.00
System Monitoring Compounds							
35) Dibromofluoromethane (S)	6.099	113	25820	4.93	ppb		0.00
Spiked Amount 10.000			Recovery = 49.30%				
56) Toluene-d8 (S)	9.786	98	87766	4.80	ppb		0.00
Spiked Amount 10.000			Recovery = 48.00%				
76) 4-Bromofluorobenzene (S)	11.855	95	34812	4.93	ppb		0.00
Spiked Amount 10.000			Recovery = 49.30%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.380	85	29821	4.4078	ppb		98
3) Chloromethane	1.543	50	41084	4.6255	ppb		97
4) Vinyl chloride	1.655	62	35885	4.5614	ppb		97
5) Bromomethane	1.970	94	23168	4.5837	ppb		94
6) Chloroethane	2.062	64	24978	4.9434	ppb		93
7) Trichlorofluoromethane	2.346	101	40435	4.6119	ppb		93
8) Diethyl ether	2.652	74	18130	4.6404	ppb		95
9) 1,1-Dichloroethene	2.896	96	26207	4.8307	ppb		93
10) Freon 113	0.000		0	N.D.			
11) Acetone	2.997	58	3722	4.5766	ppb		99
12) Iodomethane	3.058	142	51216	4.9771	ppb		96
13) Carbon disulfide	3.119	76	82312	4.6748	ppb		99
14) Allyl chloride	3.333	76	17008	4.7567	ppb		91
15) Methylene chloride	3.485	84	41476	4.7351	ppb		98
16) t-Butanol (TBA)	0.000		0	N.D.			
17) Acrylonitrile	3.811	52	8889	4.6714	ppb		89
18) Methyl t-butyl ether (...	3.862	73	89667	4.8482	ppb		96
19) trans-1,2-Dichloroethene	3.831	96	30037	4.7864	ppb		95
20) n-Hexane	0.000		0	N.D.			
21) 1,1-Dichloroethane	4.411	63	54542	4.8343	ppb		95
22) Vinyl acetate	4.533	86	6122	4.6466	ppb	#	69
23) 2-chloro-1,3-butadiene	0.000		0	N.D.			
24) Diisopropyl ether (DIPE)	4.512	45	369	No Calib	#		
25) Ethyl t-butyl ether (E...	0.000		0	N.D.			
26) 2-Butanone (MEK)	5.356	72	3413	4.8862	ppb		95
27) cis-1,2-Dichloroethene	5.295	96	34535	4.9560	ppb		91
28) 2,2-Dichloropropane	5.275	77	43986	4.9255	ppb		91
29) Propionitrile	5.468	54	4369	4.7178	ppb		66
30) Methyl acrylate	5.509	55	29029	4.7781	ppb		87
31) Methacrylonitrile	5.672	67	12026	4.4875	ppb		92
32) Bromochloromethane	5.672	128	17179	4.9931	ppb		85
33) Chloroform	5.834	83	53254	4.8661	ppb		95
34) Tetrahydrofuran	5.753	72	4993	4.5346	ppb	#	76
36) 1,1,1-Trichloroethane	6.099	97	44876	4.7647	ppb		97
37) 1-Chlorobutane	6.302	56	61022	No Calib			
38) 1,1-Dichloropropene	6.383	75	36115	4.8746	ppb		94
39) Carbon tetrachloride	6.383	117	38258	4.8271	ppb		95
40) Benzene	6.750	78	119832	4.8910	ppb		99
41) 1,2-Dichloroethane	6.800	62	38917	5.1509	ppb		95
43) t- Amyl methyl ether (...	0.000		0	N.D.			
44) Trichloroethene	8.031	95	28308	4.7226	ppb		93
45) 1,2-Dichloropropane	8.468	63	28678	4.7574	ppb		97
46) Methyl methacrylate	8.773	69	23023	4.6845	ppb		87

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324009.D
Acq On : 23 Feb 2024 15:34
Operator :
Sample : CPTP02232406 - 5ppb
Misc : PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 26 12:49:56 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

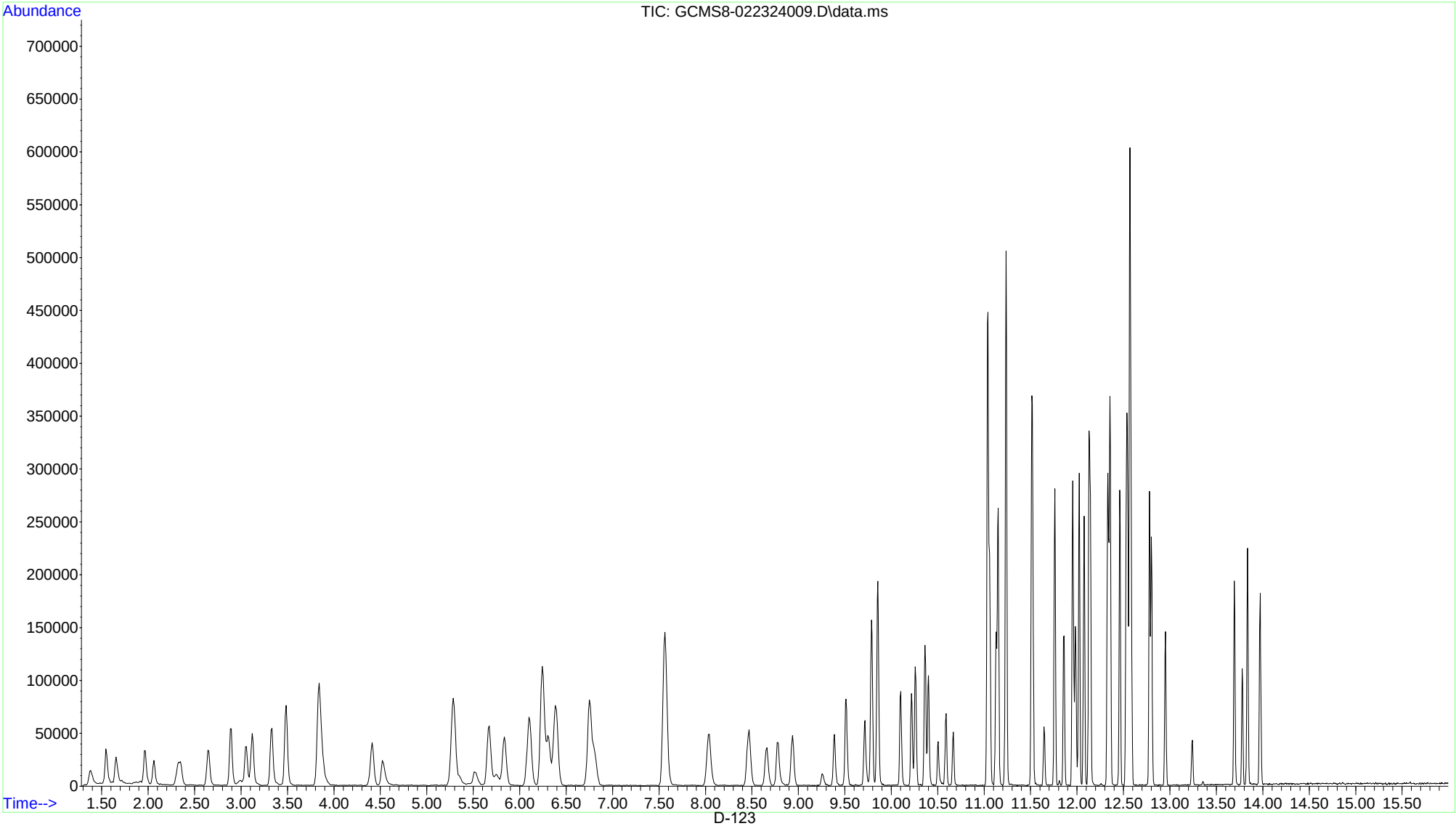
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
47) Dibromomethane	8.661	93	18370	4.7906	ppb		95
48) Bromodichloromethane	8.936	83	37455	4.8272	ppb		95
49) 2-nitro-propane	9.261	43	8783	4.8108	ppb		92
51) Chloromethyl cyanide	9.382	75	1039	No Calib			
52) 2-Chloroethyl vinyl ether	9.387	63	19406	4.8145	ppb		95
53) cis-1,3-Dichloropropene	9.508	75	46012	5.0628	ppb		98
54) 4-Methyl-2-pentanone	9.713	58	12963	4.5975	ppb		93
55) 1,1-Dichloro-2-propanone	9.713	83	620	No Calib			
57) Toluene	9.854	92	73297	4.9473	ppb		90
58) trans-1,3-Dichloropropene	10.101	75	40700	4.9380	ppb		98
59) Ethyl methacrylate	10.217	69	37872	5.0062	ppb		91
60) 1,1,2-Trichloroethane	10.259	83	21760	4.9174	ppb		98
61) 1,3-Dichloropropane	10.401	76	47852	4.9362	ppb		94
62) 2-Hexanone	10.506	43	23573	4.8112	ppb		96
63) Tetrachloroethene	10.364	164	24830	4.9181	ppb		91
64) Dibromochloromethane	10.590	129	27020	4.6562	ppb		100
65) 1,2-Dibromoethane	10.668	107	26665	4.8892	ppb		98
66) Chlorobenzene	11.057	112	78268	4.9683	ppb		98
67) 1,1,1,2-Tetrachloroethane	11.131	131	28072	4.8158	ppb		98
68) Ethylbenzene	11.152	91	133886	4.9445	ppb		96
69) m- & p-Xylenes	11.236	106	105694	10.0072	ppb		99
70) o-Xylene	11.514	106	51890	4.8067	ppb		98
71) Styrene	11.524	104	81121	4.9602	ppb		98
72) Bromoform	11.645	173	18265	4.6329	ppb		97
73) Isopropylbenzene	11.761	105	129726	4.9441	ppb		98
75) cis-1,4-dichloro-2-butene	11.813	75	566	No Calib	#		
77) 1,1,2,2-Tetrachloroethane	11.955	83	39967	5.1852	ppb		84
78) trans-1,4-Dichloro-2-b...	11.987	53	10111	5.0608	ppb		84
79) 1,2,3-Trichloropropane	11.981	110	13244	4.7026	ppb		92
80) Bromobenzene	11.955	156	32892	4.8659	ppb		95
81) n-Propylbenzene	12.023	91	155635	5.1107	ppb		99
82) 2-Chlorotoluene	12.076	126	30969	4.8120	ppb	#	81
83) 4-Ethyltoluene	12.081	105	702	No Calib	#		
84) 1,3,5-Trimethylbenzene	12.128	105	106027	5.0257	ppb		99
85) 4-Chlorotoluene	12.144	91	108654	5.1003	ppb		98
86) tert-Butylbenzene	12.333	134	28285	5.0406	ppb	#	86
87) 1,2,4-Trimethylbenzene	12.359	105	112154	5.1977	ppb		92
88) Pentachloroethane	12.349	167	19058	4.7771	ppb		92
89) sec-Butylbenzene	12.459	105	134788	5.0525	ppb		95
90) 4-Isopropyltoluene	12.543	119	118851	5.1055	ppb		95
91) 1,3-Dichlorobenzene	12.533	146	65191	4.8873	ppb		94
92) 1,4-Dichlorobenzene	12.585	146	67942	4.9955	ppb		96
93) n-Butylbenzene	12.780	92	56743	4.8618	ppb		98
94) 1,2-Dichlorobenzene	12.801	146	64032	5.0595	ppb		95
95) Hexachloroethane	12.953	201	13655	No Calib			
96) 1,2-Dibromo-3-chloropr...	13.236	75	7549	5.0225	ppb	#	70
97) Nitrobenzene	13.352	123	531	No Calib			
98) 1,2,4-Trichlorobenzene	13.693	180	38627	4.4939	ppb		98
99) Hexachlorobutadiene	13.777	225	13517	4.5208	ppb		94
100) Naphthalene	13.835	128	118507	4.7691	ppb		99
101) 1,2,3-Trichlorobenzene	13.972	180	40042	4.7894	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324009.D
Acq On : 23 Feb 2024 15:34
Operator :
Sample : CPTP02232406 - 5ppb
Misc : PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 26 12:49:56 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration



D-123

8260 Quantitation Review Report

C:\msdchem\1\data\2024\02-FEB\022324\GCMS8-022324010.D **CP** 02/23/24 010

Sample Name: CPTP02232401 - 10ppb
Data File Name: GCMS8-022324010.D
Date Acquired: 02/23/24 15:57
Vial Number: 9
Sample Multiplier: 1
Misc Info: PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B

Operator:
Data File Path: C:\msdchem\1\data\2024\02-FEB\02232
Instrument Method: VOC092623 INSTRUMENT SCAN.M
Quant. Method: VOC022324Final
Last Result Mod: 02/26/24 12:50
Last Cal Update: 02/26/24 12:39
Last Cal Mod: 02/26/24 12:39

#	Internal Standard	Response
1)	Pentafluorobenzene	119,747
42)	1,4-Difluorobenzene	192,189
50)	Chlorobenzene-d5	177,566
74)	1,4-Dichlorobenzene-d4	97,720

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
1)	Pentafluorobenzene		10	-	-	6.24	0.00	-	100	119,747	168	-		-		-	
2)	**Dichlorodifluoromethane**		**11.796**	RL	**12**	1.38	0.00	P	100	74,640	85	87	34.5 | 34.5	-		-	
3)	**Chloromethane**		**10.434**	RL	**10**	1.54	0.00	P	100	86,676	50	52	31.3 | 31.3	-		-	
4)	**Vinyl chloride**		**10.982**	RL	**11**	1.65	0.00	P	100	80,805	62	64	30.5 | 30.5	-		-	
5)	**Bromomethane**		**10.283**	RL	**10**	1.97	0.00	P	100	48,612	94	96	88.5 | 88.5	-		-	
6)	**Chloroethane**		**10.078**	RL	**10**	2.06	0.00	P	100	47,625	64	66	34.3 | 34.3	-		-	
7)	**Trichlorofluoromethane**		**10.575**	RL	**11**	2.35	0.00	P	100	86,714	101	103	61.6 | 61.6	66	12.7 | 12.7	-	
8)	**Diethyl ether**		**10.135**	RL	**10**	2.65	0.00	P	100	37,036	74	45	103 | 103	59	129 | 129	-	
9)	**1,1-Dichloroethene**		**10.375**	RL	**10**	2.90	0.00	P	100	52,644	96	61	139 | 139	63	47.0 | 47.0	-	
10)	Freon 113		No Cal.	-	-	(2.90)	-	-	0		101	151	0.00 | 82.4	103	0.00 | 64.1	153	0.00 | 53.1
11)	**Acetone**		**9.6519**	RL	**9.7**	2.97	0.00	P	100	6,706	58	43	266 | 266	-		-	
12)	**Iodomethane**		**10.409**	RL	**10**	3.06	0.00	P	100	100,178	142	127	40.6 | 40.6	141	12.9 | 12.9	-	
13)	**Carbon disulfide**		**10.134**	RL	**10**	3.12	0.00	P	100	166,898	76	78	9.17 | 9.20	-		-	
14)	**Allyl chloride**		**9.7760**	RL	**9.8**	3.33	0.00	P	100	32,693	76	78	30.7 | 30.7	41	283 | 283	39	175 | 175
15)	**Methylene chloride**		**9.9398**	RL	**9.9**	3.49	0.00	P	100	71,739	84	49	121 | 121	86	64.4 | 64.4	51	36.5 | 36.5
16)	t-Butanol (TBA)		No Cal.	-	-	(3.70)	-	-	0		59	57	0.00 | 8.40	-		-	
17)	**Acrylonitrile**		**9.8842**	RL	**9.9**	3.81	0.00	P	100	18,795	52	53	120 | 120	51	41.7 | 41.7	-	
18)	**Methyl t-butyl ether (MTBE)**		**10.185**	RL	**10**	3.85	0.00	P	100	176,179	73	57	23.3 | 23.3	-		-	
19)	**trans-1,2-Dichloroethene**		**10.039**	RL	**10**	3.83	0.00	P	100	58,925	96	61	137 | 137	98	65.3 | 65.3	-	
20)	n-Hexane		No Cal.	-	-	(4.22)	-	-	0		57	43	0.00 | 64.9	41	0.00 | 72.0	56	0.00 | 47.3
21)	**1,1-Dichloroethane**		**9.6678**	RL	**9.7**	4.41	0.00	P	100	102,017	63	65	33.7 | 33.7	83	15.0 | 15.0	-	
22)	**Vinyl acetate**		**9.9289**	RL	**9.9**	4.52	0.00	P	100	12,814	86	43	949 | 949	-		-	
23)	2-chloro-1,3-butadiene		No Cal.	-	-	(4.54)	-	-	0		53	88	0.00 | 58.3	52	0.00 | 23.5	-	
24)	Diisopropyl ether (DIPE)		No Cal.	-	-	4.50	-0.07	**F**	**1**	246	45	43	**5410 | 38.9**	87	**0.00 | 24.3**	-	
25)	Ethyl t-butyl ether (ETBE)		No Cal.	-	-	(5.12)	-	-	0		59	57	0.00 | 31.8	87	0.00 | 34.1	-	
26)	**2-Butanone (MEK)**		**10.349**	RL	**10**	5.35	0.00	P	100	7,966	72	43	353 | 353	57	29.9 | 29.9	-	
27)	**cis-1,2-Dichloroethene**		**10.370**	RL	**10**	5.29	0.00	P	100	67,587	96	61	132 | 132	98	56.2 | 56.2	-	
28)	**2,2-Dichloropropane**		**10.401**	RL	**10**	5.27	0.00	P	100	86,873	77	97	22.0 | 22.0	79	30.5 | 30.5	-	
29)	**Propionitrile**		**10.337**	RL	**10**	5.46	0.00	P	100	10,230	54	52	11.3 | 11.3	55	15.7 | 15.7	-	
30)	**Methyl acrylate**		**9.5139**	RL	**9.5**	5.51	0.00	P	100	55,448	55	85	17.1 | 17.1	-		-	
31)	**Methacrylonitrile**		**10.101**	RL	**10**	5.67	0.00	P	100	25,319	67	41	147 | 147	39	83.1 | 83.1	52	37.0 | 37.0
32)	**Bromochloromethane**		**9.6478**	RL	**9.6**	5.66	0.00	P	100	31,046	128	49	167 | 167	130	134 | 134	-	
33)	**Chloroform**		**9.9854**	RL	**10**	5.83	0.00	P	100	102,209	83	85	66.3 | 66.3	-		-	
34)	**Tetrahydrofuran**		**10.894**	RL	**11**	5.74	0.00	P	100	11,219	72	71	96.8 | 96.8	42	241 | 241	-	
35)	Dibromofluoromethane (S)		10.205	Sur	-	6.10	0.00	P	100	49,952	113	111	102 | 102	192	22.1 | 22.1	81	14.3 | 14.3
36)	**1,1,1-Trichloroethane**		**10.331**	RL	**10**	6.10	0.00	P	100	91,003	97	99	60.3 | 60.3	61	38.9 | 38.9	63	14.3 | 14.3
37)	1-Chlorobutane		No Cal.	-	-	6.30	0.00	P	100	113,045	56	49	3.36 | 3.40	-		-	
38)	**1,1-Dichloropropene**		**9.9628**	RL	**10**	6.39	0.00	P	100	69,037	75	39	55.5 | 55.5	110	36.4 | 36.4	77	31.4 | 31.4
39)	**Carbon tetrachloride**		**9.8826**	RL	**9.9**	6.38	0.00	P	100	73,259	117	119	100 | 100	-		-	
40)	**Benzene**		**10.060**	RL	**10**	6.75	0.00	P	100	230,527	78	51	15.3 | 15.3	-		-	
41)	**1,2-Dichloroethane**		**10.162**	RL	**10**	6.81	0.00	P	100	71,811	62	98	12.3 | 12.3	-		-	
42)	1,4-Difluorobenzene		10	-	-	7.56	0.00	-	100	192,189	114	-		-		-	
43)	t- Amyl methyl ether (TAME)		No Cal.	-	-	(7.05)	-	-	0		73	55	0.00 | 37.9	87	0.00 | 22.4	-	
44)	**Trichloroethene**		**9.9555**	RL	**10**	8.03	0.00	P	100	53,947	95	132	115 | 115	130	113 | 113	97	64.2 | 64.2
45)	**1,2-Dichloropropane**		**10.197**	RL	**10**	8.46	0.00	P	100	55,570	63	112	5.69 | 5.70	76	47.7 | 47.7	-	

For analyst review assistance only.

8260 Quantitation Review Report

C:\msdchem\1\data\2024\02-FEB\022324\GCMS8-022324010.D **CP** 02/23/24 010

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
46)	**Methyl methacrylate**		**9.6399**	RL	**9.6**	8.77	0.00	P	100	44,604	69	41	133 | 133	100	40.0 | 40.0	39	64.9 | 64.9
47)	**Dibromomethane**		**10.253**	RL	**10**	8.65	0.00	P	100	35,544	93	174	107 | 107	95	82.1 | 82.1	-	
48)	**Bromodichloromethane**		**10.298**	RL	**10**	8.94	0.00	P	100	72,238	83	85	64.1 | 64.1	127	8.88 | 8.90	-	
49)	**2-nitro-propane**		**9.9064**	QL	**9.9**	9.26	0.00	P	100	16,350	43	39	28.5 | 28.5	-		-	
50)	Chlorobenzene-d5		10	-	-	11.04	0.00	P	100	177,566	117	82	54.8 | 54.8	119	31.9 | 31.9	54	22.3 | 22.3
51)	Chloromethyl cyanide		No Cal.	-	-	9.38	0.00	P	100	3,215	75	48	39.0 | 39.0	40	44.5 | 44.5	-	
52)	**2-Chloroethyl vinyl ether**		**9.4445**	RL	**9.4**	9.38	0.00	P	100	36,258	63	65	30.2 | 30.2	106	31.4 | 31.4	-	
53)	**cis-1,3-Dichloropropene**		**9.6839**	RL	**9.7**	9.51	0.00	P	100	83,823	75	77	33.4 | 33.4	39	47.1 | 47.1	110	21.7 | 21.7
54)	**4-Methyl-2-pentanone**		**9.2504**	RL	**9.3**	9.71	0.00	P	100	25,345	58	41	52.2 | 52.2	100	44.0 | 44.0	85	42.0 | 42.0
55)	1,1-Dichloro-2-propanone		No Cal.	-	-	9.71	0.00	P	100	1,529	83	63	56.4 | 56.4	91	22.8 | 22.8	-	
56)	Toluene-d8 (S)		9.8553	Sur	-	9.79	0.00	P	100	171,465	98	100	71.5 | 71.5	42	12.7 | 12.7	70	11.3 | 11.3
57)	**Toluene**		**9.9024**	RL	**9.9**	9.85	0.00	P	100	139,732	92	91	168 | 168	65	18.5 | 18.5	39	16.3 | 16.3
58)	**trans-1,3-Dichloropropene**		**9.8963**	RL	**9.9**	10.10	0.00	P	100	77,688	75	77	30.2 | 30.2	39.1	43.2 | 43.2	110	24.5 | 24.5
59)	**Ethyl methacrylate**		**10.101**	RL	**10**	10.22	0.00	P	100	72,777	69	41	69.2 | 69.2	99	18.5 | 18.5	86	16.1 | 16.1
60)	**1,1,2-Trichloroethane**		**9.8869**	RL	**9.9**	10.26	0.00	P	100	41,670	83	97	125 | 125	61	70.3 | 70.3	85	59.8 | 59.8
61)	**1,3-Dichloropropane**		**9.8466**	RL	**9.8**	10.40	0.00	P	100	90,914	76	41	61.7 | 61.7	78	32.5 | 32.5	39	22.8 | 22.8
62)	**2-Hexanone**		**9.1317**	RL	**9.1**	10.50	0.00	P	100	43,922	43	58	59.4 | 59.4	57	21.2 | 21.2	100	16.0 | 16.0
63)	**Tetrachloroethene**		**9.4957**	RL	**9.5**	10.36	0.00	P	100	45,661	164	166	127 | 127	129	88.5 | 88.5	131	84.5 | 84.5
64)	**Dibromochloromethane**		**9.6990**	RL	**9.7**	10.59	0.00	P	100	53,607	129	127	79.2 | 79.2	-		-	
65)	**1,2-Dibromoethane**		**9.7526**	RL	**9.8**	10.66	0.00	P	100	50,660	107	109	89.0 | 89.0	188	2.84 | 2.80	-	
66)	**Chlorobenzene**		**9.7030**	RL	**9.7**	11.06	0.00	P	100	145,585	112	77	61.4 | 61.4	114	33.1 | 33.1	-	
67)	**1,1,1,2-Tetrachloroethane**		**9.7443**	RL	**9.7**	11.13	0.00	P	100	54,100	131	133	94.0 | 94.0	117	64.0 | 64.0	119	63.7 | 63.7
68)	**Ethylbenzene**		**9.8657**	RL	**9.9**	11.15	0.00	P	100	254,436	91	106	32.6 | 32.6	51	7.84 | 7.80	-	
69)	**m- & p-Xylenes**		**20.574**	RL	**21**	11.24	0.00	P	100	206,965	106	91	188 | 188	105	41.4 | 41.4	77	24.3 | 24.3
70)	**o-Xylene**		**9.6334**	RL	**9.6**	11.51	0.00	P	100	99,050	106	91	206 | 206	105	48.7 | 48.7	-	
71)	**Styrene**		**10.240**	RL	**10**	11.52	0.00	P	100	159,496	104	103	46.8 | 46.8	78	41.6 | 41.6	51	22.7 | 22.7
72)	**Bromoform**		**9.2417**	RL	**9.2**	11.65	0.00	P	100	35,501	173	175	46.3 | 46.3	254	12.5 | 12.5	-	
73)	**Isopropylbenzene**		**10.167**	RL	**10**	11.76	0.00	P	100	254,091	105	120	27.0 | 27.0	77	14.5 | 14.5	79	11.8 | 11.8
74)	1,4-Dichlorobenzene-d4		10	-	-	12.57	0.00	P	100	97,720	152	115	55.2 | 55.2	150	157 | 157	-	
75)	cis-1,4-dichloro-2-butene		No Cal.	-	-	11.81	0.00	**F**	**68**	1,332	75	53	**74.5 | 106**	89	23.4 | 47.5	-	
76)	4-Bromofluorobenzene (S)		10.162	Sur	-	11.86	0.00	P	100	68,632	95	174	75.6 | 75.6	176	73.8 | 73.8	75	47.6 | 47.6
77)	**1,1,2,2-Tetrachloroethane**		**9.8913**	RL	**9.9**	11.95	0.00	P	100	72,950	83	85	70.8 | 70.8	131	11.0 | 11.0	95	18.7 | 18.7
78)	**trans-1,4-Dichloro-2-butene**		**9.1001**	RL	**9.1**	11.99	0.00	P	100	17,715	53	88	55.9 | 55.9	124	23.1 | 23.1	-	
79)	**1,2,3-Trichloropropane**		**9.6231**	RL	**9.6**	11.98	0.00	P	100	25,932	110	75	269 | 269	39	79.2 | 79.2	-	
80)	**Bromobenzene**		**9.9657**	RL	**10**	11.95	0.00	P	100	64,457	156	158	94.7 | 94.7	-		-	
81)	**n-Propylbenzene**		**10.290**	RL	**10**	12.02	0.00	P	100	299,833	91	120	23.6 | 23.6	92	11.4 | 11.4	65	9.88 | 9.90
82)	**2-Chlorotoluene**		**10.161**	RL	**10**	12.08	0.00	P	100	62,574	126	91	289 | 289	63	36.0 | 36.0	-	
83)	4-Ethyltoluene		No Cal.	-	-	12.08	-0.02	**F**	**31**	1,114	105	120	**0.00 | 29.9**	77	**51.3 | 10.6**	-	
84)	**1,3,5-Trimethylbenzene**		**10.394**	RL	**10**	12.13	0.00	P	100	209,809	105	120	50.6 | 50.6	119	11.0 | 11.0	77	12.6 | 12.6
85)	**4-Chlorotoluene**		**10.070**	RL	**10**	12.14	0.00	P	100	205,267	91	126	34.5 | 34.5	63	11.3 | 11.3	-	
86)	**tert-Butylbenzene**		**9.6633**	RL	**9.7**	12.33	0.00	P	100	51,884	134	119	340 | 340	91	215 | 215	-	
87)	**1,2,4-Trimethylbenzene**		**10.332**	RL	**10**	12.36	0.00	P	100	213,308	105	120	50.1 | 50.1	-		-	
88)	**Pentachloroethane**		**9.7335**	RL	**9.7**	12.35	0.00	P	100	37,155	167	165	86.1 | 86.1	132	42.9 | 42.9	-	
89)	**sec-Butylbenzene**		**10.189**	RL	**10**	12.46	0.00	P	100	260,072	105	134	20.4 | 20.4	-		-	
90)	**4-Isopropyltoluene**		**10.099**	RL	**10**	12.54	0.00	P	100	224,952	119	134	28.5 | 28.5	91	22.4 | 22.4	-	
91)	**1,3-Dichlorobenzene**		**9.8094**	RL	**9.8**	12.53	0.00	P	100	125,197	146	148	63.8 | 63.8	111	35.3 | 35.3	-	
92)	**1,4-Dichlorobenzene**		**9.8584**	RL	**9.9**	12.58	0.00	P	100	128,292	146	111	37.8 | 37.8	148	61.5 | 61.5	-	
93)	**n-Butylbenzene**		**10.022**	RL	**10**	12.78	0.00	P	100	111,918	92	91	179 | 179	134	50.5 | 50.5	-	
94)	**1,2-Dichlorobenzene**		**10.032**	RL	**10**	12.80	0.00	P	100	121,482	146	148	64.6 | 64.6	111	40.4 | 40.4	-	
95)	Hexachloroethane		No Cal.	-	-	12.95	0.00	P	100	26,078	201	117	129 | 129	199	65.0 | 65.0	203	64.5 | 64.5
96)	**1,2-Dibromo-3-chloropropane**		**10.030**	RL	**10**	13.24	0.00	P	100	14,424	75	155	104 | 104	157	123 | 123	-	
97)	Nitrobenzene		No Cal.	-	-	13.35	0.00	P	100	1,495	123	51	62.1 | 62.1	77	146 | 146	-	
98)	**1,2,4-Trichlorobenzene**		**9.6354**	RL	**9.6**	13.69	0.00	P	100	79,245	180	182	97.2 | 97.2	184	29.6 | 29.6	145	30.6 | 30.6
99)	**Hexachlorobutadiene**		**10.309**	RL	**10**	13.78	0.00	P	100	29,492	225	227	59.6 | 59.6	260	22.3 | 22.3	223	59.4 | 59.4
100	**Naphthalene**		**10.029**	RL	**10**	13.84	0.00	P	100	238,453	128	127	12.5 | 12.5	129	11.6 | 11.6	-	
101	**1,2,3-Trichlorobenzene**		**9.7900**	RL	**9.8**	13.97	0.00	P	100	78,317	180	182	91.8 | 91.8	184	29.8 | 29.8	145	29.8 | 29.8

Uses lowest known RLs; project RLs may be higher. Qualitative P/F based only on output ratios at apex and may not reflect full peak or analyst review.

For analyst review assistance only.

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324010.D
Acq On : 23 Feb 2024 15:57
Operator :
Sample : CPTP02232401 - 10ppb
Misc : PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 26 12:50:01 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	6.241	168	119747	10.00	ppb	0.00
42) 1,4-Difluorobenzene	7.563	114	192189	10.00	ppb	0.00
50) Chlorobenzene-d5	11.036	117	177566	10.00	ppb	0.00
74) 1,4-Dichlorobenzene-d4	12.569	152	97720	10.00	ppb	0.00
System Monitoring Compounds						
35) Dibromofluoromethane (S)	6.099	113	49952	10.20	ppb	0.00
Spiked Amount 10.000			Recovery = 102.00%			
56) Toluene-d8 (S)	9.786	98	171465	9.86	ppb	0.00
Spiked Amount 10.000			Recovery = 98.60%			
76) 4-Bromofluorobenzene (S)	11.855	95	68632	10.16	ppb	0.00
Spiked Amount 10.000			Recovery = 101.60%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.380	85	74640	11.7958	ppb	100
3) Chloromethane	1.543	50	86676	10.4335	ppb	100
4) Vinyl chloride	1.655	62	80805	10.9818	ppb	100
5) Bromomethane	1.970	94	48612	10.2831	ppb	100
6) Chloroethane	2.062	64	47625	10.0775	ppb	100
7) Trichlorofluoromethane	2.346	101	86714	10.5746	ppb	100
8) Diethyl ether	2.651	74	37036	10.1351	ppb	100
9) 1,1-Dichloroethene	2.895	96	52644	10.3751	ppb	100
10) Freon 113	0.000		0	N.D.		
11) Acetone	2.967	58	6706	9.6519	ppb	100
12) Iodomethane	3.058	142	100178	10.4086	ppb	100
13) Carbon disulfide	3.119	76	166898	10.1344	ppb	100
14) Allyl chloride	3.333	76	32693	9.7760	ppb	100
15) Methylene chloride	3.485	84	71739	9.9398	ppb	100
16) t-Butanol (TBA)	0.000		0	N.D.		
17) Acrylonitrile	3.811	52	18795	9.8842	ppb	100
18) Methyl t-butyl ether (...	3.851	73	176179	10.1848	ppb	100
19) trans-1,2-Dichloroethene	3.831	96	58925	10.0393	ppb	100
20) n-Hexane	0.000		0	N.D.		
21) 1,1-Dichloroethane	4.411	63	102017	9.6678	ppb	100
22) Vinyl acetate	4.522	86	12814	9.9289	ppb	100
23) 2-chloro-1,3-butadiene	0.000		0	N.D.		
24) Diisopropyl ether (DIPE)	4.502	45	246	No Calib	#	
25) Ethyl t-butyl ether (E...	0.000		0	N.D.		
26) 2-Butanone (MEK)	5.346	72	7966	10.3487	ppb	100
27) cis-1,2-Dichloroethene	5.285	96	67587	10.3702	ppb	100
28) 2,2-Dichloropropane	5.275	77	86873	10.4010	ppb	100
29) Propionitrile	5.458	54	10230	10.3373	ppb	100
30) Methyl acrylate	5.509	55	55448	9.5139	ppb	100
31) Methacrylonitrile	5.672	67	25319	10.1014	ppb	100
32) Bromochloromethane	5.661	128	31046	9.6478	ppb	100
33) Chloroform	5.834	83	102209	9.9854	ppb	100
34) Tetrahydrofuran	5.743	72	11219	10.8938	ppb	100
36) 1,1,1-Trichloroethane	6.099	97	91003	10.3306	ppb	100
37) 1-Chlorobutane	6.302	56	113045	No Calib		
38) 1,1-Dichloropropene	6.394	75	69037	9.9628	ppb	100
39) Carbon tetrachloride	6.383	117	73259	9.8826	ppb	100
40) Benzene	6.749	78	230527	10.0600	ppb	100
41) 1,2-Dichloroethane	6.810	62	71811	10.1622	ppb	100
43) t- Amyl methyl ether (...	0.000		0	N.D.		
44) Trichloroethene	8.031	95	53947	9.9555	ppb	100
45) 1,2-Dichloropropane	8.458	63	55570	10.1972	ppb	100
46) Methyl methacrylate	8.773	69	44604	9.6399	ppb	100

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324010.D
Acq On : 23 Feb 2024 15:57
Operator :
Sample : CPTP02232401 - 10ppb
Misc : PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 26 12:50:01 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

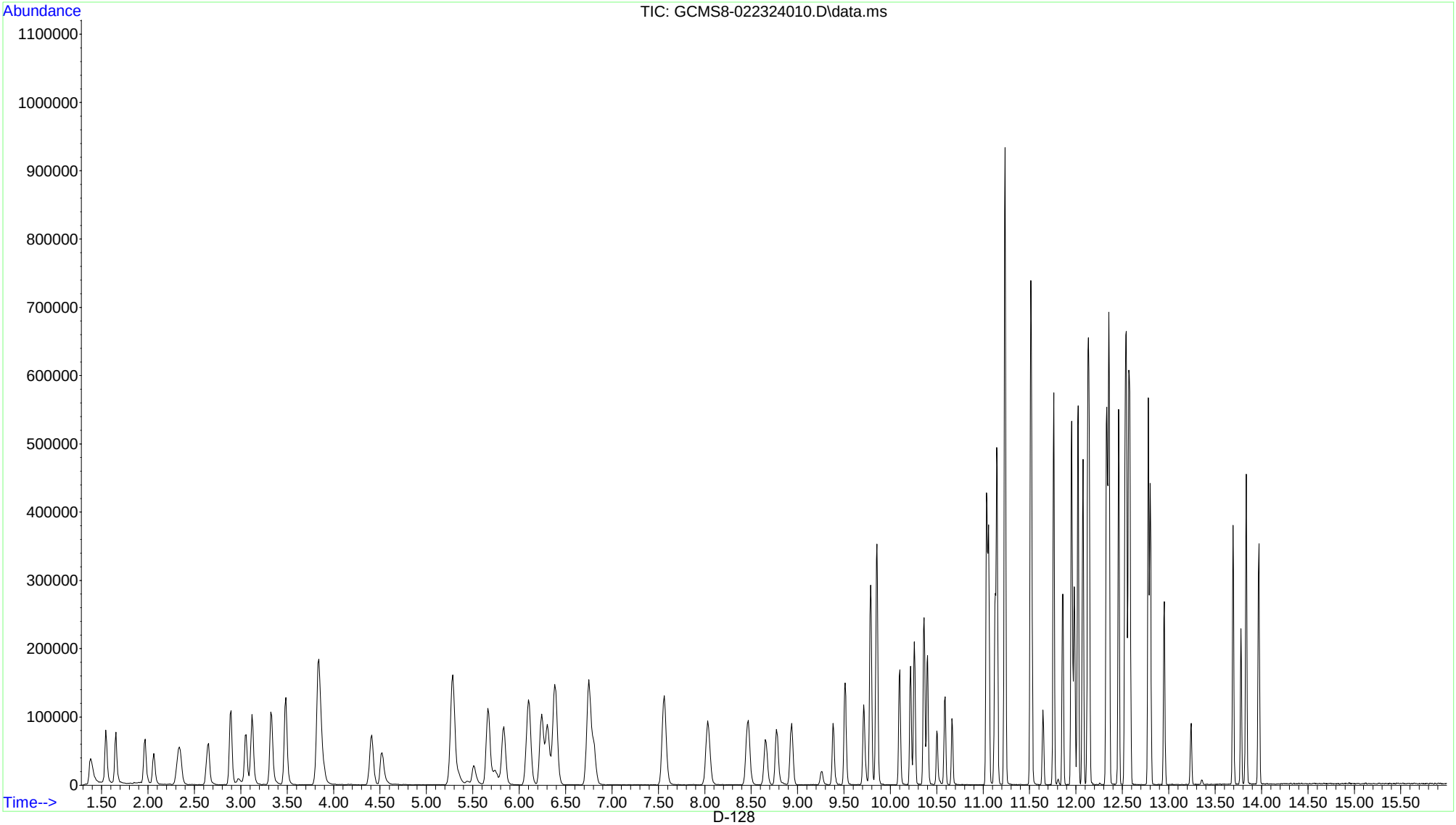
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
47) Dibromomethane	8.651	93	35544	10.2533	ppb	100
48) Bromodichloromethane	8.936	83	72238	10.2985	ppb	100
49) 2-nitro-propane	9.261	43	16350	9.9064	ppb	100
51) Chloromethyl cyanide	9.382	75	3215	No Calib		
52) 2-Chloroethyl vinyl ether	9.382	63	36258	9.4445	ppb	100
53) cis-1,3-Dichloropropene	9.513	75	83823	9.6839	ppb	100
54) 4-Methyl-2-pentanone	9.713	58	25345	9.2504	ppb	100
55) 1,1-Dichloro-2-propanone	9.713	83	1529	No Calib		
57) Toluene	9.854	92	139732	9.9024	ppb	100
58) trans-1,3-Dichloropropene	10.101	75	77688	9.8963	ppb	100
59) Ethyl methacrylate	10.217	69	72777	10.1006	ppb	100
60) 1,1,2-Trichloroethane	10.259	83	41670	9.8869	ppb	100
61) 1,3-Dichloropropane	10.401	76	90914	9.8466	ppb	100
62) 2-Hexanone	10.500	43	43922	9.1317	ppb	100
63) Tetrachloroethene	10.364	164	45661	9.4957	ppb	100
64) Dibromochloromethane	10.590	129	53607	9.6990	ppb	100
65) 1,2-Dibromoethane	10.663	107	50660	9.7526	ppb	100
66) Chlorobenzene	11.057	112	145585	9.7030	ppb	100
67) 1,1,1,2-Tetrachloroethane	11.125	131	54100	9.7443	ppb	100
68) Ethylbenzene	11.151	91	254436	9.8657	ppb	100
69) m- & p-Xylenes	11.236	106	206965	20.5741	ppb	100
70) o-Xylene	11.514	106	99050	9.6334	ppb	100
71) Styrene	11.524	104	159496	10.2396	ppb	100
72) Bromoform	11.645	173	35501	9.2417	ppb	100
73) Isopropylbenzene	11.761	105	254091	10.1674	ppb	100
75) cis-1,4-dichloro-2-butene	11.808	75	1332	No Calib	#	
77) 1,1,2,2-Tetrachloroethane	11.955	83	72950	9.8913	ppb	100
78) trans-1,4-Dichloro-2-b...	11.986	53	17715	9.1001	ppb	100
79) 1,2,3-Trichloropropane	11.981	110	25932	9.6231	ppb	100
80) Bromobenzene	11.955	156	64457	9.9657	ppb	100
81) n-Propylbenzene	12.023	91	299833	10.2901	ppb	100
82) 2-Chlorotoluene	12.076	126	62574	10.1615	ppb	100
83) 4-Ethyltoluene	12.076	105	1114	No Calib	#	
84) 1,3,5-Trimethylbenzene	12.128	105	209809	10.3936	ppb	100
85) 4-Chlorotoluene	12.144	91	205267	10.0701	ppb	100
86) tert-Butylbenzene	12.333	134	51884	9.6633	ppb	100
87) 1,2,4-Trimethylbenzene	12.359	105	213308	10.3316	ppb	100
88) Pentachloroethane	12.349	167	37155	9.7335	ppb	100
89) sec-Butylbenzene	12.459	105	260072	10.1885	ppb	100
90) 4-Isopropyltoluene	12.543	119	224952	10.0994	ppb	100
91) 1,3-Dichlorobenzene	12.533	146	125197	9.8094	ppb	100
92) 1,4-Dichlorobenzene	12.580	146	128292	9.8584	ppb	100
93) n-Butylbenzene	12.779	92	111918	10.0220	ppb	100
94) 1,2-Dichlorobenzene	12.800	146	121482	10.0320	ppb	100
95) Hexachloroethane	12.953	201	26078	No Calib		
96) 1,2-Dibromo-3-chloropr...	13.242	75	14424	10.0296	ppb	100
97) Nitrobenzene	13.352	123	1495	No Calib		
98) 1,2,4-Trichlorobenzene	13.693	180	79245	9.6354	ppb	100
99) Hexachlorobutadiene	13.777	225	29492	10.3087	ppb	100
100) Naphthalene	13.835	128	238453	10.0290	ppb	100
101) 1,2,3-Trichlorobenzene	13.972	180	78317	9.7900	ppb	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324010.D
Acq On : 23 Feb 2024 15:57
Operator :
Sample : CPTP02232401 - 10ppb
Misc : PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 26 12:50:01 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration



8260 Quantitation Review Report

C:\msdchem\1\data\2024\02-FEB\022324\GCMS8-022324011.D **CP** 02/23/24 011

Sample Name: CPTP02232407 - 20ppb
Data File Name: GCMS8-022324011.D
Date Acquired: 02/23/24 16:21
Vial Number: 10
Sample Multiplier: 1
Misc Info: PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B

Operator:
Data File Path: C:\msdchem\1\data\2024\02-FEB\02232
Instrument Method: VOC092623 INSTRUMENT SCAN.M
Quant. Method: VOC022324Final
Last Result Mod: 02/26/24 12:50
Last Cal Update: 02/26/24 12:39
Last Cal Mod: 02/26/24 12:39

#	Internal Standard	Response
1)	Pentafluorobenzene	124,620
42)	1,4-Difluorobenzene	199,074
50)	Chlorobenzene-d5	179,193
74)	1,4-Dichlorobenzene-d4	98,960

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
1)	Pentafluorobenzene		10	-	-	6.25	0.01	-	100	124,620	168	-		-		-	
2)	**Dichlorodifluoromethane**		**20.934**	RL	**21**	1.38	0.00	P	89	137,852	85	87	28.2 | 34.5	-		-	
3)	**Chloromethane**		**18.426**	RL	**18**	1.55	0.01	P	96	159,300	50	52	29.0 | 31.3	-		-	
4)	**Vinyl chloride**		**18.525**	RL	**19**	1.67	0.01	P	99	141,852	62	64	29.8 | 30.5	-		-	
5)	**Bromomethane**		**19.503**	RL	**20**	1.97	0.00	P	92	95,949	94	96	95.7 | 88.5	-		-	
6)	**Chloroethane**		**19.258**	RL	**19**	2.06	0.00	P	96	94,716	64	66	32.1 | 34.3	-		-	
7)	**Trichlorofluoromethane**		**19.005**	RL	**19**	2.35	0.00	P	96	162,188	101	103	64.7 | 61.6	66	11.5 | 12.7	-	
8)	**Diethyl ether**		**20.550**	RL	**21**	2.65	0.00	P	91	78,150	74	45	96.9 | 103	59	140 | 129	-	
9)	**1,1-Dichloroethene**		**19.622**	RL	**20**	2.90	0.00	P	90	103,616	96	61	156 | 139	63	46.4 | 47.0	-	
10)	Freon 113		No Cal.	-	-	(2.90)	-	-	0		101	151	0.00 | 82.4	103	0.00 | 64.1	153	0.00 | 53.1
11)	**Acetone**		**22.978**	RL	**23**	2.98	0.01	P	77	15,791	58	43	308 | 266	-		-	
12)	**Iodomethane**		**20.326**	RL	**20**	3.06	0.00	P	99	203,589	142	127	40.7 | 40.6	141	14.8 | 12.9	-	
13)	**Carbon disulfide**		**19.372**	RL	**19**	3.12	0.00	P	99	332,009	76	78	8.95 | 9.20	-		-	
14)	**Allyl chloride**		**20.572**	RL	**21**	3.33	0.00	P	91	71,598	76	78	30.1 | 30.7	41	262 | 283	39	166 | 175
15)	**Methylene chloride**		**20.386**	RL	**20**	3.49	0.00	P	98	143,478	84	49	125 | 121	86	63.8 | 64.4	51	37.7 | 36.5
16)	t-Butanol (TBA)		No Cal.	-	-	(3.70)	-	-	0		59	57	0.00 | 8.40	-		-	
17)	**Acrylonitrile**		**20.155**	RL	**20**	3.82	0.01	P	97	41,051	52	53	117 | 120	51	40.8 | 41.7	-	
18)	**Methyl t-butyl ether (MTBE)**		**20.464**	RL	**20**	3.86	0.01	P	94	368,391	73	57	20.4 | 23.3	-		-	
19)	**trans-1,2-Dichloroethene**		**20.367**	RL	**20**	3.84	0.01	P	93	124,405	96	61	127 | 137	98	62.6 | 65.3	-	
20)	n-Hexane		No Cal.	-	-	4.13	-0.09	**F**	**19**	157	57	43	**0.00 | 64.9**	41	**0.00 | 72.0**	56	**0.00 | 47.3**
21)	**1,1-Dichloroethane**		**19.903**	RL	**20**	4.41	0.00	P	96	218,567	63	65	31.3 | 33.7	83	14.3 | 15.0	-	
22)	**Vinyl acetate**		**19.820**	RL	**20**	4.52	0.00	P	72	27,148	86	43	828 | 949	-		-	
23)	2-chloro-1,3-butadiene		No Cal.	-	-	(4.54)	-	-	0		53	88	0.00 | 58.3	52	0.00 | 23.5	-	
24)	Diisopropyl ether (DIPE)		No Cal.	-	-	4.53	-0.04	**F**	**1**	1,362	45	43	**10300 | 38.9**	87	**86.0 | 24.3**	-	
25)	Ethyl t-butyl ether (ETBE)		No Cal.	-	-	(5.12)	-	-	0		59	57	0.00 | 31.8	87	0.00 | 34.1	-	
26)	**2-Butanone (MEK)**		**21.140**	RL	**21**	5.35	0.00	P	94	18,105	72	43	366 | 353	57	28.4 | 29.9	-	
27)	**cis-1,2-Dichloroethene**		**20.787**	RL	**21**	5.30	0.01	P	91	140,991	96	61	122 | 132	98	64.6 | 56.2	-	
28)	**2,2-Dichloropropane**		**20.239**	RL	**20**	5.29	0.01	P	97	175,922	77	97	20.3 | 22.0	79	31.6 | 30.5	-	
29)	**Propionitrile**		**20.227**	RL	**20**	5.44	-0.02	P	88	21,899	54	52	17.2 | 11.3	55	19.8 | 15.7	-	
30)	**Methyl acrylate**		**20.960**	RL	**21**	5.51	0.00	P	95	128,880	55	85	14.9 | 17.1	-		-	
31)	**Methacrylonitrile**		**21.744**	RL	**22**	5.67	0.00	P	94	56,718	67	41	141 | 147	39	73.8 | 83.1	52	34.3 | 37.0
32)	**Bromochloromethane**		**21.223**	RL	**21**	5.66	0.00	P	89	71,072	128	49	157 | 167	130	116 | 134	-	
33)	**Chloroform**		**20.405**	RL	**20**	5.83	0.00	P	97	217,363	83	85	64.1 | 66.3	-		-	
34)	**Tetrahydrofuran**		**20.435**	RL	**20**	5.74	0.00	P	85	21,902	72	71	83.4 | 96.8	42	215 | 241	-	
35)	Dibromofluoromethane (S)		20.122	Sur	-	6.10	0.00	P	98	102,504	113	111	104 | 102	192	22.2 | 22.1	81	16.1 | 14.3
36)	**1,1,1-Trichloroethane**		**19.669**	RL	**20**	6.10	0.00	P	95	180,315	97	99	66.2 | 60.3	61	40.2 | 38.9	63	12.9 | 14.3
37)	1-Chlorobutane		No Cal.	-	-	6.30	0.00	P	97	226,976	56	49	4.32 | 3.40	-		-	
38)	**1,1-Dichloropropene**		**19.368**	RL	**19**	6.39	0.00	P	99	139,674	75	39	55.4 | 55.5	110	37.8 | 36.4	77	30.3 | 31.4
39)	**Carbon tetrachloride**		**19.308**	RL	**19**	6.38	0.00	P	92	148,955	117	119	92.0 | 100	-		-	
40)	**Benzene**		**20.061**	RL	**20**	6.75	0.00	P	96	478,414	78	51	16.9 | 15.3	-		-	
41)	**1,2-Dichloroethane**		**21.075**	RL	**21**	6.80	-0.01	P	97	154,990	62	98	11.1 | 12.3	-		-	
42)	1,4-Difluorobenzene		10	-	-	7.56	0.00	-	100	199,074	114	-		-		-	
43)	t- Amyl methyl ether (TAME)		No Cal.	-	-	(7.05)	-	-	0		73	55	0.00 | 37.9	87	0.00 | 22.4	-	
44)	**Trichloroethene**		**19.511**	RL	**20**	8.03	0.00	P	92	109,511	95	132	102 | 115	130	105 | 113	97	61.2 | 64.2
45)	**1,2-Dichloropropane**		**20.421**	RL	**20**	8.47	0.01	P	100	115,273	63	112	6.10 | 5.70	76	47.5 | 47.7	-	

For analyst review assistance only.

8260 Quantitation Review Report

C:\msdchem\1\data\2024\02-FEB\022324\GCMS8-022324011.D **CP** 02/23/24 011

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
46)	Methyl methacrylate		20.912	RL	21	8.77	0.00	P	95	102,261	69	41	124 | 133	100	42.2 | 40.0	39	64.3 | 64.9
47)	Dibromomethane		20.580	RL	21	8.65	0.00	P	99	73,898	93	174	106 | 107	95	83.0 | 82.1	-	
48)	Bromodichloromethane		21.169	RL	21	8.94	0.00	P	97	153,809	83	85	66.9 | 64.1	127	8.86 | 8.90	-	
49)	2-nitro-propane		22.080	QL	22	9.26	0.00	P	90	37,747	43	39	23.5 | 28.5	-		-	
50)	Chlorobenzene-d5		10	-	-	11.04	0.00	P	97	179,193	117	82	53.7 | 54.8	119	29.6 | 31.9	54	21.1 | 22.3
51)	Chloromethyl cyanide		No Cal.	-	-	9.38	-0.01	F	56	6,972	75	48	90.9 | 39.0	40	39.2 | 44.5	-	
52)	2-Chloroethyl vinyl ether		20.849	RL	21	9.38	0.00	P	98	80,773	63	65	32.1 | 30.2	106	31.3 | 31.4	-	
53)	cis-1,3-Dichloropropene		21.026	RL	21	9.51	0.00	P	94	183,667	75	77	30.3 | 33.4	39	50.3 | 47.1	110	25.2 | 21.7
54)	4-Methyl-2-pentanone		20.929	RL	21	9.72	0.00	P	97	58,503	58	41	53.4 | 52.2	100	40.0 | 44.0	85	40.6 | 42.0
55)	1,1-Dichloro-2-propanone		No Cal.	-	-	9.71	-0.01	F	51	3,525	83	63	96.8 | 56.4	91	38.8 | 22.8	-	
56)	Toluene-d8 (S)		19.779	Sur	-	9.79	0.00	P	97	347,265	98	100	68.5 | 71.5	42	12.4 | 12.7	70	10.7 | 11.3
57)	Toluene		19.928	RL	20	9.85	0.00	P	99	283,773	92	91	166 | 168	65	17.9 | 18.5	39	16.5 | 16.3
58)	trans-1,3-Dichloropropene		20.994	RL	21	10.10	0.00	P	99	166,317	75	77	31.5 | 30.2	39.1	43.7 | 43.2	110	24.8 | 24.5
59)	Ethyl methacrylate		20.891	RL	21	10.22	0.00	P	97	151,905	69	41	71.5 | 69.2	99	18.0 | 18.5	86	12.9 | 16.1
60)	1,1,2-Trichloroethane		20.564	RL	21	10.26	0.00	P	98	87,463	83	97	122 | 125	61	68.9 | 70.3	85	61.8 | 59.8
61)	1,3-Dichloropropane		20.240	RL	20	10.40	0.00	P	98	188,586	76	41	60.7 | 61.7	78	32.9 | 32.5	39	20.8 | 22.8
62)	2-Hexanone		20.924	RL	21	10.50	0.00	P	95	103,464	43	58	55.6 | 59.4	57	19.9 | 21.2	100	13.7 | 16.0
63)	Tetrachloroethene		19.002	RL	19	10.36	0.00	P	98	92,209	164	166	124 | 127	129	85.5 | 88.5	131	83.5 | 84.5
64)	Dibromochloromethane		20.629	RL	21	10.59	0.00	P	97	115,061	129	127	77.0 | 79.2	-		-	
65)	1,2-Dibromoethane		21.042	RL	21	10.67	0.01	P	97	110,302	107	109	91.4 | 89.0	188	4.44 | 2.80	-	
66)	Chlorobenzene		19.764	RL	20	11.06	0.01	P	93	299,255	112	77	53.1 | 61.4	114	33.6 | 33.1	-	
67)	1,1,1,2-Tetrachloroethane		21.138	RL	21	11.13	0.01	P	98	118,434	131	133	94.5 | 94.0	117	61.7 | 64.0	119	61.1 | 63.7
68)	Ethylbenzene		19.771	RL	20	11.15	0.00	P	99	514,573	91	106	32.7 | 32.6	51	8.68 | 7.80	-	
69)	m- & p-Xylenes		39.651	RL	40	11.24	0.00	P	93	402,522	106	91	200 | 188	105	45.2 | 41.4	77	25.0 | 24.3
70)	o-Xylene		19.750	RL	20	11.51	0.00	P	95	204,924	106	91	199 | 206	105	45.6 | 48.7	-	
71)	Styrene		21.236	RL	21	11.52	0.00	P	92	333,819	104	103	51.0 | 46.8	78	45.1 | 41.6	51	30.3 | 22.7
72)	Bromoform		19.824	RL	20	11.65	0.00	P	97	77,778	173	175	47.8 | 46.3	254	9.47 | 12.5	-	
73)	Isopropylbenzene		20.071	RL	20	11.76	0.00	P	99	506,175	105	120	27.1 | 27.0	77	14.0 | 14.5	79	10.5 | 11.8
74)	1,4-Dichlorobenzene-d4		10	-	-	12.57	0.00	P	92	98,960	152	115	59.4 | 55.2	150	168 | 157	-	
75)	cis-1,4-dichloro-2-butene		No Cal.	-	-	11.80	-0.01	P	82	2,723	75	53	87.8 | 106	89	35.7 | 47.5	-	
76)	4-Bromofluorobenzene (S)		19.234	Sur	-	11.86	0.00	P	98	131,554	95	174	78.7 | 75.6	176	73.5 | 73.8	75	48.0 | 47.6
77)	1,1,2,2-Tetrachloroethane		20.795	RL	21	11.96	0.00	P	94	155,316	83	85	65.4 | 70.8	131	10.8 | 11.0	95	15.8 | 18.7
78)	trans-1,4-Dichloro-2-butene		19.439	RL	19	11.99	0.00	P	93	38,781	53	88	50.3 | 55.9	124	25.5 | 23.1	-	
79)	1,2,3-Trichloropropane		19.731	RL	20	11.98	0.00	P	100	53,846	110	75	269 | 269	39	77.8 | 79.2	-	
80)	Bromobenzene		20.209	RL	20	11.96	0.00	P	100	132,370	156	158	94.9 | 94.7	-		-	
81)	n-Propylbenzene		19.537	RL	20	12.02	0.00	P	99	576,500	91	120	23.3 | 23.6	92	10.6 | 11.4	65	10.1 | 9.90
82)	2-Chlorotoluene		19.949	RL	20	12.08	0.00	P	99	124,405	126	91	290 | 289	63	38.7 | 36.0	-	
83)	4-Ethyltoluene		No Cal.	-	-	12.08	-0.01	P	85	2,211	105	120	32.8 | 29.9	77	26.4 | 10.6	-	
84)	1,3,5-Trimethylbenzene		20.474	RL	20	12.13	0.00	P	99	418,531	105	120	50.5 | 50.6	119	12.6 | 11.0	77	11.7 | 12.6
85)	4-Chlorotoluene		19.880	RL	20	12.14	0.00	P	99	410,365	91	126	35.2 | 34.5	63	11.5 | 11.3	-	
86)	tert-Butylbenzene		18.920	RL	19	12.33	0.00	P	89	102,874	134	119	378 | 340	91	215 | 215	-	
87)	1,2,4-Trimethylbenzene		20.467	RL	20	12.36	0.00	P	95	427,926	105	120	47.0 | 50.1	-		-	
88)	Pentachloroethane		20.829	RL	21	12.35	0.00	P	97	80,518	167	165	83.7 | 86.1	132	39.7 | 42.9	-	
89)	sec-Butylbenzene		19.692	RL	20	12.46	0.00	P	99	509,046	105	134	21.1 | 20.4	-		-	
90)	4-Isopropyltoluene		19.541	RL	20	12.54	0.00	P	98	440,784	119	134	27.3 | 28.5	91	21.5 | 22.4	-	
91)	1,3-Dichlorobenzene		19.575	RL	20	12.53	-0.01	P	94	253,005	146	148	60.8 | 63.8	111	40.6 | 35.3	-	
92)	1,4-Dichlorobenzene		19.224	RL	19	12.59	0.01	P	97	253,340	146	111	34.4 | 37.8	148	60.4 | 61.5	-	
93)	n-Butylbenzene		19.122	RL	19	12.78	0.00	P	93	216,245	92	91	169 | 179	134	47.0 | 50.5	-	
94)	1,2-Dichlorobenzene		19.938	RL	20	12.80	0.00	P	99	244,502	146	148	65.7 | 64.6	111	40.4 | 40.4	-	
95)	Hexachloroethane		No Cal.	-	-	12.95	0.00	P	96	57,484	201	117	136 | 129	199	63.0 | 65.0	203	65.6 | 64.5
96)	1,2-Dibromo-3-chloropropane		21.059	RL	21	13.24	0.00	P	95	30,671	75	155	96.5 | 104	157	120 | 123	-	
97)	Nitrobenzene		No Cal.	-	-	13.36	0.01	F	30	2,633	123	51	98.4 | 62.1	77	245 | 146	-	
98)	1,2,4-Trichlorobenzene		19.662	RL	20	13.69	0.00	P	97	163,758	180	182	95.4 | 97.2	184	27.7 | 29.6	145	27.4 | 30.6
99)	Hexachlorobutadiene		18.491	RL	18	13.78	0.00	P	94	53,571	225	227	65.6 | 59.6	260	27.0 | 22.3	223	61.6 | 59.4
100	Naphthalene		21.502	RL	22	13.84	0.00	P	100	517,724	128	127	12.4 | 12.5	129	11.3 | 11.6	-	
101	1,2,3-Trichlorobenzene		19.794	RL	20	13.97	0.00	P	99	160,356	180	182	92.8 | 91.8	184	28.9 | 29.8	145	30.2 | 29.8

Uses lowest known RLs; project RLs may be higher. Qualitative P/F based only on output ratios at apex and may not reflect full peak or analyst review.

For analyst review assistance only.

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324011.D
Acq On : 23 Feb 2024 16:21
Operator :
Sample : CPTP02232407 - 20ppb
Misc : PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 26 12:50:08 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	6.251	168	124620	10.00	ppb		0.01
42) 1,4-Difluorobenzene	7.563	114	199074	10.00	ppb		0.00
50) Chlorobenzene-d5	11.036	117	179193	10.00	ppb		0.00
74) 1,4-Dichlorobenzene-d4	12.570	152	98960	10.00	ppb		0.00
System Monitoring Compounds							
35) Dibromofluoromethane (S)	6.099	113	102504	20.12	ppb		0.00
Spiked Amount 10.000			Recovery = 201.20%				
56) Toluene-d8 (S)	9.786	98	347265	19.78	ppb		0.00
Spiked Amount 10.000			Recovery = 197.80%				
76) 4-Bromofluorobenzene (S)	11.855	95	131554	19.23	ppb		0.00
Spiked Amount 10.000			Recovery = 192.30%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.380	85	137852	20.9336	ppb		89
3) Chloromethane	1.553	50	159300	18.4257	ppb		96
4) Vinyl chloride	1.665	62	141852	18.5245	ppb		99
5) Bromomethane	1.970	94	95949	19.5028	ppb		92
6) Chloroethane	2.062	64	94716	19.2583	ppb		96
7) Trichlorofluoromethane	2.346	101	162188	19.0051	ppb		96
8) Diethyl ether	2.652	74	78150	20.5500	ppb		91
9) 1,1-Dichloroethene	2.896	96	103616	19.6221	ppb		90
10) Freon 113	0.000		0	N.D.			
11) Acetone	2.977	58	15791	22.9784	ppb	#	77
12) Iodomethane	3.058	142	203589	20.3260	ppb		99
13) Carbon disulfide	3.119	76	332009	19.3719	ppb		99
14) Allyl chloride	3.333	76	71598	20.5724	ppb		91
15) Methylene chloride	3.485	84	143478	20.3863	ppb		98
16) t-Butanol (TBA)	0.000		0	N.D.			
17) Acrylonitrile	3.821	52	41051	20.1548	ppb		97
18) Methyl t-butyl ether (...	3.862	73	368391	20.4638	ppb		94
19) trans-1,2-Dichloroethene	3.841	96	124405	20.3666	ppb		93
20) n-Hexane	4.126	57	157	No Calib	#		
21) 1,1-Dichloroethane	4.411	63	218567	19.9029	ppb		96
22) Vinyl acetate	4.523	86	27148	19.8200	ppb	#	72
23) 2-chloro-1,3-butadiene	0.000		0	N.D.			
24) Diisopropyl ether (DIPE)	4.533	45	1362	No Calib	#		
25) Ethyl t-butyl ether (E...	0.000		0	N.D.			
26) 2-Butanone (MEK)	5.346	72	18105	21.1401	ppb		94
27) cis-1,2-Dichloroethene	5.295	96	140991	20.7870	ppb		91
28) 2,2-Dichloropropane	5.285	77	175922	20.2389	ppb		97
29) Propionitrile	5.438	54	21899	20.2275	ppb		88
30) Methyl acrylate	5.509	55	128880	20.9600	ppb		95
31) Methacrylonitrile	5.672	67	56718	21.7436	ppb		94
32) Bromochloromethane	5.662	128	71072	21.2225	ppb		89
33) Chloroform	5.834	83	217363	20.4051	ppb		97
34) Tetrahydrofuran	5.743	72	21902	20.4354	ppb		85
36) 1,1,1-Trichloroethane	6.099	97	180315	19.6689	ppb		95
37) 1-Chlorobutane	6.302	56	226976	No Calib			
38) 1,1-Dichloropropene	6.394	75	139674	19.3683	ppb		99
39) Carbon tetrachloride	6.384	117	148955	19.3082	ppb		92
40) Benzene	6.750	78	478414	20.0612	ppb		96
41) 1,2-Dichloroethane	6.800	62	154990	21.0754	ppb		97
43) t- Amyl methyl ether (...	0.000		0	N.D.			
44) Trichloroethene	8.031	95	109511	19.5105	ppb		92
45) 1,2-Dichloropropane	8.468	63	115273	20.4212	ppb		100
46) Methyl methacrylate	8.773	69	102261	20.9125	ppb		95

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324011.D
Acq On : 23 Feb 2024 16:21
Operator :
Sample : CPTP02232407 - 20ppb
Misc : PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 26 12:50:08 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

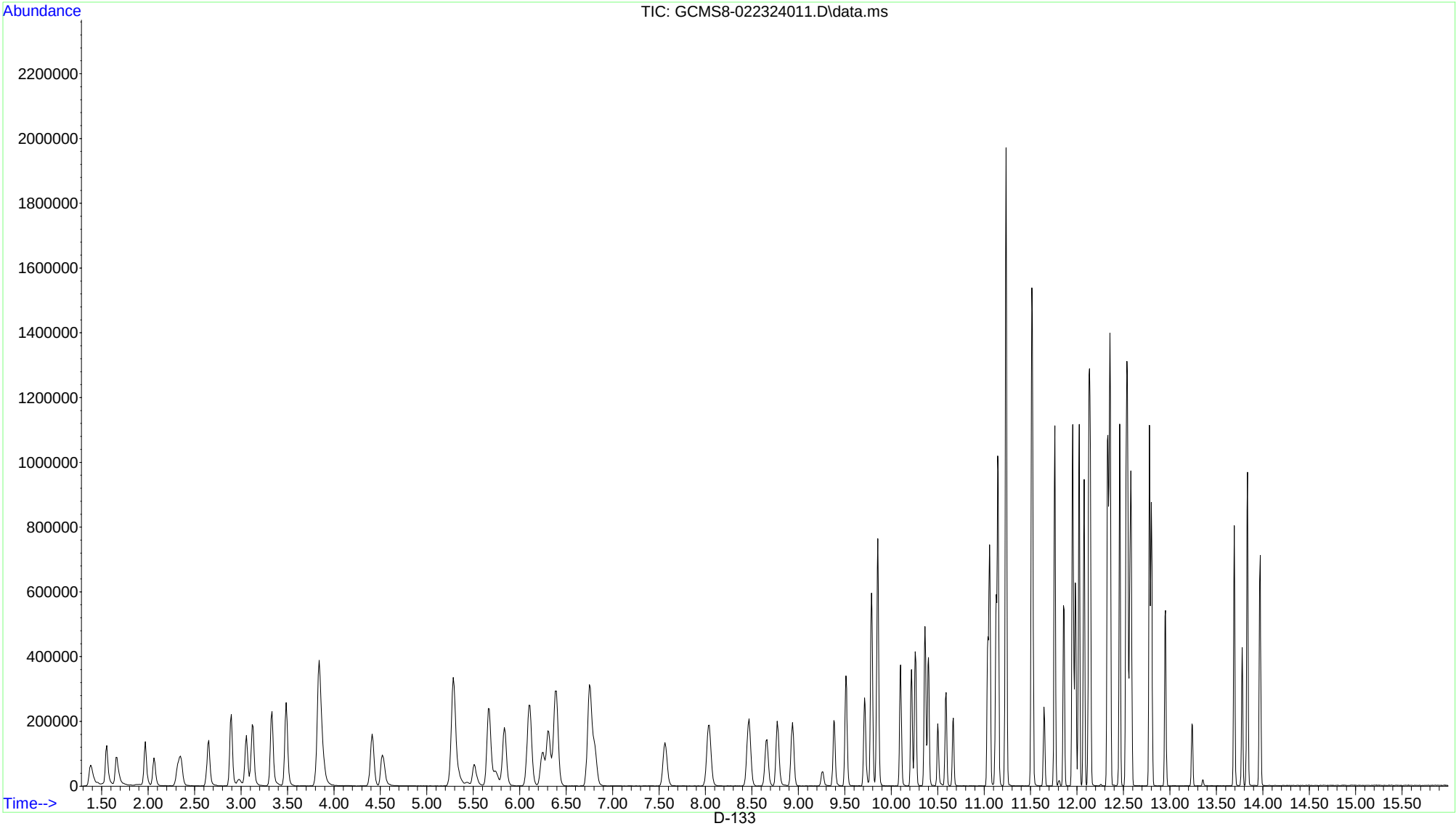
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
47) Dibromomethane	8.651	93	73898	20.5800	ppb		99
48) Bromodichloromethane	8.936	83	153809	21.1691	ppb		97
49) 2-nitro-propane	9.261	43	37747	22.0798	ppb		90
51) Chloromethyl cyanide	9.377	75	6972	No Calib	#		
52) 2-Chloroethyl vinyl ether	9.382	63	80773	20.8488	ppb		98
53) cis-1,3-Dichloropropene	9.513	75	183667	21.0260	ppb		94
54) 4-Methyl-2-pentanone	9.718	58	58503	20.9293	ppb		97
55) 1,1-Dichloro-2-propanone	9.707	83	3525	No Calib	#		
57) Toluene	9.855	92	283773	19.9276	ppb		99
58) trans-1,3-Dichloropropene	10.101	75	166317	20.9939	ppb		99
59) Ethyl methacrylate	10.217	69	151905	20.8913	ppb		97
60) 1,1,2-Trichloroethane	10.259	83	87463	20.5636	ppb		98
61) 1,3-Dichloropropane	10.401	76	188586	20.2397	ppb		98
62) 2-Hexanone	10.500	43	103464	20.9243	ppb		95
63) Tetrachloroethene	10.364	164	92209	19.0018	ppb		98
64) Dibromochloromethane	10.590	129	115061	20.6287	ppb		97
65) 1,2-Dibromoethane	10.669	107	110302	21.0416	ppb		97
66) Chlorobenzene	11.062	112	299255	19.7637	ppb		93
67) 1,1,1,2-Tetrachloroethane	11.131	131	118434	21.1383	ppb		98
68) Ethylbenzene	11.152	91	514573	19.7714	ppb		99
69) m- & p-Xylenes	11.236	106	402522	39.6508	ppb		93
70) o-Xylene	11.514	106	204924	19.7495	ppb		95
71) Styrene	11.519	104	333819	21.2365	ppb		92
72) Bromoform	11.645	173	77778	19.8241	ppb		97
73) Isopropylbenzene	11.761	105	506175	20.0705	ppb		99
75) cis-1,4-dichloro-2-butene	11.803	75	2723	No Calib			
77) 1,1,2,2-Tetrachloroethane	11.955	83	155316	20.7954	ppb		94
78) trans-1,4-Dichloro-2-b...	11.987	53	38781	19.4390	ppb		93
79) 1,2,3-Trichloropropane	11.981	110	53846	19.7314	ppb		100
80) Bromobenzene	11.955	156	132370	20.2093	ppb		100
81) n-Propylbenzene	12.023	91	576500	19.5372	ppb		99
82) 2-Chlorotoluene	12.076	126	124405	19.9492	ppb		99
83) 4-Ethyltoluene	12.081	105	2211	No Calib			
84) 1,3,5-Trimethylbenzene	12.128	105	418531	20.4736	ppb		99
85) 4-Chlorotoluene	12.144	91	410365	19.8797	ppb		99
86) tert-Butylbenzene	12.333	134	102874	18.9201	ppb	#	89
87) 1,2,4-Trimethylbenzene	12.360	105	427926	20.4669	ppb		95
88) Pentachloroethane	12.349	167	80518	20.8290	ppb		97
89) sec-Butylbenzene	12.459	105	509046	19.6924	ppb		99
90) 4-Isopropyltoluene	12.543	119	440784	19.5413	ppb		98
91) 1,3-Dichlorobenzene	12.528	146	253005	19.5751	ppb		94
92) 1,4-Dichlorobenzene	12.585	146	253340	19.2235	ppb		97
93) n-Butylbenzene	12.780	92	216245	19.1215	ppb		93
94) 1,2-Dichlorobenzene	12.801	146	244502	19.9379	ppb		99
95) Hexachloroethane	12.953	201	57484	No Calib			
96) 1,2-Dibromo-3-chloropr...	13.242	75	30671	21.0595	ppb		95
97) Nitrobenzene	13.357	123	2633	No Calib	#		
98) 1,2,4-Trichlorobenzene	13.693	180	163758	19.6619	ppb		97
99) Hexachlorobutadiene	13.777	225	53571	18.4907	ppb		94
100) Naphthalene	13.835	128	517724	21.5020	ppb		100
101) 1,2,3-Trichlorobenzene	13.972	180	160356	19.7941	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324011.D
Acq On : 23 Feb 2024 16:21
Operator :
Sample : CPTP02232407 - 20ppb
Misc : PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 26 12:50:08 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration



D-133

8260 Quantitation Review Report

C:\msdchem\1\data\2024\02-FEB\022324\GCMS8-022324012.D **CP** 02/23/24 012

Sample Name: CPTP02232408 - 30ppb
Data File Name: GCMS8-022324012.D
Date Acquired: 02/23/24 16:44
Vial Number: 11
Sample Multiplier: 1
Misc Info: PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B

Operator:
Data File Path: C:\msdchem\1\data\2024\02-FEB\02232
Instrument Method: VOC092623 INSTRUMENT SCAN.M
Quant. Method: VOC022324Final
Last Result Mod: 02/26/24 12:50
Last Cal Update: 02/26/24 12:39
Last Cal Mod: 02/26/24 12:39

#	Internal Standard	Response
1)	Pentafluorobenzene	122,405
42)	1,4-Difluorobenzene	199,973
50)	Chlorobenzene-d5	179,712
74)	1,4-Dichlorobenzene-d4	98,176

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
1)	Pentafluorobenzene		10	-	-	6.25	0.01	-	100	122,405	168	-		-		-	
2)	**Dichlorodifluoromethane**		**32.678**	RL	**33**	1.39	0.01	P	97	211,363	85	87	33.0 | 34.5	-		-	
3)	**Chloromethane**		**29.702**	RL	**30**	1.55	0.01	P	98	252,229	50	52	32.4 | 31.3	-		-	
4)	**Vinyl chloride**		**30.359**	RL	**30**	1.67	0.01	P	98	228,346	62	64	31.7 | 30.5	-		-	
5)	**Bromomethane**		**28.641**	RL	**29**	1.97	0.00	P	93	138,403	94	96	95.1 | 88.5	-		-	
6)	**Chloroethane**		**29.872**	RL	**30**	2.07	0.01	P	97	144,304	64	66	32.4 | 34.3	-		-	
7)	**Trichlorofluoromethane**		**29.825**	RL	**30**	2.35	0.00	P	98	250,000	101	103	60.3 | 61.6	66	11.6 | 12.7	-	
8)	**Diethyl ether**		**32.963**	RL	**33**	2.65	0.00	P	94	123,129	74	45	99.1 | 103	59	137 | 129	-	
9)	**1,1-Dichloroethene**		**31.194**	RL	**31**	2.90	0.00	P	84	161,797	96	61	161 | 139	63	51.7 | 47.0	-	
10)	Freon 113		No Cal.	-	-	2.91	0.01	F	16	162	101	151	0.00 | 82.4	103	0.00 | 64.1	153	0.00 | 53.1
11)	**Acetone**		**29.261**	RL	**29**	2.99	0.02	P	58	19,591	58	43	342 | 266	-		-	
12)	**Iodomethane**		**32.202**	RL	**32**	3.06	0.00	P	99	316,808	142	127	41.1 | 40.6	141	13.7 | 12.9	-	
13)	**Carbon disulfide**		**30.515**	RL	**31**	3.13	0.01	P	99	513,687	76	78	8.71 | 9.20	-		-	
14)	**Allyl chloride**		**31.650**	RL	**32**	3.33	0.00	P	95	108,195	76	78	33.2 | 30.7	41	293 | 283	39	183 | 175
15)	**Methylene chloride**		**30.462**	RL	**30**	3.50	0.01	P	99	206,122	84	49	121 | 121	86	62.3 | 64.4	51	37.3 | 36.5
16)	t-Butanol (TBA)		No Cal.	-	-	(3.70)	-	-	0		59	57	0.00 | 8.40	-		-	
17)	**Acrylonitrile**		**31.571**	RL	**32**	3.82	0.01	P	97	63,786	52	53	125 | 120	51	40.5 | 41.7	-	
18)	**Methyl t-butyl ether (MTBE)**		**32.226**	RL	**32**	3.86	0.01	P	95	569,821	73	57	21.0 | 23.3	-		-	
19)	**trans-1,2-Dichloroethene**		**31.679**	RL	**32**	3.84	0.01	P	95	190,066	96	61	130 | 137	98	64.7 | 65.3	-	
20)	n-Hexane		No Cal.	-	-	4.16	-0.06	F	19	373	57	43	0.00 | 64.9	41	0.00 | 72.0	56	0.00 | 47.3
21)	**1,1-Dichloroethane**		**30.763**	RL	**31**	4.41	0.00	P	95	331,827	63	65	31.3 | 33.7	83	12.9 | 15.0	-	
22)	**Vinyl acetate**		**30.810**	RL	**31**	4.52	0.00	P	90	41,740	86	43	992 | 949	-		-	
23)	2-chloro-1,3-butadiene		No Cal.	-	-	(4.54)	-	-	0		53	88	0.00 | 58.3	52	0.00 | 23.5	-	
24)	Diisopropyl ether (DIPE)		No Cal.	-	-	4.51	-0.06	F	1	2,791	45	43	12000 | 38.9	87	95.4 | 24.3	-	
25)	Ethyl t-butyl ether (ETBE)		No Cal.	-	-	(5.12)	-	-	0		59	57	0.00 | 31.8	87	0.00 | 34.1	-	
26)	**2-Butanone (MEK)**		**29.505**	RL	**30**	5.34	-0.01	P	88	25,256	72	43	380 | 353	57	29.7 | 29.9	-	
27)	**cis-1,2-Dichloroethene**		**32.458**	RL	**32**	5.30	0.01	P	90	216,241	96	61	119 | 132	98	62.9 | 56.2	-	
28)	**2,2-Dichloropropane**		**31.129**	RL	**31**	5.29	0.01	P	97	265,771	77	97	23.5 | 22.0	79	32.1 | 30.5	-	
29)	**Propionitrile**		**30.640**	RL	**31**	5.44	-0.02	P	73	33,146	54	52	23.8 | 11.3	55	25.6 | 15.7	-	
30)	**Methyl acrylate**		**31.303**	RL	**31**	5.51	0.00	P	99	189,763	55	85	17.4 | 17.1	-		-	
31)	**Methacrylonitrile**		**33.815**	RL	**34**	5.67	0.00	P	91	86,639	67	41	160 | 147	39	77.7 | 83.1	52	40.8 | 37.0
32)	**Bromochloromethane**		**31.408**	RL	**31**	5.66	0.00	P	95	103,314	128	49	172 | 167	130	127 | 134	-	
33)	**Chloroform**		**31.716**	RL	**32**	5.83	0.00	P	98	331,841	83	85	65.0 | 66.3	-		-	
34)	**Tetrahydrofuran**		**30.671**	RL	**31**	5.74	0.00	P	81	32,288	72	71	77.9 | 96.8	42	208 | 241	-	
35)	Dibromofluoromethane (S)		31.107	Sur	-	6.11	0.01	P	98	155,647	113	111	104 | 102	192	23.2 | 22.1	81	14.5 | 14.3
36)	**1,1,1-Trichloroethane**		**31.796**	RL	**32**	6.11	0.01	P	97	286,310	97	99	62.7 | 60.3	61	37.9 | 38.9	63	11.4 | 14.3
37)	1-Chlorobutane		No Cal.	-	-	6.31	0.01	P	99	349,542	56	49	3.87 | 3.40	-		-	
38)	**1,1-Dichloropropene**		**30.363**	RL	**30**	6.39	0.00	P	99	215,067	75	39	54.5 | 55.5	110	36.3 | 36.4	77	31.1 | 31.4
39)	**Carbon tetrachloride**		**30.642**	RL	**31**	6.38	0.00	P	89	232,192	117	119	89.3 | 100	-		-	
40)	**Benzene**		**31.180**	RL	**31**	6.75	0.00	P	98	730,356	78	51	16.3 | 15.3	-		-	
41)	**1,2-Dichloroethane**		**32.610**	RL	**33**	6.81	0.00	P	98	235,555	62	98	11.5 | 12.3	-		-	
42)	1,4-Difluorobenzene		10	-	-	7.56	0.00	-	100	199,973	114	-		-		-	
43)	t- Amyl methyl ether (TAME)		No Cal.	-	-	(7.05)	-	-	0		73	55	0.00 | 37.9	87	0.00 | 22.4	-	
44)	**Trichloroethene**		**30.238**	RL	**30**	8.03	0.00	P	90	170,487	95	132	99.5 | 115	130	101 | 113	97	63.8 | 64.2
45)	**1,2-Dichloropropane**		**31.451**	RL	**31**	8.47	0.01	P	97	178,334	63	112	5.16 | 5.70	76	45.5 | 47.7	-	

For analyst review assistance only.

8260 Quantitation Review Report

C:\msdchem\1\data\2024\02-FEB\022324\GCMS8-022324012.D **CP** 02/23/24 012

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
46)	Methyl methacrylate		30.887	RL	31	8.77	0.00	P	96	152,552	69	41	125 | 133	100	41.8 | 40.0	39	64.9 | 64.9
47)	Dibromomethane		32.107	RL	32	8.65	0.00	P	98	115,808	93	174	106 | 107	95	79.2 | 82.1	-	
48)	Bromodichloromethane		32.313	RL	32	8.94	0.00	P	98	235,835	83	85	65.8 | 64.1	127	8.04 | 8.90	-	
49)	2-nitro-propane		32.405	QL	32	9.26	-0.01	P	93	55,648	43	39	25.1 | 28.5	-		-	
50)	Chlorobenzene-d5		10	-	-	11.04	0.00	P	98	179,712	117	82	53.4 | 54.8	119	30.6 | 31.9	54	21.1 | 22.3
51)	Chloromethyl cyanide		No Cal.	-	-	9.37	-0.02	F	74	11,922	75	48	69.1 | 39.0	40	47.6 | 44.5	-	
52)	2-Chloroethyl vinyl ether		33.125	RL	33	9.38	0.00	P	95	128,704	63	65	32.5 | 30.2	106	28.6 | 31.4	-	
53)	cis-1,3-Dichloropropene		32.730	RL	33	9.51	0.00	P	98	286,729	75	77	29.9 | 33.4	39	47.2 | 47.1	110	22.4 | 21.7
54)	4-Methyl-2-pentanone		31.363	RL	31	9.72	0.00	P	98	88,172	58	41	54.1 | 52.2	100	44.8 | 44.0	85	43.4 | 42.0
55)	1,1-Dichloro-2-propanone		No Cal.	-	-	9.71	-0.01	F	57	5,467	83	63	94.6 | 56.4	91	32.7 | 22.8	-	
56)	Toluene-d8 (S)		30.338	Sur	-	9.79	0.00	P	99	534,206	98	100	71.7 | 71.5	42	12.4 | 12.7	70	12.2 | 11.3
57)	Toluene		30.854	RL	31	9.85	0.00	P	100	440,647	92	91	167 | 168	65	18.2 | 18.5	39	15.9 | 16.3
58)	trans-1,3-Dichloropropene		33.392	RL	33	10.10	0.00	P	99	265,300	75	77	31.2 | 30.2	39.1	43.7 | 43.2	110	23.7 | 24.5
59)	Ethyl methacrylate		34.920	RL	35	10.22	0.00	P	95	254,648	69	41	74.3 | 69.2	99	19.6 | 18.5	86	14.6 | 16.1
60)	1,1,2-Trichloroethane		31.682	RL	32	10.26	0.00	P	99	135,142	83	97	125 | 125	61	71.5 | 70.3	85	62.7 | 59.8
61)	1,3-Dichloropropane		31.321	RL	31	10.40	0.00	P	97	292,683	76	41	59.0 | 61.7	78	32.1 | 32.5	39	20.8 | 22.8
62)	2-Hexanone		31.480	RL	31	10.50	0.00	P	94	156,855	43	58	55.3 | 59.4	57	17.9 | 21.2	100	13.5 | 16.0
63)	Tetrachloroethene		29.555	RL	30	10.36	0.00	P	96	143,833	164	166	118 | 127	129	88.6 | 88.5	131	81.4 | 84.5
64)	Dibromochloromethane		32.710	RL	33	10.59	0.00	P	99	182,973	129	127	78.6 | 79.2	-		-	
65)	1,2-Dibromoethane		31.669	RL	32	10.66	0.00	P	99	166,495	107	109	88.6 | 89.0	188	4.77 | 2.80	-	
66)	Chlorobenzene		30.149	RL	30	11.06	0.00	P	97	457,825	112	77	57.9 | 61.4	114	32.7 | 33.1	-	
67)	1,1,1,2-Tetrachloroethane		31.702	RL	32	11.13	0.01	P	98	178,135	131	133	94.7 | 94.0	117	63.0 | 64.0	119	59.9 | 63.7
68)	Ethylbenzene		30.736	RL	31	11.15	0.00	P	96	802,250	91	106	30.2 | 32.6	51	9.75 | 7.80	-	
69)	m- & p-Xylenes		62.542	RL	63	11.24	0.00	P	97	636,744	106	91	193 | 188	105	43.6 | 41.4	77	25.1 | 24.3
70)	o-Xylene		31.094	RL	31	11.51	-0.01	P	94	323,568	106	91	213 | 206	105	41.5 | 48.7	-	
71)	Styrene		33.385	RL	33	11.52	0.00	P	92	526,310	104	103	51.3 | 46.8	78	44.5 | 41.6	51	29.8 | 22.7
72)	Bromoform		32.005	RL	32	11.65	0.00	P	93	126,430	173	175	51.2 | 46.3	254	10.1 | 12.5	-	
73)	Isopropylbenzene		31.552	RL	32	11.76	0.00	P	99	798,052	105	120	27.3 | 27.0	77	14.8 | 14.5	79	10.6 | 11.8
74)	1,4-Dichlorobenzene-d4		10	-	-	12.57	0.00	P	97	98,176	152	115	53.7 | 55.2	150	152 | 157	-	
75)	cis-1,4-dichloro-2-butene		No Cal.	-	-	11.81	0.00	P	85	4,416	75	53	90.4 | 106	89	58.1 | 47.5	-	
76)	4-Bromofluorobenzene (S)		30.377	Sur	-	11.86	0.00	P	96	206,120	95	174	81.6 | 75.6	176	77.0 | 73.8	75	47.2 | 47.6
77)	1,1,2,2-Tetrachloroethane		32.217	RL	32	11.96	0.00	P	95	238,712	83	85	66.9 | 70.8	131	10.0 | 11.0	95	15.3 | 18.7
78)	trans-1,4-Dichloro-2-butene		31.481	RL	31	11.99	0.00	P	92	62,555	53	88	49.2 | 55.9	124	24.9 | 23.1	-	
79)	1,2,3-Trichloropropane		30.231	RL	30	11.98	0.00	P	98	81,844	110	75	274 | 269	39	79.1 | 79.2	-	
80)	Bromobenzene		31.678	RL	32	11.96	0.00	P	98	205,847	156	158	96.5 | 94.7	-		-	
81)	n-Propylbenzene		31.399	RL	31	12.02	0.00	P	99	919,185	91	120	24.4 | 23.6	92	10.9 | 11.4	65	10.3 | 9.90
82)	2-Chlorotoluene		31.035	RL	31	12.08	0.00	P	97	192,006	126	91	295 | 289	63	41.1 | 36.0	-	
83)	4-Ethyltoluene		No Cal.	-	-	12.08	-0.02	F	57	3,102	105	120	32.2 | 29.9	77	68.5 | 10.6	-	
84)	1,3,5-Trimethylbenzene		32.554	RL	33	12.13	0.00	P	99	660,206	105	120	51.4 | 50.6	119	12.2 | 11.0	77	12.8 | 12.6
85)	4-Chlorotoluene		31.795	RL	32	12.14	0.00	P	99	651,125	91	126	33.5 | 34.5	63	11.6 | 11.3	-	
86)	tert-Butylbenzene		30.037	RL	30	12.33	0.00	P	88	162,025	134	119	379 | 340	91	219 | 215	-	
87)	1,2,4-Trimethylbenzene		32.249	RL	32	12.36	0.00	P	99	668,925	105	120	49.5 | 50.1	-		-	
88)	Pentachloroethane		33.655	RL	34	12.35	0.00	P	89	129,069	167	165	75.6 | 86.1	132	36.5 | 42.9	-	
89)	sec-Butylbenzene		31.568	RL	32	12.46	0.00	P	98	809,557	105	134	21.5 | 20.4	-		-	
90)	4-Isopropyltoluene		31.623	RL	32	12.54	0.00	P	97	707,662	119	134	26.8 | 28.5	91	21.1 | 22.4	-	
91)	1,3-Dichlorobenzene		30.572	RL	31	12.53	-0.01	P	96	392,004	146	148	61.3 | 63.8	111	38.5 | 35.3	-	
92)	1,4-Dichlorobenzene		30.145	RL	30	12.58	0.00	P	99	394,120	146	111	37.2 | 37.8	148	62.9 | 61.5	-	
93)	n-Butylbenzene		32.070	RL	32	12.78	0.00	P	96	359,804	92	91	172 | 179	134	49.9 | 50.5	-	
94)	1,2-Dichlorobenzene		31.510	RL	32	12.80	0.00	P	98	383,353	146	148	63.8 | 64.6	111	38.7 | 40.4	-	
95)	Hexachloroethane		No Cal.	-	-	12.95	0.00	P	94	94,451	201	117	118 | 129	199	62.2 | 65.0	203	66.4 | 64.5
96)	1,2-Dibromo-3-chloropropane		32.877	RL	33	13.24	-0.01	P	81	47,503	75	155	77.3 | 104	157	108 | 123	-	
97)	Nitrobenzene		No Cal.	-	-	13.35	0.00	F	41	4,606	123	51	111 | 62.1	77	217 | 146	-	
98)	1,2,4-Trichlorobenzene		31.756	RL	32	13.69	0.00	P	97	262,390	180	182	95.0 | 97.2	184	31.4 | 29.6	145	29.1 | 30.6
99)	Hexachlorobutadiene		32.662	RL	33	13.78	0.00	P	94	93,879	225	227	62.5 | 59.6	260	27.3 | 22.3	223	65.2 | 59.4
100	Naphthalene		33.108	RL	33	13.84	0.00	P	98	790,869	128	127	13.0 | 12.5	129	10.3 | 11.6	-	
101	1,2,3-Trichlorobenzene		31.098	RL	31	13.97	0.00	P	96	249,937	180	182	98.1 | 91.8	184	30.1 | 29.8	145	29.8 | 29.8

Uses lowest known RLs; project RLs may be higher. Qualitative P/F based only on output ratios at apex and may not reflect full peak or analyst review.

For analyst review assistance only.

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324012.D
Acq On : 23 Feb 2024 16:44
Operator :
Sample : CPTP02232408 - 30ppb
Misc : PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 26 12:50:13 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	6.251	168	122405	10.00	ppb		0.01
42) 1,4-Difluorobenzene	7.563	114	199973	10.00	ppb		0.00
50) Chlorobenzene-d5	11.036	117	179712	10.00	ppb		0.00
74) 1,4-Dichlorobenzene-d4	12.570	152	98176	10.00	ppb		0.00
System Monitoring Compounds							
35) Dibromofluoromethane (S)	6.109	113	155647	31.11	ppb		0.00
Spiked Amount 10.000			Recovery = 311.10%				
56) Toluene-d8 (S)	9.786	98	534206	30.34	ppb		0.00
Spiked Amount 10.000			Recovery = 303.40%				
76) 4-Bromofluorobenzene (S)	11.855	95	206120	30.38	ppb		0.00
Spiked Amount 10.000			Recovery = 303.80%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.391	85	211363	32.6775	ppb		97
3) Chloromethane	1.553	50	252229	29.7025	ppb		98
4) Vinyl chloride	1.665	62	228346	30.3595	ppb		98
5) Bromomethane	1.970	94	138403	28.6412	ppb		93
6) Chloroethane	2.072	64	144304	29.8718	ppb		97
7) Trichlorofluoromethane	2.346	101	250000	29.8250	ppb		98
8) Diethyl ether	2.652	74	123129	32.9633	ppb		94
9) 1,1-Dichloroethene	2.896	96	161797	31.1945	ppb		84
10) Freon 113	2.906	101	162	No Calib	#		
11) Acetone	2.987	58	19591	29.2612	ppb	#	58
12) Iodomethane	3.058	142	316808	32.2020	ppb		99
13) Carbon disulfide	3.129	76	513687	30.5148	ppb		99
14) Allyl chloride	3.333	76	108195	31.6504	ppb		95
15) Methylene chloride	3.496	84	206122	30.4615	ppb		99
16) t-Butanol (TBA)	0.000		0	N.D.			
17) Acrylonitrile	3.821	52	63786	31.5715	ppb		97
18) Methyl t-butyl ether (...	3.862	73	569821	32.2258	ppb		95
19) trans-1,2-Dichloroethene	3.841	96	190066	31.6792	ppb		95
20) n-Hexane	4.157	57	373	No Calib	#		
21) 1,1-Dichloroethane	4.411	63	331827	30.7633	ppb		95
22) Vinyl acetate	4.523	86	41740	30.8101	ppb	#	90
23) 2-chloro-1,3-butadiene	0.000		0	N.D.			
24) Diisopropyl ether (DIPE)	4.512	45	2791	No Calib	#		
25) Ethyl t-butyl ether (E...	0.000		0	N.D.			
26) 2-Butanone (MEK)	5.336	72	25256	29.5052	ppb		88
27) cis-1,2-Dichloroethene	5.295	96	216241	32.4583	ppb		90
28) 2,2-Dichloropropane	5.285	77	265771	31.1289	ppb		97
29) Propionitrile	5.438	54	33146	30.6398	ppb		73
30) Methyl acrylate	5.509	55	189763	31.3031	ppb		99
31) Methacrylonitrile	5.672	67	86639	33.8153	ppb		91
32) Bromochloromethane	5.662	128	103314	31.4084	ppb		95
33) Chloroform	5.834	83	331841	31.7155	ppb		98
34) Tetrahydrofuran	5.743	72	32288	30.6711	ppb	#	81
36) 1,1,1-Trichloroethane	6.109	97	286310	31.7961	ppb		97
37) 1-Chlorobutane	6.312	56	349542	No Calib			
38) 1,1-Dichloropropene	6.394	75	215067	30.3625	ppb		99
39) Carbon tetrachloride	6.384	117	232192	30.6424	ppb		89
40) Benzene	6.750	78	730356	31.1799	ppb		98
41) 1,2-Dichloroethane	6.811	62	235555	32.6102	ppb		98
43) t- Amyl methyl ether (...	0.000		0	N.D.			
44) Trichloroethene	8.031	95	170487	30.2375	ppb		90
45) 1,2-Dichloropropane	8.468	63	178334	31.4507	ppb		97
46) Methyl methacrylate	8.773	69	152552	30.8873	ppb		96

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324012.D
Acq On : 23 Feb 2024 16:44
Operator :
Sample : CPTP02232408 - 30ppb
Misc : PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 26 12:50:13 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

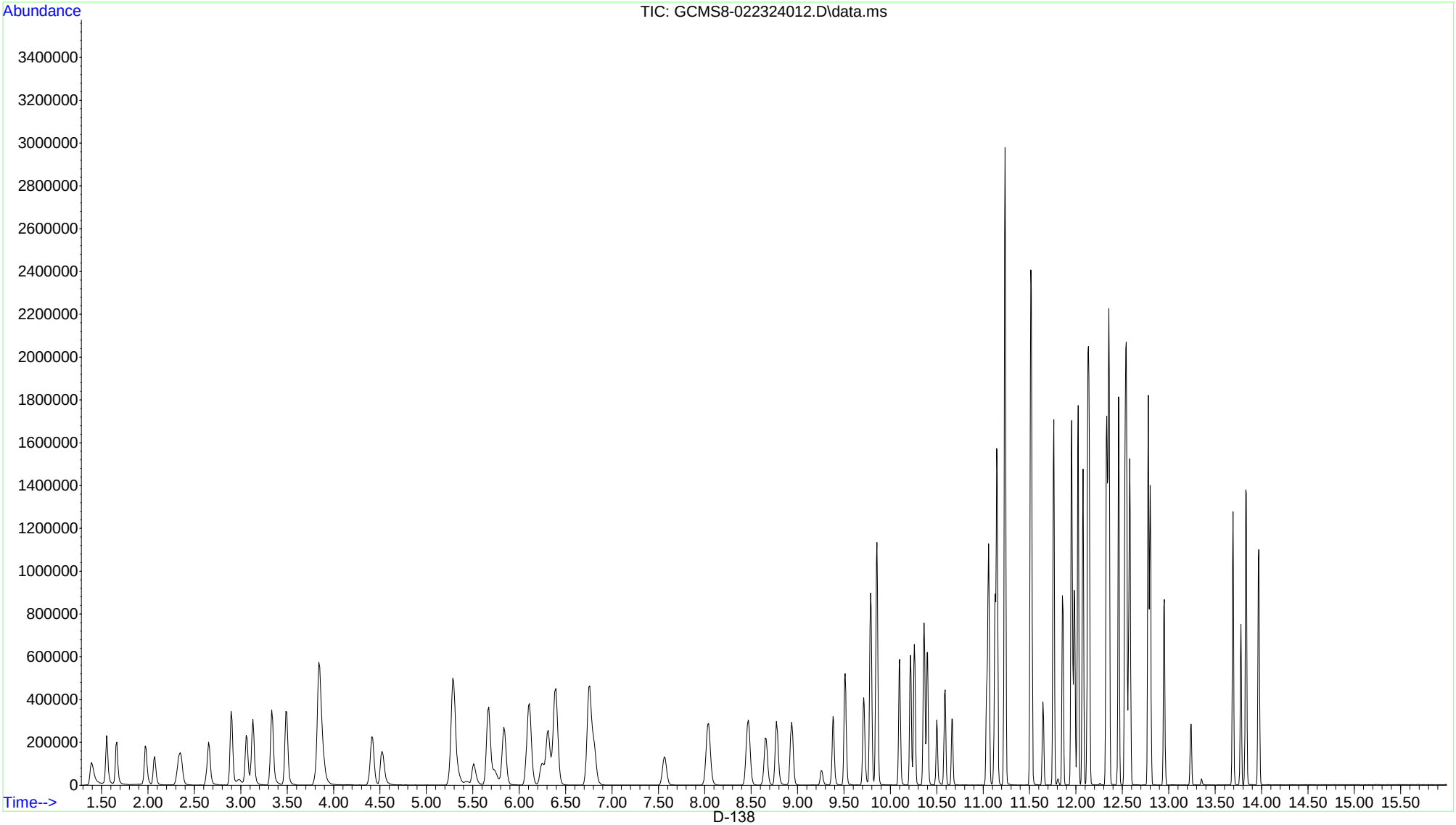
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
47) Dibromomethane	8.651	93	115808	32.1066	ppb		98
48) Bromodichloromethane	8.936	83	235835	32.3126	ppb		98
49) 2-nitro-propane	9.256	43	55648	32.4045	ppb		93
51) Chloromethyl cyanide	9.366	75	11922	No Calib	#		
52) 2-Chloroethyl vinyl ether	9.382	63	128704	33.1246	ppb		95
53) cis-1,3-Dichloropropene	9.513	75	286729	32.7296	ppb		98
54) 4-Methyl-2-pentanone	9.718	58	88172	31.3626	ppb		98
55) 1,1-Dichloro-2-propanone	9.707	83	5467	No Calib	#		
57) Toluene	9.855	92	440647	30.8545	ppb		100
58) trans-1,3-Dichloropropene	10.101	75	265300	33.3916	ppb		99
59) Ethyl methacrylate	10.217	69	254648	34.9202	ppb		95
60) 1,1,2-Trichloroethane	10.259	83	135142	31.6818	ppb		99
61) 1,3-Dichloropropane	10.401	76	292683	31.3211	ppb		97
62) 2-Hexanone	10.500	43	156855	31.4804	ppb		94
63) Tetrachloroethene	10.364	164	143833	29.5545	ppb		96
64) Dibromochloromethane	10.590	129	182973	32.7096	ppb		99
65) 1,2-Dibromoethane	10.663	107	166495	31.6694	ppb		99
66) Chlorobenzene	11.057	112	457825	30.1489	ppb		97
67) 1,1,1,2-Tetrachloroethane	11.131	131	178135	31.7020	ppb		98
68) Ethylbenzene	11.146	91	802250	30.7357	ppb		96
69) m- & p-Xylenes	11.236	106	636744	62.5419	ppb		97
70) o-Xylene	11.509	106	323568	31.0937	ppb		94
71) Styrene	11.519	104	526310	33.3854	ppb		92
72) Bromoform	11.645	173	126430	32.0046	ppb		93
73) Isopropylbenzene	11.761	105	798052	31.5524	ppb		99
75) cis-1,4-dichloro-2-butene	11.808	75	4416	No Calib			
77) 1,1,2,2-Tetrachloroethane	11.955	83	238712	32.2167	ppb		95
78) trans-1,4-Dichloro-2-b...	11.987	53	62555	31.4805	ppb		92
79) 1,2,3-Trichloropropane	11.981	110	81844	30.2305	ppb		98
80) Bromobenzene	11.955	156	205847	31.6782	ppb		98
81) n-Propylbenzene	12.023	91	919185	31.3993	ppb		99
82) 2-Chlorotoluene	12.076	126	192006	31.0354	ppb		97
83) 4-Ethyltoluene	12.076	105	3102	No Calib	#		
84) 1,3,5-Trimethylbenzene	12.128	105	660206	32.5538	ppb		99
85) 4-Chlorotoluene	12.144	91	651125	31.7949	ppb		99
86) tert-Butylbenzene	12.333	134	162025	30.0368	ppb	#	88
87) 1,2,4-Trimethylbenzene	12.360	105	668925	32.2489	ppb		99
88) Pentachloroethane	12.349	167	129069	33.6552	ppb		89
89) sec-Butylbenzene	12.459	105	809557	31.5677	ppb		98
90) 4-Isopropyltoluene	12.543	119	707662	31.6234	ppb		97
91) 1,3-Dichlorobenzene	12.528	146	392004	30.5716	ppb		96
92) 1,4-Dichlorobenzene	12.580	146	394120	30.1448	ppb		99
93) n-Butylbenzene	12.780	92	359804	32.0699	ppb		96
94) 1,2-Dichlorobenzene	12.801	146	383353	31.5102	ppb		98
95) Hexachloroethane	12.953	201	94451	No Calib			
96) 1,2-Dibromo-3-chloropr...	13.237	75	47503	32.8772	ppb		81
97) Nitrobenzene	13.352	123	4606	No Calib	#		
98) 1,2,4-Trichlorobenzene	13.693	180	262390	31.7558	ppb		97
99) Hexachlorobutadiene	13.777	225	93879	32.6623	ppb		94
100) Naphthalene	13.835	128	790869	33.1084	ppb		98
101) 1,2,3-Trichlorobenzene	13.972	180	249937	31.0982	ppb		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324012.D
Acq On : 23 Feb 2024 16:44
Operator :
Sample : CPTP02232408 - 30ppb
Misc : PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 26 12:50:13 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration



D-138

8260 Quantitation Review Report

C:\msdchem\1\data\2024\02-FEB\022324\GCMS8-022324013.D **CP** 02/23/24 013

Sample Name: CPTP02232409 - 40ppb
Data File Name: GCMS8-022324013.D
Date Acquired: 02/23/24 17:08
Vial Number: 12
Sample Multiplier: 1
Misc Info: PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B

Operator:
Data File Path: C:\msdchem\1\data\2024\02-FEB\02232
Instrument Method: VOC092623 INSTRUMENT SCAN.M
Quant. Method: VOC022324Final
Last Result Mod: 02/26/24 12:50
Last Cal Update: 02/26/24 12:39
Last Cal Mod: 02/26/24 12:39

#	Internal Standard	Response
1)	Pentafluorobenzene	124,451
42)	1,4-Difluorobenzene	202,422
50)	Chlorobenzene-d5	177,282
74)	1,4-Dichlorobenzene-d4	99,311

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
1)	Pentafluorobenzene		10	-	-	6.25	0.01	-	100	124,451	168	-		-		-	
2)	Dichlorodifluoromethane		46.749	OC	>40	1.39	0.01	P	96	307,433	85	87	32.1 | 34.5	-		-	
3)	**Chloromethane**		**40.163**	RL	**40**	1.55	0.01	P	99	346,763	50	52	30.8 | 31.3	-		-	
4)	**Vinyl chloride**		**41.536**	RL	**42**	1.67	0.01	P	99	317,633	62	64	31.2 | 30.5	-		-	
5)	**Bromomethane**		**39.532**	RL	**40**	1.98	0.01	P	92	194,224	94	96	95.6 | 88.5	-		-	
6)	**Chloroethane**		**41.047**	RL	**41**	2.07	0.01	P	100	201,604	64	66	34.2 | 34.3	-		-	
7)	**Trichlorofluoromethane**		**42.177**	RL	**42**	2.36	0.01	P	93	359,444	101	103	66.9 | 61.6	66	10.9 | 12.7	-	
8)	**Diethyl ether**		**42.139**	RL	**42**	2.66	0.01	P	93	160,035	74	45	90.9 | 103	59	125 | 129	-	
9)	**1,1-Dichloroethene**		**42.730**	RL	**43**	2.91	0.01	P	94	225,333	96	61	148 | 139	63	48.4 | 47.0	-	
10)	Freon 113		No Cal.	-	-	2.90	0.00	**F**	**16**	154	101	151	**0.00 | 82.4**	103	**0.00 | 64.1**	153	**0.00 | 53.1**
11)	**Acetone**		**41.057**	RL	**41**	2.99	0.02	P	83	27,708	58	43	298 | 266	-		-	
12)	**Iodomethane**		**42.554**	RL	**43**	3.07	0.01	P	97	425,652	142	127	39.0 | 40.6	141	14.1 | 12.9	-	
13)	**Carbon disulfide**		**42.565**	RL	**43**	3.13	0.01	P	100	728,523	76	78	9.33 | 9.20	-		-	
14)	**Allyl chloride**		**43.533**	RL	**44**	3.34	0.01	P	94	151,304	76	78	31.3 | 30.7	41	267 | 283	39	171 | 175
15)	**Methylene chloride**		**40.699**	RL	**41**	3.50	0.01	P	95	276,918	84	49	116 | 121	86	59.9 | 64.4	51	37.3 | 36.5
16)	t-Butanol (TBA)		No Cal.	-	-	(3.70)	-	-	0		59	57	0.00 | 8.40	-		-	
17)	**Acrylonitrile**		**39.767**	RL	**40**	3.82	0.01	P	97	81,977	52	53	125 | 120	51	41.9 | 41.7	-	
18)	**Methyl t-butyl ether (MTBE)**		**41.204**	RL	**41**	3.86	0.01	P	99	740,755	73	57	22.7 | 23.3	-		-	
19)	**trans-1,2-Dichloroethene**		**43.454**	RL	**43**	3.84	0.01	P	93	265,067	96	61	128 | 137	98	61.1 | 65.3	-	
20)	n-Hexane		No Cal.	-	-	4.21	-0.01	**F**	**19**	365	57	43	**0.00 | 64.9**	41	**0.00 | 72.0**	56	**0.00 | 47.3**
21)	**1,1-Dichloroethane**		**41.047**	RL	**41**	4.42	0.01	P	97	450,156	63	65	32.1 | 33.7	83	13.4 | 15.0	-	
22)	**Vinyl acetate**		**40.073**	RL	**40**	4.53	0.01	P	83	55,355	86	43	875 | 949	-		-	
23)	2-chloro-1,3-butadiene		No Cal.	-	-	(4.54)	-	-	0		53	88	0.00 | 58.3	52	0.00 | 23.5	-	
24)	Diisopropyl ether (DIPE)		No Cal.	-	-	4.52	-0.05	**F**	**1**	3,441	45	43	**14000 | 38.9**	87	**86.8 | 24.3**	-	
25)	Ethyl t-butyl ether (ETBE)		No Cal.	-	-	(5.12)	-	-	0		59	57	0.00 | 31.8	87	0.00 | 34.1	-	
26)	**2-Butanone (MEK)**		**38.532**	RL	**39**	5.34	-0.01	P	84	33,877	72	43	388 | 353	57	23.6 | 29.9	-	
27)	**cis-1,2-Dichloroethene**		**42.642**	RL	**43**	5.30	0.01	P	96	288,835	96	61	132 | 132	98	64.5 | 56.2	-	
28)	**2,2-Dichloropropane**		**41.636**	RL	**42**	5.29	0.01	P	98	361,421	77	97	21.9 | 22.0	79	31.9 | 30.5	-	
29)	**Propionitrile**		**39.936**	RL	**40**	5.45	-0.01	P	82	44,263	54	52	18.0 | 11.3	55	23.6 | 15.7	-	
30)	**Methyl acrylate**		**40.355**	RL	**40**	5.51	0.00	P	98	249,148	55	85	16.1 | 17.1	-		-	
31)	**Methacrylonitrile**		**43.713**	RL	**44**	5.68	0.01	P	95	113,870	67	41	152 | 147	39	75.7 | 83.1	52	38.3 | 37.0
32)	**Bromochloromethane**		**42.303**	RL	**42**	5.67	0.01	P	93	141,476	128	49	157 | 167	130	128 | 134	-	
33)	**Chloroform**		**41.735**	RL	**42**	5.84	0.01	P	99	443,969	83	85	65.7 | 66.3	-		-	
34)	**Tetrahydrofuran**		**39.328**	RL	**39**	5.75	0.01	P	88	42,093	72	71	99.9 | 96.8	42	214 | 241	-	
35)	Dibromofluoromethane (S)		42.751	Sur	-	6.11	0.01	P	98	217,484	113	111	99.4 | 102	192	21.0 | 22.1	81	14.6 | 14.3
36)	**1,1,1-Trichloroethane**		**43.072**	RL	**43**	6.11	0.01	P	97	394,323	97	99	63.5 | 60.3	61	38.2 | 38.9	63	12.5 | 14.3
37)	1-Chlorobutane		No Cal.	-	-	6.31	0.01	P	97	490,974	56	49	4.34 | 3.40	-		-	
38)	**1,1-Dichloropropene**		**41.710**	RL	**42**	6.39	0.00	P	98	300,384	75	39	56.9 | 55.5	110	34.2 | 36.4	77	31.7 | 31.4
39)	**Carbon tetrachloride**		**42.617**	RL	**43**	6.39	0.01	P	92	328,330	117	119	92.8 | 100	-		-	
40)	**Benzene**		**41.991**	RL	**42**	6.76	0.01	P	97	1,000,029	78	51	16.4 | 15.3	-		-	
41)	**1,2-Dichloroethane**		**43.146**	RL	**43**	6.81	0.00	P	97	316,870	62	98	11.1 | 12.3	-		-	
42)	1,4-Difluorobenzene		10	-	-	7.57	0.01	-	100	202,422	114	-		-		-	
43)	t- Amyl methyl ether (TAME)		No Cal.	-	-	(7.05)	-	-	0		73	55	0.00 | 37.9	87	0.00 | 22.4	-	
44)	**Trichloroethene**		**42.164**	RL	**42**	8.04	0.01	P	94	240,644	95	132	103 | 115	130	110 | 113	97	64.6 | 64.2
45)	**1,2-Dichloropropane**		**41.635**	RL	**42**	8.47	0.01	P	98	238,971	63	112	5.80 | 5.70	76	46.4 | 47.7	-	

For analyst review assistance only.

8260 Quantitation Review Report

C:\msdchem\1\data\2024\02-FEB\022324\GCMS8-022324013.D **CP** 02/23/24 013

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
46)	**Methyl methacrylate**		**41.777**	RL	**42**	8.77	0.00	P	97	209,486	69	41	128 | 133	100	41.0 | 40.0	39	64.3 | 64.9
47)	**Dibromomethane**		**42.273**	RL	**42**	8.66	0.01	P	94	154,346	93	174	118 | 107	95	83.0 | 82.1	-	
48)	**Bromodichloromethane**		**44.078**	RL	**44**	8.94	0.00	P	100	325,643	83	85	64.4 | 64.1	127	8.71 | 8.90	-	
49)	**2-nitro-propane**		**43.016**	QL	**43**	9.26	0.00	P	96	74,776	43	39	26.2 | 28.5	-		-	
50)	Chlorobenzene-d5		10	-	-	11.04	0.01	P	96	177,282	117	82	52.5 | 54.8	119	33.6 | 31.9	54	18.7 | 22.3
51)	Chloromethyl cyanide		No Cal.	-	-	9.38	-0.01	P	**68**	15,631	75	48	67.5 | 39.0	40	31.5 | 44.5	-	
52)	**2-Chloroethyl vinyl ether**		**44.239**	RL	**44**	9.39	0.01	P	96	169,566	63	65	31.3 | 30.2	106	34.9 | 31.4	-	
53)	**cis-1,3-Dichloropropene**		**45.365**	RL	**45**	9.51	0.00	P	95	392,051	75	77	34.0 | 33.4	39	51.3 | 47.1	110	24.8 | 21.7
54)	**4-Methyl-2-pentanone**		**42.624**	RL	**43**	9.72	0.00	P	95	118,389	58	41	56.1 | 52.2	100	42.1 | 44.0	85	46.7 | 42.0
55)	1,1-Dichloro-2-propanone		No Cal.	-	-	9.71	-0.01	**F**	**54**	7,353	83	63	**88.7 | 56.4**	91	47.2 | 22.8	-	
56)	Toluene-d8 (S)		42.796	Sur	-	9.79	0.00	P	98	743,379	98	100	70.0 | 71.5	42	12.5 | 12.7	70	11.1 | 11.3
57)	**Toluene**		**42.583**	RL	**43**	9.85	0.00	P	99	599,924	92	91	166 | 168	65	19.3 | 18.5	39	15.6 | 16.3
58)	**trans-1,3-Dichloropropene**		**45.743**	RL	**46**	10.10	0.00	P	98	358,517	75	77	31.6 | 30.2	39.1	41.9 | 43.2	110	24.7 | 24.5
59)	Ethyl methacrylate		45.344	OC	>40	10.22	0.00	P	97	326,191	69	41	71.1 | 69.2	99	19.3 | 18.5	86	14.1 | 16.1
60)	**1,1,2-Trichloroethane**		**42.051**	RL	**42**	10.26	0.00	P	97	176,949	83	97	122 | 125	61	71.1 | 70.3	85	64.7 | 59.8
61)	**1,3-Dichloropropane**		**42.617**	RL	**43**	10.40	0.00	P	95	392,855	76	41	56.1 | 61.7	78	31.2 | 32.5	39	20.8 | 22.8
62)	**2-Hexanone**		**42.539**	RL	**43**	10.50	0.00	P	94	209,603	43	58	54.8 | 59.4	57	17.7 | 21.2	100	14.8 | 16.0
63)	**Tetrachloroethene**		**41.768**	RL	**42**	10.36	0.00	P	96	200,526	164	166	132 | 127	129	84.6 | 88.5	131	81.0 | 84.5
64)	**Dibromochloromethane**		**44.916**	RL	**45**	10.59	0.00	P	96	247,857	129	127	75.3 | 79.2	-		-	
65)	**1,2-Dibromoethane**		**43.267**	RL	**43**	10.67	0.01	P	97	224,390	107	109	91.6 | 89.0	188	4.21 | 2.80	-	
66)	**Chlorobenzene**		**42.393**	RL	**42**	11.06	0.00	P	96	635,059	112	77	57.8 | 61.4	114	30.9 | 33.1	-	
67)	**1,1,1,2-Tetrachloroethane**		**44.692**	RL	**45**	11.13	0.01	P	99	247,729	131	133	94.4 | 94.0	117	64.4 | 64.0	119	60.8 | 63.7
68)	**Ethylbenzene**		**42.353**	RL	**42**	11.15	0.00	P	99	1,090,542	91	106	32.4 | 32.6	51	9.14 | 7.80	-	
69)	**m- & p-Xylenes**		**87.159**	RL	**87**	11.24	0.00	P	96	875,373	106	91	195 | 188	105	43.5 | 41.4	77	25.3 | 24.3
70)	**o-Xylene**		**42.557**	RL	**43**	11.51	0.00	P	98	436,865	106	91	204 | 206	105	48.0 | 48.7	-	
71)	**Styrene**		**45.885**	RL	**46**	11.52	0.00	P	91	713,587	104	103	50.5 | 46.8	78	46.6 | 41.6	51	31.2 | 22.7
72)	**Bromoform**		**43.376**	RL	**43**	11.65	0.00	P	93	169,321	173	175	50.7 | 46.3	254	9.71 | 12.5	-	
73)	**Isopropylbenzene**		**44.206**	RL	**44**	11.76	0.00	P	99	1,102,977	105	120	27.7 | 27.0	77	13.9 | 14.5	79	11.0 | 11.8
74)	1,4-Dichlorobenzene-d4		10	-	-	12.57	0.00	P	96	99,311	152	115	55.2 | 55.2	150	164 | 157	-	
75)	cis-1,4-dichloro-2-butene		No Cal.	-	-	11.81	0.00	P	90	6,198	75	53	121 | 106	89	48.4 | 47.5	-	
76)	4-Bromofluorobenzene (S)		41.453	Sur	-	11.86	0.00	P	99	284,528	95	174	75.0 | 75.6	176	72.7 | 73.8	75	48.9 | 47.6
77)	**1,1,2,2-Tetrachloroethane**		**41.752**	RL	**42**	11.96	0.00	P	94	312,944	83	85	65.3 | 70.8	131	10.9 | 11.0	95	15.9 | 18.7
78)	**trans-1,4-Dichloro-2-butene**		**41.110**	RL	**41**	11.99	0.00	P	92	82,759	53	88	49.8 | 55.9	124	27.0 | 23.1	-	
79)	**1,2,3-Trichloropropane**		**39.962**	RL	**40**	11.98	0.00	P	91	109,442	110	75	289 | 269	39	80.4 | 79.2	-	
80)	**Bromobenzene**		**41.709**	RL	**42**	11.96	0.00	P	92	274,159	156	158	102 | 94.7	-		-	
81)	**n-Propylbenzene**		**43.492**	RL	**43**	12.02	0.00	P	99	1,287,911	91	120	23.6 | 23.6	92	10.3 | 11.4	65	9.75 | 9.90
82)	**2-Chlorotoluene**		**41.844**	RL	**42**	12.08	0.00	P	98	261,869	126	91	293 | 289	63	38.6 | 36.0	-	
83)	4-Ethyltoluene		No Cal.	-	-	12.08	-0.02	**F**	**33**	4,158	105	120	43.1 | 29.9	77	**81.5 | 10.6**	-	
84)	**1,3,5-Trimethylbenzene**		**44.489**	RL	**44**	12.13	0.00	P	99	912,683	105	120	51.3 | 50.6	119	12.3 | 11.0	77	12.7 | 12.6
85)	**4-Chlorotoluene**		**42.096**	RL	**42**	12.14	0.00	P	99	872,047	91	126	33.9 | 34.5	63	11.4 | 11.3	-	
86)	**tert-Butylbenzene**		**42.083**	RL	**42**	12.33	0.00	P	91	229,631	134	119	370 | 340	91	214 | 215	-	
87)	**1,2,4-Trimethylbenzene**		**43.969**	RL	**44**	12.36	0.00	P	98	922,575	105	120	48.8 | 50.1	-		-	
88)	**Pentachloroethane**		**44.864**	RL	**45**	12.35	0.00	P	93	174,043	167	165	77.8 | 86.1	132	40.6 | 42.9	-	
89)	**sec-Butylbenzene**		**44.049**	RL	**44**	12.46	0.00	P	100	1,142,708	105	134	20.3 | 20.4	-		-	
90)	**4-Isopropyltoluene**		**43.663**	RL	**44**	12.54	0.00	P	97	988,368	119	134	26.4 | 28.5	91	21.7 | 22.4	-	
91)	**1,3-Dichlorobenzene**		**40.696**	RL	**41**	12.53	-0.01	P	97	527,862	146	148	62.3 | 63.8	111	38.8 | 35.3	-	
92)	**1,4-Dichlorobenzene**		**40.961**	RL	**41**	12.59	0.01	P	96	541,727	146	111	33.9 | 37.8	148	63.3 | 61.5	-	
93)	**n-Butylbenzene**		**44.246**	RL	**44**	12.78	0.00	P	93	502,152	92	91	168 | 179	134	48.2 | 50.5	-	
94)	**1,2-Dichlorobenzene**		**41.586**	RL	**42**	12.80	0.00	P	100	511,779	146	148	64.2 | 64.6	111	40.5 | 40.4	-	
95)	Hexachloroethane		No Cal.	-	-	12.95	0.00	P	98	134,248	201	117	127 | 129	199	66.1 | 65.0	203	65.8 | 64.5
96)	**1,2-Dibromo-3-chloropropane**		**42.762**	RL	**43**	13.24	-0.01	P	88	62,499	75	155	86.7 | 104	157	115 | 123	-	
97)	Nitrobenzene		No Cal.	-	-	13.35	0.00	**F**	**43**	6,139	123	51	**106 | 62.1**	77	216 | 146	-	
98)	**1,2,4-Trichlorobenzene**		**43.461**	RL	**43**	13.69	0.00	P	98	363,261	180	182	95.1 | 97.2	184	30.8 | 29.6	145	29.4 | 30.6
99)	Hexachlorobutadiene		45.407	OC	>40	13.78	0.00	P	95	132,020	225	227	60.7 | 59.6	260	27.5 | 22.3	223	64.6 | 59.4
100	**Naphthalene**		**44.717**	RL	**45**	13.84	0.00	P	99	1,080,525	128	127	12.4 | 12.5	129	10.7 | 11.6	-	
101	**1,2,3-Trichlorobenzene**		**41.930**	RL	**42**	13.97	0.00	P	95	340,891	180	182	98.1 | 91.8	184	31.2 | 29.8	145	31.4 | 29.8

Uses lowest known RLs; project RLs may be higher. Qualitative P/F based only on output ratios at apex and may not reflect full peak or analyst review.

For analyst review assistance only.

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324013.D
Acq On : 23 Feb 2024 17:08
Operator :
Sample : CPTP02232409 - 40ppb
Misc : PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 26 12:50:19 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	6.251	168	124451	10.00	ppb		0.01
42) 1,4-Difluorobenzene	7.573	114	202422	10.00	ppb		0.01
50) Chlorobenzene-d5	11.041	117	177282	10.00	ppb		0.00
74) 1,4-Dichlorobenzene-d4	12.570	152	99311	10.00	ppb		0.00
System Monitoring Compounds							
35) Dibromofluoromethane (S)	6.109	113	217484	42.75	ppb		0.00
Spiked Amount 10.000			Recovery = 427.50%				
56) Toluene-d8 (S)	9.786	98	743379	42.80	ppb		0.00
Spiked Amount 10.000			Recovery = 428.00%				
76) 4-Bromofluorobenzene (S)	11.855	95	284528	41.45	ppb		0.00
Spiked Amount 10.000			Recovery = 414.50%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.391	85	307433	46.7489	ppb		96
3) Chloromethane	1.553	50	346763	40.1635	ppb		99
4) Vinyl chloride	1.665	62	317633	41.5362	ppb		99
5) Bromomethane	1.980	94	194224	39.5321	ppb		92
6) Chloroethane	2.072	64	201604	41.0472	ppb		100
7) Trichlorofluoromethane	2.357	101	359444	42.1767	ppb		93
8) Diethyl ether	2.662	74	160035	42.1392	ppb		93
9) 1,1-Dichloroethene	2.906	96	225333	42.7300	ppb		94
10) Freon 113	2.896	101	154	No Calib	#		
11) Acetone	2.987	58	27708	41.0572	ppb	#	83
12) Iodomethane	3.068	142	425652	42.5541	ppb		97
13) Carbon disulfide	3.129	76	728523	42.5653	ppb		100
14) Allyl chloride	3.343	76	151304	43.5335	ppb		94
15) Methylene chloride	3.495	84	276918	40.6989	ppb		95
16) t-Butanol (TBA)	0.000		0	N.D.			
17) Acrylonitrile	3.821	52	81977	39.7666	ppb		97
18) Methyl t-butyl ether (...	3.862	73	740755	41.2041	ppb		99
19) trans-1,2-Dichloroethene	3.841	96	265067	43.4536	ppb		93
20) n-Hexane	4.207	57	365	No Calib	#		
21) 1,1-Dichloroethane	4.421	63	450156	41.0473	ppb		97
22) Vinyl acetate	4.533	86	55355	40.0726	ppb	#	83
23) 2-chloro-1,3-butadiene	0.000		0	N.D.			
24) Diisopropyl ether (DIPE)	4.523	45	3441	No Calib	#		
25) Ethyl t-butyl ether (E...	0.000		0	N.D.			
26) 2-Butanone (MEK)	5.336	72	33877	38.5321	ppb	#	84
27) cis-1,2-Dichloroethene	5.295	96	288835	42.6421	ppb		96
28) 2,2-Dichloropropane	5.285	77	361421	41.6361	ppb		98
29) Propionitrile	5.448	54	44263	39.9363	ppb		82
30) Methyl acrylate	5.509	55	249148	40.3554	ppb		98
31) Methacrylonitrile	5.682	67	113870	43.7129	ppb		95
32) Bromochloromethane	5.672	128	141476	42.3030	ppb		93
33) Chloroform	5.845	83	443969	41.7345	ppb		99
34) Tetrahydrofuran	5.753	72	42093	39.3278	ppb		88
36) 1,1,1-Trichloroethane	6.109	97	394323	43.0715	ppb		97
37) 1-Chlorobutane	6.312	56	490974	No Calib			
38) 1,1-Dichloropropene	6.394	75	300384	41.7102	ppb		98
39) Carbon tetrachloride	6.394	117	328330	42.6175	ppb		92
40) Benzene	6.760	78	1000029	41.9908	ppb		97
41) 1,2-Dichloroethane	6.811	62	316870	43.1462	ppb		97
43) t- Amyl methyl ether (...	0.000		0	N.D.			
44) Trichloroethene	8.041	95	240644	42.1642	ppb		94
45) 1,2-Dichloropropane	8.468	63	238971	41.6347	ppb		98
46) Methyl methacrylate	8.773	69	209486	41.7770	ppb		97

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324013.D
Acq On : 23 Feb 2024 17:08
Operator :
Sample : CPTP02232409 - 40ppb
Misc : PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 26 12:50:19 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

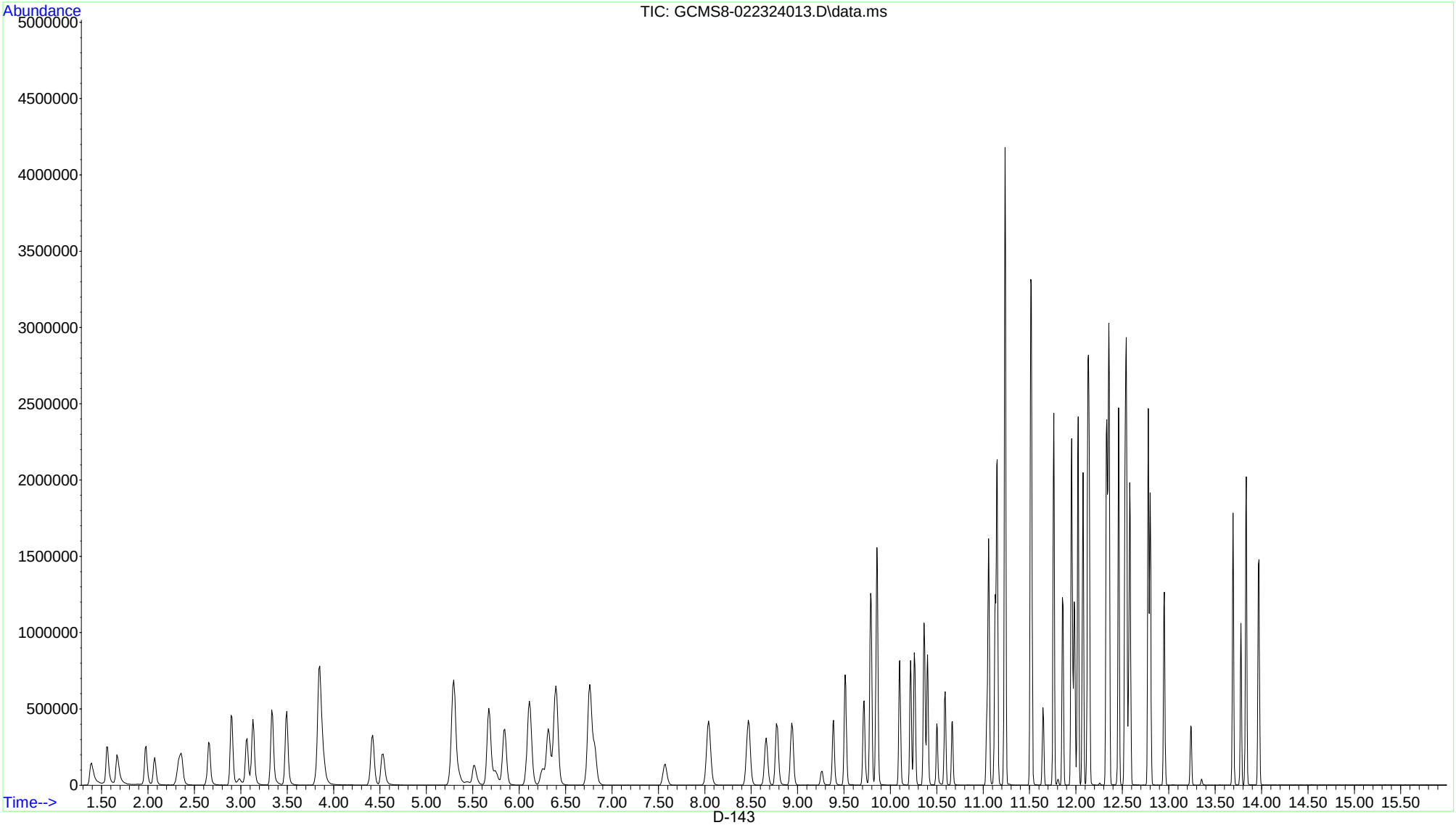
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
47) Dibromomethane	8.661	93	154346	42.2732	ppb		94
48) Bromodichloromethane	8.936	83	325643	44.0777	ppb		100
49) 2-nitro-propane	9.261	43	74776	43.0162	ppb		96
51) Chloromethyl cyanide	9.377	75	15631	No Calib			
52) 2-Chloroethyl vinyl ether	9.387	63	169566	44.2395	ppb		96
53) cis-1,3-Dichloropropene	9.513	75	392051	45.3654	ppb		95
54) 4-Methyl-2-pentanone	9.718	58	118389	42.6236	ppb		95
55) 1,1-Dichloro-2-propanone	9.707	83	7353	No Calib		#	
57) Toluene	9.854	92	599924	42.5830	ppb		99
58) trans-1,3-Dichloropropene	10.101	75	358517	45.7427	ppb		98
59) Ethyl methacrylate	10.217	69	326191	45.3442	ppb		97
60) 1,1,2-Trichloroethane	10.259	83	176949	42.0513	ppb		97
61) 1,3-Dichloropropane	10.401	76	392855	42.6171	ppb		95
62) 2-Hexanone	10.500	43	209603	42.5394	ppb		94
63) Tetrachloroethene	10.364	164	200526	41.7685	ppb		96
64) Dibromochloromethane	10.590	129	247857	44.9161	ppb		96
65) 1,2-Dibromoethane	10.668	107	224390	43.2668	ppb		97
66) Chlorobenzene	11.057	112	635059	42.3934	ppb		96
67) 1,1,1,2-Tetrachloroethane	11.131	131	247729	44.6916	ppb		99
68) Ethylbenzene	11.152	91	1090542	42.3535	ppb		99
69) m- & p-Xylenes	11.236	106	875373	87.1589	ppb		96
70) o-Xylene	11.514	106	436865	42.5566	ppb		98
71) Styrene	11.519	104	713587	45.8854	ppb		91
72) Bromoform	11.645	173	169321	43.3765	ppb		93
73) Isopropylbenzene	11.761	105	1102977	44.2059	ppb		99
75) cis-1,4-dichloro-2-butene	11.808	75	6198	No Calib			
77) 1,1,2,2-Tetrachloroethane	11.955	83	312944	41.7523	ppb		94
78) trans-1,4-Dichloro-2-b...	11.987	53	82759	41.1104	ppb		92
79) 1,2,3-Trichloropropane	11.981	110	109442	39.9624	ppb		91
80) Bromobenzene	11.955	156	274159	41.7087	ppb		92
81) n-Propylbenzene	12.023	91	1287911	43.4921	ppb		99
82) 2-Chlorotoluene	12.076	126	261869	41.8441	ppb		98
83) 4-Ethyltoluene	12.076	105	4158	No Calib		#	
84) 1,3,5-Trimethylbenzene	12.128	105	912683	44.4887	ppb		99
85) 4-Chlorotoluene	12.144	91	872047	42.0960	ppb		99
86) tert-Butylbenzene	12.333	134	229631	42.0833	ppb	#	91
87) 1,2,4-Trimethylbenzene	12.359	105	922575	43.9691	ppb		98
88) Pentachloroethane	12.349	167	174043	44.8637	ppb		93
89) sec-Butylbenzene	12.459	105	1142708	44.0493	ppb		100
90) 4-Isopropyltoluene	12.543	119	988368	43.6625	ppb		97
91) 1,3-Dichlorobenzene	12.528	146	527862	40.6965	ppb		97
92) 1,4-Dichlorobenzene	12.585	146	541727	40.9612	ppb		96
93) n-Butylbenzene	12.780	92	502152	44.2460	ppb		93
94) 1,2-Dichlorobenzene	12.801	146	511779	41.5856	ppb		100
95) Hexachloroethane	12.953	201	134248	No Calib			
96) 1,2-Dibromo-3-chloropr...	13.236	75	62499	42.7617	ppb		88
97) Nitrobenzene	13.352	123	6139	No Calib		#	
98) 1,2,4-Trichlorobenzene	13.693	180	363261	43.4613	ppb		98
99) Hexachlorobutadiene	13.777	225	132020	45.4074	ppb		95
100) Naphthalene	13.835	128	1080525	44.7174	ppb		99
101) 1,2,3-Trichlorobenzene	13.972	180	340891	41.9303	ppb		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324013.D
Acq On : 23 Feb 2024 17:08
Operator :
Sample : CPTP02232409 - 40ppb
Misc : PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 26 12:50:19 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration



D-143

8260 Quantitation Review Report

C:\msdchem\1\data\2024\02-FEB\022324\GCMS8-022324014.D **CP** 02/23/24 014

Sample Name: **CPTP02232410 - 50ppb**
Data File Name: GCMS8-022324014.D
Date Acquired: **02/23/24 17:32**
Vial Number: 13
Sample Multiplier: **1**
Misc Info: PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B

Operator:
Data File Path: C:\msdchem\1\data\2024\02-FEB\02232
Instrument Method: VOC092623 INSTRUMENT SCAN.M
Quant. Method: VOC022324Final
Last Result Mod: 02/26/24 12:50
Last Cal Update: 02/26/24 12:39
Last Cal Mod: 02/26/24 12:39

#	Internal Standard	Response
1)	Pentafluorobenzene	127,668
42)	1,4-Difluorobenzene	201,560
50)	Chlorobenzene-d5	178,621
74)	1,4-Dichlorobenzene-d4	96,588

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
1)	Pentafluorobenzene		10	-	-	6.25	0.01	-	100	127,668	168	-		-		-	
2)	Dichlorodifluoromethane		66.547	OC	>40	1.39	0.01	P	95	448,942	85	87	31.4 | 34.5	-		-	
3)	**Chloromethane**		**49.545**	RL	**50**	1.56	0.02	P	98	438,818	50	52	32.4 | 31.3	-		-	
4)	**Vinyl chloride**		**51.988**	RL	**52**	1.67	0.01	P	96	407,838	62	64	32.7 | 30.5	-		-	
5)	**Bromomethane**		**48.173**	RL	**48**	1.98	0.01	P	91	242,797	94	96	96.7 | 88.5	-		-	
6)	**Chloroethane**		**49.709**	RL	**50**	2.07	0.01	P	96	250,458	64	66	32.1 | 34.3	-		-	
7)	**Trichlorofluoromethane**		**55.545**	RL	**56**	2.36	0.01	P	99	485,606	101	103	62.0 | 61.6	66	11.8 | 12.7	-	
8)	Diethyl ether		51.558	OC	>50	2.65	0.00	P	95	200,866	74	45	100 | 103	59	135 | 129	-	
9)	1,1-Dichloroethene		51.603	OC	>50	2.90	0.00	P	81	279,159	96	61	166 | 139	63	51.7 | 47.0	-	
10)	Freon 113		No Cal.	-	-	2.91	0.01	**F**	**16**	166	101	151	**0.00 | 82.4**	103	**0.00 | 64.1**	153	**0.00 | 53.1**
11)	**Acetone**		**49.107**	RL	**49**	2.98	0.01	P	87	33,877	58	43	290 | 266	-		-	
12)	Iodomethane		51.945	OC	>50	3.07	0.01	P	97	533,019	142	127	38.8 | 40.6	141	13.6 | 12.9	-	
13)	Carbon disulfide		51.205	OC	>50	3.13	0.01	P	99	899,052	76	78	8.72 | 9.20	-		-	
14)	Allyl chloride		52.880	OC	>50	3.33	0.00	P	93	188,539	76	78	33.9 | 30.7	41	292 | 283	39	191 | 175
15)	**Methylene chloride**		**49.191**	RL	**49**	3.50	0.01	P	97	341,388	84	49	116 | 121	86	64.3 | 64.4	51	35.2 | 36.5
16)	t-Butanol (TBA)		No Cal.	-	-	(3.70)	-	-	0		59	57	0.00 | 8.40	-		-	
17)	Acrylonitrile		50.542	OC	>50	3.82	0.01	P	95	107,194	52	53	114 | 120	51	40.4 | 41.7	-	
18)	Methyl t-butyl ether (MTBE)		50.186	OC	>50	3.86	0.01	P	97	925,558	73	57	22.0 | 23.3	-		-	
19)	trans-1,2-Dichloroethene		52.285	OC	>50	3.84	0.01	P	96	327,185	96	61	131 | 137	98	64.4 | 65.3	-	
20)	n-Hexane		No Cal.	-	-	4.21	-0.01	**F**	**57**	541	57	43	**119 | 64.9**	41	73.3 | 72.0	56	**0.00 | 47.3**
21)	1,1-Dichloroethane		50.072	OC	>50	4.42	0.01	P	98	563,326	63	65	32.7 | 33.7	83	13.6 | 15.0	-	
22)	Vinyl acetate		54.780	OC	>50	4.53	0.01	P	**68**	77,827	86	43	812 | 949	-		-	
23)	2-chloro-1,3-butadiene		No Cal.	-	-	(4.54)	-	-	0		53	88	0.00 | 58.3	52	0.00 | 23.5	-	
24)	Diisopropyl ether (DIPE)		No Cal.	-	-	4.51	-0.06	**F**	**1**	4,495	45	43	**11500 | 38.9**	87	**58.3 | 24.3**	-	
25)	Ethyl t-butyl ether (ETBE)		No Cal.	-	-	(5.12)	-	-	0		59	57	0.00 | 31.8	87	0.00 | 34.1	-	
26)	**2-Butanone (MEK)**		**49.204**	RL	**49**	5.35	0.00	P	91	44,696	72	43	372 | 353	57	25.6 | 29.9	-	
27)	cis-1,2-Dichloroethene		51.582	OC	>50	5.30	0.01	P	94	358,423	96	61	124 | 132	98	61.1 | 56.2	-	
28)	2,2-Dichloropropane		50.203	OC	>50	5.29	0.01	P	96	447,055	77	97	24.3 | 22.0	79	32.5 | 30.5	-	
29)	**Propionitrile**		**48.867**	RL	**49**	5.44	-0.02	P	86	55,817	54	52	19.1 | 11.3	55	19.8 | 15.7	-	
30)	Methyl acrylate		50.268	OC	>50	5.51	0.00	P	99	318,733	55	85	16.6 | 17.1	-		-	
31)	Methacrylonitrile		53.872	OC	>50	5.67	0.00	P	94	143,961	67	41	157 | 147	39	79.7 | 83.1	52	38.7 | 37.0
32)	Bromochloromethane		50.471	OC	>50	5.67	0.01	P	93	173,156	128	49	156 | 167	130	128 | 134	-	
33)	Chloroform		51.040	OC	>50	5.84	0.01	P	98	556,995	83	85	65.0 | 66.3	-		-	
34)	**Tetrahydrofuran**		**48.819**	RL	**49**	5.74	0.00	P	95	53,602	72	71	90.3 | 96.8	42	235 | 241	-	
35)	Dibromofluoromethane (S)		51.244	Sur	-	6.11	0.01	P	93	267,429	113	111	110 | 102	192	23.9 | 22.1	81	16.1 | 14.3
36)	1,1,1-Trichloroethane		52.298	OC	>50	6.11	0.01	P	97	491,167	97	99	63.4 | 60.3	61	38.3 | 38.9	63	12.4 | 14.3
37)	1-Chlorobutane		No Cal.	-	-	6.31	0.01	P	99	612,207	56	49	3.63 | 3.40	-		-	
38)	1,1-Dichloropropene		50.661	OC	>50	6.39	0.00	P	98	374,276	75	39	56.3 | 55.5	110	38.4 | 36.4	77	30.3 | 31.4
39)	Carbon tetrachloride		52.103	OC	>50	6.39	0.01	P	96	411,787	117	119	96.9 | 100	-		-	
40)	Benzene		50.607	OC	>50	6.76	0.01	P	96	1,236,373	78	51	16.9 | 15.3	-		-	
41)	1,2-Dichloroethane		51.355	OC	>50	6.81	0.00	P	96	386,909	62	98	10.5 | 12.3	-		-	
42)	1,4-Difluorobenzene		10	-	-	7.56	0.00	-	100	201,560	114	-		-		-	
43)	t- Amyl methyl ether (TAME)		No Cal.	-	-	(7.05)	-	-	0		73	55	0.00 | 37.9	87	0.00 | 22.4	-	
44)	Trichloroethene		51.000	OC	>50	8.04	0.01	P	97	289,836	95	132	109 | 115	130	112 | 113	97	65.8 | 64.2
45)	1,2-Dichloropropane		51.858	OC	>50	8.47	0.01	P	99	296,383	63	112	5.69 | 5.70	76	46.6 | 47.7	-	

For analyst review assistance only.

8260 Quantitation Review Report

C:\msdchem\1\data\2024\02-FEB\022324\GCMS8-022324014.D **CP** 02/23/24 014

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
46)	**Methyl methacrylate**		**49.741**	RL	**50**	8.77	0.00	P	96	248,696	69	41	128 | 133	100	42.6 | 40.0	39	62.3 | 64.9
47)	Dibromomethane		52.994	OC	>50	8.66	0.01	P	93	192,667	93	174	119 | 107	95	80.4 | 82.1	-	
48)	Bromodichloromethane		55.270	OC	>50	8.94	0.00	P	98	406,592	83	85	62.7 | 64.1	127	8.65 | 8.90	-	
49)	2-nitro-propane		55.485	OC	>50	9.26	0.00	P	96	96,040	43	39	26.3 | 28.5	-		-	
50)	Chlorobenzene-d5		10	-	-	11.04	0.01	P	99	178,621	117	82	54.0 | 54.8	119	31.9 | 31.9	54	20.5 | 22.3
51)	Chloromethyl cyanide		No Cal.	-	-	9.37	-0.01	F	72	20,989	75	48	**74.2 | 39.0**	40	45.3 | 44.5	-	
52)	2-Chloroethyl vinyl ether		53.183	OC	>50	9.39	0.01	P	98	205,384	63	65	32.2 | 30.2	106	31.3 | 31.4	-	
53)	cis-1,3-Dichloropropene		56.113	OC	>50	9.51	0.00	P	97	488,599	75	77	30.8 | 33.4	39	47.5 | 47.1	110	24.1 | 21.7
54)	4-Methyl-2-pentanone		52.740	OC	>50	9.72	0.00	P	97	147,712	58	41	55.3 | 52.2	100	42.0 | 44.0	85	41.9 | 42.0
55)	1,1-Dichloro-2-propanone		No Cal.	-	-	9.71	0.00	P	67	9,649	83	63	81.4 | 56.4	91	37.9 | 22.8	-	
56)	Toluene-d8 (S)		52.106	Sur	-	9.79	0.00	P	95	911,938	98	100	66.3 | 71.5	42	11.1 | 12.7	70	10.8 | 11.3
57)	Toluene		51.631	OC	>50	9.85	0.00	P	97	732,888	92	91	164 | 168	65	18.5 | 18.5	39	16.6 | 16.3
58)	trans-1,3-Dichloropropene		55.387	OC	>50	10.10	0.00	P	94	437,386	75	77	33.7 | 30.2	39.1	47.3 | 43.2	110	26.0 | 24.5
59)	Ethyl methacrylate		61.831	OC	>40	10.22	0.00	P	98	448,149	69	41	68.0 | 69.2	99	17.6 | 18.5	86	14.5 | 16.1
60)	1,1,2-Trichloroethane		51.082	OC	>50	10.26	0.00	P	97	216,573	83	97	122 | 125	61	72.8 | 70.3	85	63.6 | 59.8
61)	1,3-Dichloropropane		51.371	OC	>50	10.40	0.00	P	97	477,127	76	41	58.8 | 61.7	78	31.8 | 32.5	39	21.1 | 22.8
62)	2-Hexanone		52.386	OC	>50	10.50	0.00	P	95	260,410	43	58	56.2 | 59.4	57	18.6 | 21.2	100	13.9 | 16.0
63)	Tetrachloroethene		51.810	OC	>50	10.36	0.00	P	98	250,615	164	166	129 | 127	129	86.8 | 88.5	131	85.1 | 84.5
64)	Dibromochloromethane		55.593	OC	>50	10.59	0.00	P	97	309,094	129	127	76.6 | 79.2	-		-	
65)	1,2-Dibromoethane		53.515	OC	>50	10.67	0.01	P	95	279,636	107	109	93.4 | 89.0	188	4.91 | 2.80	-	
66)	Chlorobenzene		51.322	OC	>50	11.06	0.01	P	93	774,619	112	77	54.0 | 61.4	114	31.9 | 33.1	-	
67)	1,1,1,2-Tetrachloroethane		54.261	OC	>50	11.13	0.01	P	99	303,047	131	133	95.2 | 94.0	117	64.8 | 64.0	119	63.6 | 63.7
68)	Ethylbenzene		52.577	OC	>50	11.15	0.00	P	98	1,364,011	91	106	31.9 | 32.6	51	8.98 | 7.80	-	
69)	m- & p-Xylenes		105.56	OC	>100	11.24	0.00	P	95	1,068,209	106	91	197 | 188	105	42.8 | 41.4	77	25.8 | 24.3
70)	o-Xylene		51.468	OC	>50	11.51	0.00	P	97	532,338	106	91	202 | 206	105	46.1 | 48.7	-	
71)	Styrene		55.927	OC	>50	11.52	0.00	P	98	876,312	104	103	46.8 | 46.8	78	40.2 | 41.6	51	24.8 | 22.7
72)	Bromoform		53.030	OC	>50	11.65	0.00	P	96	208,745	173	175	48.7 | 46.3	254	9.60 | 12.5	-	
73)	Isopropylbenzene		54.405	OC	>50	11.76	0.00	P	99	1,367,707	105	120	26.1 | 27.0	77	14.3 | 14.5	79	11.1 | 11.8
74)	1,4-Dichlorobenzene-d4		10	-	-	12.57	0.00	P	96	96,588	152	115	54.0 | 55.2	150	163 | 157	-	
75)	cis-1,4-dichloro-2-butene		No Cal.	-	-	11.81	0.00	P	88	7,779	75	53	91.6 | 106	89	52.2 | 47.5	-	
76)	4-Bromofluorobenzene (S)		50.515	Sur	-	11.86	0.01	P	91	337,221	95	174	84.8 | 75.6	176	81.8 | 73.8	75	45.0 | 47.6
77)	1,1,2,2-Tetrachloroethane		52.711	OC	>50	11.96	0.00	P	92	384,249	83	85	63.3 | 70.8	131	10.8 | 11.0	95	15.7 | 18.7
78)	trans-1,4-Dichloro-2-butene		50.769	OC	>50	11.99	0.00	P	95	99,493	53	88	53.1 | 55.9	124	27.3 | 23.1	-	
79)	**1,2,3-Trichloropropane**		**49.651**	RL	**50**	11.98	0.00	P	97	132,248	110	75	264 | 269	39	73.5 | 79.2	-	
80)	Bromobenzene		52.681	OC	>50	11.96	0.00	P	96	336,789	156	158	98.9 | 94.7	-		-	
81)	n-Propylbenzene		56.361	OC	>50	12.02	0.00	P	99	1,623,237	91	120	23.9 | 23.6	92	10.2 | 11.4	65	10.1 | 9.90
82)	2-Chlorotoluene		52.587	OC	>50	12.08	0.00	P	97	320,076	126	91	294 | 289	63	38.2 | 36.0	-	
83)	4-Ethyltoluene		No Cal.	-	-	12.08	-0.02	F	61	5,226	105	120	34.9 | 29.9	77	**56.7 | 10.6**	-	
84)	1,3,5-Trimethylbenzene		57.008	OC	>50	12.13	0.00	P	99	1,137,442	105	120	50.9 | 50.6	119	12.2 | 11.0	77	12.2 | 12.6
85)	4-Chlorotoluene		52.859	OC	>50	12.14	0.00	P	99	1,064,994	91	126	33.5 | 34.5	63	11.7 | 11.3	-	
86)	tert-Butylbenzene		54.560	OC	>50	12.33	0.00	P	94	289,549	134	119	360 | 340	91	212 | 215	-	
87)	1,2,4-Trimethylbenzene		55.453	OC	>50	12.36	0.00	P	97	1,131,621	105	120	48.1 | 50.1	-		-	
88)	Pentachloroethane		56.777	OC	>50	12.35	0.00	P	94	214,221	167	165	78.3 | 86.1	132	41.7 | 42.9	-	
89)	sec-Butylbenzene		57.550	OC	>50	12.46	0.00	P	99	1,452,005	105	134	20.8 | 20.4	-		-	
90)	4-Isopropyltoluene		56.912	OC	>50	12.54	0.00	P	97	1,252,969	119	134	27.0 | 28.5	91	21.1 | 22.4	-	
91)	1,3-Dichlorobenzene		50.778	OC	>50	12.53	0.00	P	100	640,567	146	148	64.2 | 63.8	111	35.2 | 35.3	-	
92)	1,4-Dichlorobenzene		50.339	OC	>50	12.59	0.01	P	97	647,503	146	111	35.7 | 37.8	148	64.0 | 61.5	-	
93)	n-Butylbenzene		58.636	OC	>50	12.78	0.00	P	95	647,224	92	91	172 | 179	134	46.7 | 50.5	-	
94)	1,2-Dichlorobenzene		52.359	OC	>50	12.80	0.00	P	98	626,701	146	148	62.7 | 64.6	111	40.5 | 40.4	-	
95)	Hexachloroethane		No Cal.	-	-	12.95	0.00	P	99	171,499	201	117	128 | 129	199	65.3 | 65.0	203	66.3 | 64.5
96)	1,2-Dibromo-3-chloropropane		55.710	OC	>50	13.24	0.00	P	95	79,191	75	155	98.0 | 104	157	128 | 123	-	
97)	Nitrobenzene		No Cal.	-	-	13.36	0.01	F	48	8,057	123	51	**120 | 62.1**	77	198 | 146	-	
98)	1,2,4-Trichlorobenzene		54.400	OC	>50	13.69	0.00	P	97	442,220	180	182	95.1 | 97.2	184	31.9 | 29.6	145	29.5 | 30.6
99)	Hexachlorobutadiene		62.675	OC	>40	13.78	0.00	P	96	177,229	225	227	60.8 | 59.6	260	27.1 | 22.3	223	63.1 | 59.4
100	Naphthalene		55.633	OC	>50	13.84	0.00	P	98	1,307,433	128	127	12.9 | 12.5	129	10.5 | 11.6	-	
101	1,2,3-Trichlorobenzene		52.586	OC	>50	13.97	0.00	P	98	415,801	180	182	94.2 | 91.8	184	29.5 | 29.8	145	29.0 | 29.8

Uses lowest known RLs; project RLs may be higher. Qualitative P/F based only on output ratios at apex and may not reflect full peak or analyst review.

For analyst review assistance only.

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324014.D
Acq On : 23 Feb 2024 17:32
Operator :
Sample : CPTP02232410 - 50ppb
Misc : PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 26 12:50:24 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	6.251	168	127668	10.00	ppb		0.01
42) 1,4-Difluorobenzene	7.563	114	201560	10.00	ppb		0.00
50) Chlorobenzene-d5	11.041	117	178621	10.00	ppb		0.00
74) 1,4-Dichlorobenzene-d4	12.570	152	96588	10.00	ppb		0.00
System Monitoring Compounds							
35) Dibromofluoromethane (S)	6.109	113	267429	51.24	ppb		0.00
Spiked Amount 10.000			Recovery = 512.40%				
56) Toluene-d8 (S)	9.786	98	911938	52.11	ppb		0.00
Spiked Amount 10.000			Recovery = 521.10%				
76) 4-Bromofluorobenzene (S)	11.861	95	337221	50.51	ppb		0.00
Spiked Amount 10.000			Recovery = 505.10%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.391	85	448942	66.5469	ppb		95
3) Chloromethane	1.563	50	438818	49.5449	ppb		98
4) Vinyl chloride	1.665	62	407838	51.9883	ppb		96
5) Bromomethane	1.980	94	242797	48.1733	ppb		91
6) Chloroethane	2.072	64	250458	49.7091	ppb		96
7) Trichlorofluoromethane	2.357	101	485606	55.5445	ppb		99
8) Diethyl ether	2.652	74	200866	51.5578	ppb		95
9) 1,1-Dichloroethene	2.896	96	279159	51.6031	ppb		81
10) Freon 113	2.906	101	166	No Calib	#		
11) Acetone	2.977	58	33877	49.1065	ppb		87
12) Iodomethane	3.068	142	533019	51.9453	ppb		97
13) Carbon disulfide	3.129	76	899052	51.2051	ppb		99
14) Allyl chloride	3.333	76	188539	52.8799	ppb		93
15) Methylene chloride	3.496	84	341388	49.1909	ppb		97
16) t-Butanol (TBA)	0.000		0	N.D.			
17) Acrylonitrile	3.821	52	107194	50.5416	ppb		95
18) Methyl t-butyl ether (...	3.862	73	925558	50.1864	ppb		97
19) trans-1,2-Dichloroethene	3.841	96	327185	52.2853	ppb		96
20) n-Hexane	4.207	57	541	No Calib	#		
21) 1,1-Dichloroethane	4.421	63	563326	50.0724	ppb		98
22) Vinyl acetate	4.533	86	77827	54.7803	ppb	#	68
23) 2-chloro-1,3-butadiene	0.000		0	N.D.			
24) Diisopropyl ether (DIPE)	4.512	45	4495	No Calib	#		
25) Ethyl t-butyl ether (E...	0.000		0	N.D.			
26) 2-Butanone (MEK)	5.346	72	44696	49.2038	ppb		91
27) cis-1,2-Dichloroethene	5.295	96	358423	51.5824	ppb		94
28) 2,2-Dichloropropane	5.285	77	447055	50.2035	ppb		96
29) Propionitrile	5.438	54	55817	48.8672	ppb		86
30) Methyl acrylate	5.509	55	318733	50.2676	ppb		99
31) Methacrylonitrile	5.672	67	143961	53.8718	ppb		94
32) Bromochloromethane	5.672	128	173156	50.4710	ppb		93
33) Chloroform	5.845	83	556995	51.0400	ppb		98
34) Tetrahydrofuran	5.743	72	53602	48.8188	ppb		95
36) 1,1,1-Trichloroethane	6.109	97	491167	52.2978	ppb		97
37) 1-Chlorobutane	6.312	56	612207	No Calib			
38) 1,1-Dichloropropene	6.394	75	374276	50.6610	ppb		98
39) Carbon tetrachloride	6.394	117	411787	52.1034	ppb		96
40) Benzene	6.760	78	1236373	50.6066	ppb		96
41) 1,2-Dichloroethane	6.811	62	386909	51.3554	ppb		96
43) t- Amyl methyl ether (...	0.000		0	N.D.			
44) Trichloroethene	8.041	95	289836	51.0005	ppb		97
45) 1,2-Dichloropropane	8.468	63	296383	51.8581	ppb		99
46) Methyl methacrylate	8.773	69	248696	49.7415	ppb		96

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324014.D
Acq On : 23 Feb 2024 17:32
Operator :
Sample : CPTP02232410 - 50ppb
Misc : PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 26 12:50:24 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

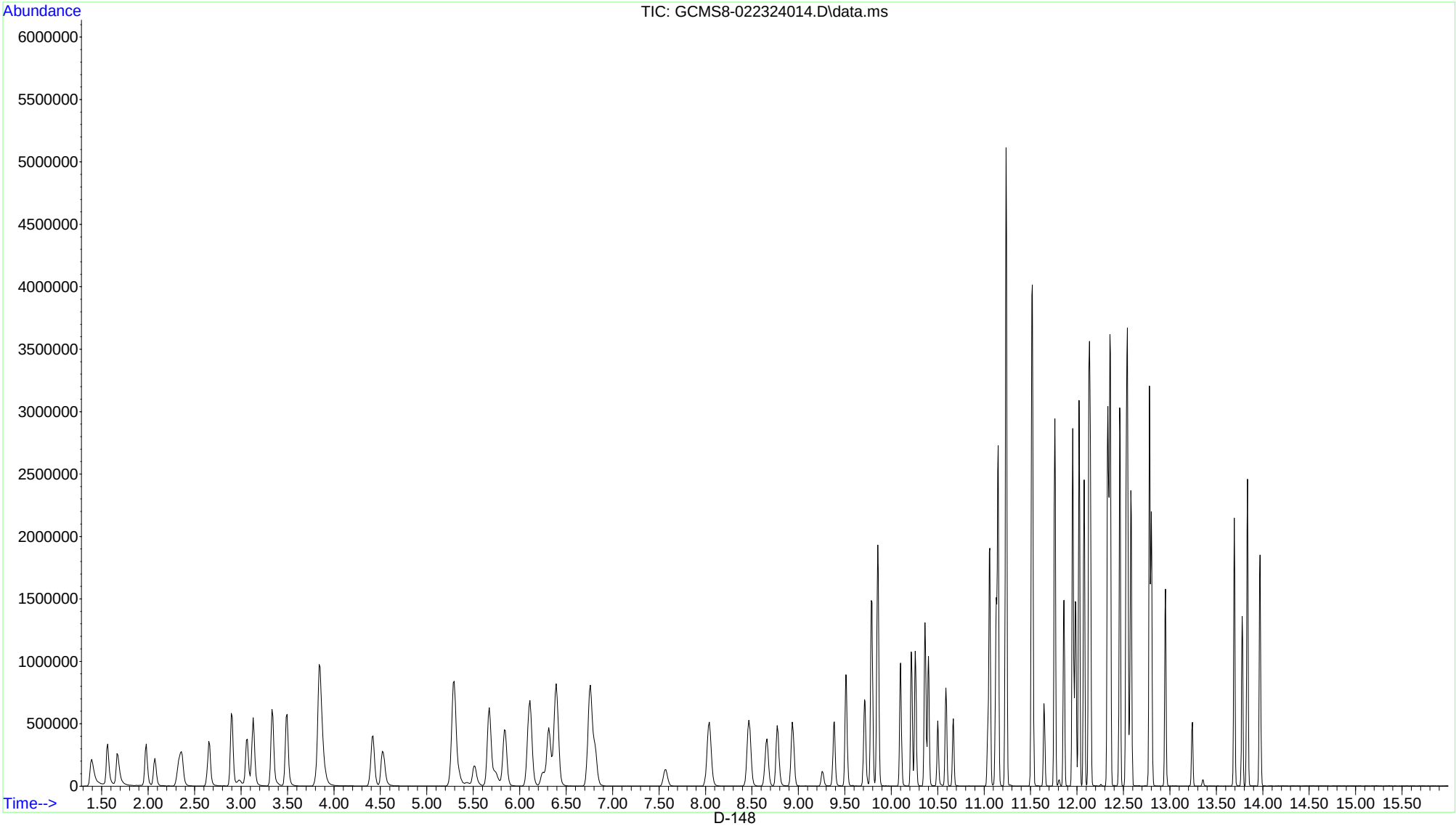
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
47) Dibromomethane	8.661	93	192667	52.9945	ppb	93
48) Bromodichloromethane	8.936	83	406592	55.2700	ppb	98
49) 2-nitro-propane	9.261	43	96040	55.4850	ppb	96
51) Chloromethyl cyanide	9.371	75	20989	No Calib	#	
52) 2-Chloroethyl vinyl ether	9.387	63	205384	53.1826	ppb	98
53) cis-1,3-Dichloropropene	9.513	75	488599	56.1134	ppb	97
54) 4-Methyl-2-pentanone	9.718	58	147712	52.7397	ppb	97
55) 1,1-Dichloro-2-propanone	9.713	83	9649	No Calib		
57) Toluene	9.854	92	732888	51.6309	ppb	97
58) trans-1,3-Dichloropropene	10.101	75	437386	55.3872	ppb	94
59) Ethyl methacrylate	10.217	69	448149	61.8307	ppb	98
60) 1,1,2-Trichloroethane	10.259	83	216573	51.0820	ppb	97
61) 1,3-Dichloropropane	10.401	76	477127	51.3710	ppb	97
62) 2-Hexanone	10.500	43	260410	52.3862	ppb	95
63) Tetrachloroethene	10.364	164	250615	51.8104	ppb	98
64) Dibromochloromethane	10.590	129	309094	55.5934	ppb	97
65) 1,2-Dibromoethane	10.669	107	279636	53.5151	ppb	95
66) Chlorobenzene	11.062	112	774619	51.3221	ppb	93
67) 1,1,1,2-Tetrachloroethane	11.131	131	303047	54.2615	ppb	99
68) Ethylbenzene	11.152	91	1364011	52.5771	ppb	98
69) m- & p-Xylenes	11.236	106	1068209	105.5618	ppb	95
70) o-Xylene	11.514	106	532338	51.4683	ppb	97
71) Styrene	11.525	104	876312	55.9266	ppb	98
72) Bromoform	11.645	173	208745	53.0295	ppb	96
73) Isopropylbenzene	11.761	105	1367707	54.4051	ppb	99
75) cis-1,4-dichloro-2-butene	11.808	75	7779	No Calib		
77) 1,1,2,2-Tetrachloroethane	11.955	83	384249	52.7110	ppb	92
78) trans-1,4-Dichloro-2-b...	11.987	53	99493	50.7689	ppb	95
79) 1,2,3-Trichloropropane	11.981	110	132248	49.6513	ppb	97
80) Bromobenzene	11.955	156	336789	52.6813	ppb	96
81) n-Propylbenzene	12.023	91	1623237	56.3613	ppb	99
82) 2-Chlorotoluene	12.076	126	320076	52.5869	ppb	97
83) 4-Ethyltoluene	12.076	105	5226	No Calib	#	
84) 1,3,5-Trimethylbenzene	12.128	105	1137442	57.0077	ppb	99
85) 4-Chlorotoluene	12.144	91	1064994	52.8594	ppb	99
86) tert-Butylbenzene	12.333	134	289549	54.5602	ppb	94
87) 1,2,4-Trimethylbenzene	12.360	105	1131621	55.4525	ppb	97
88) Pentachloroethane	12.349	167	214221	56.7773	ppb	94
89) sec-Butylbenzene	12.459	105	1452005	57.5501	ppb	99
90) 4-Isopropyltoluene	12.543	119	1252969	56.9121	ppb	97
91) 1,3-Dichlorobenzene	12.533	146	640567	50.7779	ppb	100
92) 1,4-Dichlorobenzene	12.585	146	647503	50.3394	ppb	97
93) n-Butylbenzene	12.780	92	647224	58.6365	ppb	95
94) 1,2-Dichlorobenzene	12.801	146	626701	52.3594	ppb	98
95) Hexachloroethane	12.953	201	171499	No Calib		
96) 1,2-Dibromo-3-chloropr...	13.242	75	79191	55.7098	ppb	95
97) Nitrobenzene	13.357	123	8057	No Calib	#	
98) 1,2,4-Trichlorobenzene	13.693	180	442220	54.3998	ppb	97
99) Hexachlorobutadiene	13.777	225	177229	62.6752	ppb	96
100) Naphthalene	13.835	128	1307433	55.6334	ppb	98
101) 1,2,3-Trichlorobenzene	13.972	180	415801	52.5863	ppb	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324014.D
Acq On : 23 Feb 2024 17:32
Operator :
Sample : CPTP02232410 - 50ppb
Misc : PAV 1150, 1153, 1144J, 1142F, 1143D, 1148B
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 26 12:50:24 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration



D-148

8260 Quantitation Review Report

C:\msdchem\1\data\2024\02-FEB\022324\GCMS8-022324015.D **CP** 02/23/24 015

Sample Name: **CPTP02232411 - 100ppb**
Data File Name: GCMS8-022324015.D
Date Acquired: **02/23/24 17:55**
Vial Number: 14
Sample Multiplier: **1**
Misc Info: PAV 1150, 1153, 1144J

Operator:
Data File Path: C:\msdchem\1\data\2024\02-FEB\02232
Instrument Method: VOC092623 INSTRUMENT SCAN.M
Quant. Method: VOC022324Final
Last Result Mod: 02/26/24 12:50
Last Cal Update: 02/26/24 12:39
Last Cal Mod: 02/26/24 12:39

#	Internal Standard	Response
1)	Pentafluorobenzene	122,171
42)	1,4-Difluorobenzene	189,638
50)	Chlorobenzene-d5	168,383
74)	1,4-Dichlorobenzene-d4	92,728

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
1)	Pentafluorobenzene		10	-	-	6.24	0.00	-	100	122,171	168	-		-		-	
2)	Dichlorodifluoromethane		142.81	OC	>40	1.38	0.00	P	95	921,922	85	87	31.5 | 34.5	-		-	
3)	Chloromethane		103.40	OC	>100	1.55	0.01	P	100	876,349	50	52	31.3 | 31.3	-		-	
4)	Vinyl chloride		108.21	OC	>100	1.65	0.00	P	97	812,324	62	64	32.0 | 30.5	-		-	
5)	**Bromomethane**		**96.016**	RL	**96**	1.97	0.00	P	93	463,092	94	96	94.8 | 88.5	-		-	
6)	Chloroethane		103.13	OC	>100	2.06	0.00	P	97	497,243	64	66	32.8 | 34.3	-		-	
7)	Trichlorofluoromethane		115.96	OC	>100	2.34	-0.01	P	96	970,168	101	103	64.8 | 61.6	66	11.0 | 12.7	-	
8)	Diethyl ether		NR	ND	<0.40	(2.65)	-	-	0		74	45	0.00 | 103	59	0.00 | 129	-	
9)	1,1-Dichloroethene		NR	ND	<0.43	(2.90)	-	-	0		96	61	0.00 | 139	63	0.00 | 47.0	-	
10)	Freon 113		No Cal.	-	-	(2.90)	-	-	0		101	151	0.00 | 82.4	103	0.00 | 64.1	153	0.00 | 53.1
11)	Acetone		0.36581	ND	<0.90	3.01	0.04	**F**	**11**	822	58	43	**104 | 266**	-		-	
12)	Iodomethane		0.016804	ND	<0.37	3.06	0.00	**F**	**43**	165	142	127	**0.00 | 40.6**	141	**0.00 | 12.9**	-	
13)	Carbon disulfide		0.29919	QL-	<0.34	3.12	0.00	P	90	5,027	76	78	12.7 | 9.20	-		-	
14)	Allyl chloride		NR	ND	<0.29	(3.33)	-	-	0		76	78	0.00 | 30.7	41	0.00 | 283	39	0.00 | 175
15)	Methylene chloride		0.26114	QL-	<1.1	3.49	0.00	P	88	10,683	84	49	106 | 121	86	53.1 | 64.4	51	34.9 | 36.5
16)	t-Butanol (TBA)		No Cal.	-	-	(3.70)	-	-	0		59	57	0.00 | 8.40	-		-	
17)	Acrylonitrile		NR	ND	<0.43	(3.81)	-	-	0		52	53	0.00 | 120	51	0.00 | 41.7	-	
18)	Methyl t-butyl ether (MTBE)		NR	ND	<0.58	(3.85)	-	-	0		73	57	0.00 | 23.3	-		-	
19)	trans-1,2-Dichloroethene		0.041414	ND	<0.33	3.83	0.00	**F**	**62**	248	96	61	117 | 137	98	**0.00 | 65.3**	-	
20)	n-Hexane		No Cal.	-	-	(4.22)	-	-	0		57	43	0.00 | 64.9	41	0.00 | 72.0	56	0.00 | 47.3
21)	1,1-Dichloroethane		NR	ND	<0.37	(4.41)	-	-	0		63	65	0.00 | 33.7	83	0.00 | 15.0	-	
22)	Vinyl acetate		NR	ND	<0.68	(4.52)	-	-	0		86	43	0.00 | 949	-		-	
23)	2-chloro-1,3-butadiene		No Cal.	-	-	(4.54)	-	-	0		53	88	0.00 | 58.3	52	0.00 | 23.5	-	
24)	Diisopropyl ether (DIPE)		No Cal.	-	-	(4.57)	-	-	0		45	43	0.00 | 38.9	87	0.00 | 24.3	-	
25)	Ethyl t-butyl ether (ETBE)		No Cal.	-	-	(5.12)	-	-	0		59	57	0.00 | 31.8	87	0.00 | 34.1	-	
26)	2-Butanone (MEK)		NR	ND	<0.44	(5.35)	-	-	0		72	43	0.00 | 353	57	0.00 | 29.9	-	
27)	cis-1,2-Dichloroethene		0.023310	ND	<0.29	5.31	0.02	**F**	**67**	155	96	61	115 | 132	98	**0.00 | 56.2**	-	
28)	2,2-Dichloropropane		NR	ND	<0.35	(5.28)	-	-	0		77	97	0.00 | 22.0	79	0.00 | 30.5	-	
29)	Propionitrile		NR	ND	<1.0	(5.46)	-	-	0		54	52	0.00 | 11.3	55	0.00 | 15.7	-	
30)	Methyl acrylate		NR	ND	<0.38	(5.51)	-	-	0		55	85	0.00 | 17.1	-		-	
31)	Methacrylonitrile		NR	ND	<0.43	(5.67)	-	-	0		67	41	0.00 | 147	39	0.00 | 83.1	52	0.00 | 37.0
32)	Bromochloromethane		NR	ND	<0.36	(5.66)	-	-	0		128	49	0.00 | 167	130	0.00 | 134	-	
33)	Chloroform		NR	ND	<0.34	(5.83)	-	-	0		83	85	0.00 | 66.3	-		-	
34)	Tetrahydrofuran		NR	ND	<0.93	(5.74)	-	-	0		72	71	0.00 | 96.8	42	0.00 | 241	-	
35)	Dibromofluoromethane (S)		102.55	OC	>100	6.10	0.00	P	98	512,133	113	111	105 | 102	192	22.6 | 22.1	81	14.2 | 14.3
36)	1,1,1-Trichloroethane		NR	ND	<0.34	(6.10)	-	-	0		97	99	0.00 | 60.3	61	0.00 | 38.9	63	0.00 | 14.3
37)	1-Chlorobutane		No Cal.	-	-	6.24	-0.06	**Inc**	90	1,559	56	49	**0.00 | 3.40**	-		-	
38)	1,1-Dichloropropene		NR	ND	<0.29	(6.39)	-	-	0		75	39	0.00 | 55.5	110	0.00 | 36.4	77	0.00 | 31.4
39)	Carbon tetrachloride		NR	ND	<0.44	(6.38)	-	-	0		117	119	0.00 | 100	-		-	
40)	Benzene		0.022413	ND	<0.21	6.77	0.02	**Inc**	**63**	524	78	51	**0.00 | 15.3**	-		-	
41)	1,2-Dichloroethane		0.06214	ND	<0.38	6.82	0.01	**Inc**	**69**	448	62	98	**0.00 | 12.3**	-		-	
42)	1,4-Difluorobenzene		10	-	-	7.56	0.00	-	100	189,638	114	-		-		-	
43)	t- Amyl methyl ether (TAME)		No Cal.	-	-	(7.05)	-	-	0		73	55	0.00 | 37.9	87	0.00 | 22.4	-	
44)	Trichloroethene		NR	ND	<0.33	(8.03)	-	-	0		95	132	0.00 | 115	130	0.00 | 113	97	0.00 | 64.2
45)	1,2-Dichloropropane		NR	ND	<0.34	(8.46)	-	-	0		63	112	0.00 | 5.70	76	0.00 | 47.7	-	

For analyst review assistance only.

8260 Quantitation Review Report

C:\msdchem\1\data\2024\02-FEB\022324\GCMS8-022324015.D **CP** 02/23/24 015

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
46)	Methyl methacrylate		NR	ND	<0.36	(8.77)	-	-	0		69	41	0.00 | 133	100	0.00 | 40.0	39	0.00 | 64.9
47)	Dibromomethane		0.053208	ND	<0.37	8.66	0.01	F	71	182	93	174	85.2 | 107	95	**118 | 82.1**	-	
48)	Bromodichloromethane		NR	ND	<0.33	(8.94)	-	-	0		83	85	0.00 | 64.1	127	0.00 | 8.90	-	
49)	2-nitro-propane		NR	ND	<0.27	(9.26)	-	-	0		43	39	0.00 | 28.5	-		-	
50)	Chlorobenzene-d5		10	-	-	11.04	0.00	P	96	168,383	117	82	53.8 | 54.8	119	27.6 | 31.9	54	20.5 | 22.3
51)	Chloromethyl cyanide		No Cal.	-	-	(9.38)	-	-	0		75	48	0.00 | 39.0	40	0.00 | 44.5	-	
52)	2-Chloroethyl vinyl ether		NR	ND	<0.25	(9.38)	-	-	0		63	65	0.00 | 30.2	106	0.00 | 31.4	-	
53)	cis-1,3-Dichloropropene		0.1066	ND	<0.26	9.53	0.02	F	39	875	75	77	**0.00 | 33.4**	39	**0.00 | 47.1**	110	**0.00 | 21.7**
54)	4-Methyl-2-pentanone		NR	ND	<0.31	(9.71)	-	-	0		58	41	0.00 | 52.2	100	0.00 | 44.0	85	0.00 | 42.0
55)	1,1-Dichloro-2-propanone		No Cal.	-	-	9.78	0.07	Inc	78	1,465	83	63	47.9 | 56.4	91	**0.00 | 22.8**	-	
56)	Toluene-d8 (S)		105.69	OC	>100	9.79	0.00	P	96	1,743,675	98	100	67.7 | 71.5	42	11.2 | 12.7	70	10.7 | 11.3
57)	Toluene		0.058141	ND	<0.37	9.85	0.00	F	57	778	92	91	**109 | 168**	65	**0.00 | 18.5**	39	**0.00 | 16.3**
58)	trans-1,3-Dichloropropene		0.13769	ND	<0.30	10.11	0.01	F	63	1,025	75	77	**0.00 | 30.2**	39.1	54.6 | 43.2	110	**0.00 | 24.5**
59)	Ethyl methacrylate		NR	ND	<0.32	(10.22)	-	-	0		69	41	0.00 | 69.2	99	0.00 | 18.5	86	0.00 | 16.1
60)	1,1,2-Trichloroethane		NR	ND	<0.33	(10.26)	-	-	0		83	97	0.00 | 125	61	0.00 | 70.3	85	0.00 | 59.8
61)	1,3-Dichloropropane		0.067043	ND	<0.26	10.41	0.00	F	32	587	76	41	**0.00 | 61.7**	78	**0.00 | 32.5**	39	**0.00 | 22.8**
62)	2-Hexanone		NR	ND	<0.31	(10.50)	-	-	0		43	58	0.00 | 59.4	57	0.00 | 21.2	100	0.00 | 16.0
63)	Tetrachloroethene		0.095177	ND	<0.31	10.37	0.01	P	88	434	164	166	100 | 127	129	87.9 | 88.5	131	78.0 | 84.5
64)	Dibromochloromethane		NR	ND	<0.27	(10.59)	-	-	0		129	127	0.00 | 79.2	-		-	
65)	1,2-Dibromoethane		0.12302	ND	<0.32	10.67	0.01	Inc	90	606	107	109	98.7 | 89.0	188	**0.00 | 2.80**	-	
66)	Chlorobenzene		0.077874	ND	<0.23	11.07	0.01	P	77	1,108	112	77	41.7 | 61.4	114	23.3 | 33.1	-	
67)	1,1,1,2-Tetrachloroethane		NR	ND	<0.23	(11.13)	-	-	0		131	133	0.00 | 94.0	117	0.00 | 64.0	119	0.00 | 63.7
68)	Ethylbenzene		0.062357	ND	<0.25	11.15	0.00	Inc	77	1,525	91	106	19.6 | 32.6	51	**0.00 | 7.80**	-	
69)	m- & p-Xylenes		0.12034	ND	<0.39	11.24	0.00	P	70	1,148	106	91	135 | 188	105	33.8 | 41.4	77	31.8 | 24.3
70)	o-Xylene		0.023384	ND	<0.21	11.51	0.00	F	66	228	106	91	246 | 206	105	**0.00 | 48.7**	-	
71)	Styrene		0.075419	ND	<0.18	11.52	0.00	F	60	1,114	104	103	**90.0 | 46.8**	78	37.1 | 41.6	51	**0.00 | 22.7**
72)	**Bromoform**		**0.32949**	MDL	**0.33**	11.65	0.01	F	38	466	173	175	**0.00 | 46.3**	254	**0.00 | 12.5**	-	
73)	Isopropylbenzene		0.067515	ND	<0.21	11.76	0.00	Inc	77	1,600	105	120	34.0 | 27.0	77	**0.00 | 14.5**	79	**0.00 | 11.8**
74)	1,4-Dichlorobenzene-d4		10	-	-	12.57	0.00	P	99	92,728	152	115	51.4 | 55.2	150	157 | 157	-	
75)	cis-1,4-dichloro-2-butene		No Cal.	-	-	(11.81)	-	-	0		75	53	0.00 | 106	89	0.00 | 47.5	-	
76)	4-Bromofluorobenzene (S)		101.55	OC	>100	11.86	0.00	P	97	650,833	95	174	78.5 | 75.6	176	76.1 | 73.8	75	50.1 | 47.6
77)	1,1,2,2-Tetrachloroethane		0.030007	ND	<0.35	11.96	0.00	F	12	210	83	85	**0.00 | 70.8**	131	**0.00 | 11.0**	95	**76.8 | 18.7**
78)	**trans-1,4-Dichloro-2-butene**		**0.31072**	MDL	**0.31**	12.00	0.01	F	32	208	53	88	**0.00 | 55.9**	124	**0.00 | 23.1**	-	
79)	1,2,3-Trichloropropane		NR	ND	<0.37	(11.98)	-	-	0		110	75	0.00 | 269	39	0.00 | 79.2	-	
80)	Bromobenzene		0.12334	ND	<0.35	11.96	0.00	F	49	757	156	158	**144 | 94.7**	-		-	
81)	n-Propylbenzene		0.089694	ND	<0.29	12.02	0.00	Inc	81	2,480	91	120	29.0 | 23.6	92	**0.00 | 11.4**	65	**0.00 | 9.90**
82)	2-Chlorotoluene		0.090872	ND	<0.30	12.07	-0.01	F	7	531	126	91	**103 | 289**	63	**0.00 | 36.0**	-	
83)	4-Ethyltoluene		No Cal.	-	-	12.09	0.00	Inc	52	93	105	120	**0.00 | 29.9**	77	**0.00 | 10.6**	-	
84)	1,3,5-Trimethylbenzene		0.091151	ND	<0.26	12.13	0.01	Inc	68	1,746	105	120	72.1 | 50.6	119	25.7 | 11.0	77	**0.00 | 12.6**
85)	4-Chlorotoluene		0.10862	ND	<0.26	12.15	0.01	P	92	2,101	91	126	36.1 | 34.5	63	20.5 | 11.3	-	
86)	tert-Butylbenzene		0.11502	ND	<0.26	12.34	0.01	F	1	586	134	119	**108 | 340**	91	**80.6 | 215**	-	
87)	1,2,4-Trimethylbenzene		0.10076	ND	<0.22	12.36	0.00	P	87	1,974	105	120	41.0 | 50.1	-		-	
88)	Pentachloroethane		0.054387	ND	<1.7	12.35	0.00	F	15	197	167	165	**0.00 | 86.1**	132	**0.00 | 42.9**	-	
89)	sec-Butylbenzene		0.12348	ND	<0.21	12.46	0.01	P	87	2,991	105	134	26.4 | 20.4	-		-	
90)	4-Isopropyltoluene		0.12751	ND	<0.20	12.54	0.00	P	94	2,695	119	134	33.1 | 28.5	91	23.8 | 22.4	-	
91)	1,3-Dichlorobenzene		0.16910	ND	<0.27	12.53	-0.01	P	78	2,048	146	148	46.0 | 63.8	111	48.1 | 35.3	-	
92)	1,4-Dichlorobenzene		0.21103	ND	<0.34	12.59	0.01	P	98	2,606	146	111	36.4 | 37.8	148	63.1 | 61.5	-	
93)	n-Butylbenzene		0.17543	ND	<0.24	12.78	0.00	P	93	1,859	92	91	169 | 179	134	55.8 | 50.5	-	
94)	1,2-Dichlorobenzene		0.18432	ND	<0.30	12.81	0.01	P	93	2,118	146	148	67.0 | 64.6	111	48.0 | 40.4	-	
95)	Hexachloroethane		No Cal.	-	-	12.95	-0.01	F	54	91	201	117	140 | 129	199	**0.00 | 65.0**	203	**0.00 | 64.5**
96)	1,2-Dibromo-3-chloropropane		NR	ND	<0.30	(13.24)	-	-	0		75	155	0.00 | 104	157	0.00 | 123	-	
97)	Nitrobenzene		No Cal.	-	-	(13.35)	-	-	0		123	51	0.00 | 62.1	77	0.00 | 146	-	
98)	**1,2,4-Trichlorobenzene**		**0.48461**	QL	**0.48**	13.69	0.00	P	97	3,782	180	182	95.7 | 97.2	184	27.5 | 29.6	145	25.8 | 30.6
99)	**Hexachlorobutadiene**		**0.51755**	RL	**0.52**	13.78	0.00	P	93	1,405	225	227	52.1 | 59.6	260	26.9 | 22.3	223	61.3 | 59.4
100	**Naphthalene**		**0.37905**	MDL	**0.38**	13.84	0.00	P	80	8,552	128	127	20.3 | 12.5	129	19.2 | 11.6	-	
101	**1,2,3-Trichlorobenzene**		**0.52193**	RL	**0.52**	13.97	0.00	P	78	3,962	180	182	121 | 91.8	184	23.1 | 29.8	145	26.3 | 29.8

Uses lowest known RLs; project RLs may be higher. Qualitative P/F based only on output ratios at apex and may not reflect full peak or analyst review.

For analyst review assistance only.

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324015.D
Acq On : 23 Feb 2024 17:55
Operator :
Sample : CPTP02232411 - 100ppb
Misc : PAV 1150, 1153, 1144J
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 26 12:50:29 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	6.241	168	122171	10.00	ppb		0.00
42) 1,4-Difluorobenzene	7.563	114	189638	10.00	ppb		0.00
50) Chlorobenzene-d5	11.036	117	168383	10.00	ppb		0.00
74) 1,4-Dichlorobenzene-d4	12.570	152	92728	10.00	ppb		0.00
System Monitoring Compounds							
35) Dibromofluoromethane (S)	6.099	113	512133	102.55	ppb		0.00
Spiked Amount 10.000			Recovery = 1025.50%				
56) Toluene-d8 (S)	9.786	98	1743675	105.69	ppb		0.00
Spiked Amount 10.000			Recovery = 1056.90%				
76) 4-Bromofluorobenzene (S)	11.855	95	650833	101.55	ppb		0.00
Spiked Amount 10.000			Recovery = 1015.50%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.380	85	921922	142.8057	ppb		95
3) Chloromethane	1.553	50	876349	103.3965	ppb		100
4) Vinyl chloride	1.655	62	812324	108.2084	ppb		97
5) Bromomethane	1.970	94	463092	96.0162	ppb		93
6) Chloroethane	2.062	64	497243	103.1296	ppb		97
7) Trichlorofluoromethane	2.336	101	970168	115.9627	ppb		96
8) Diethyl ether	0.000		0	N.D.			
9) 1,1-Dichloroethene	0.000		0	N.D.			
10) Freon 113	0.000		0	N.D.			
11) Acetone	3.007	58	822	0.3658	ppb	#	11
12) Iodomethane	3.058	142	165	0.0168	ppb	#	43
13) Carbon disulfide	3.119	76	5027	0.2992	ppb		90
14) Allyl chloride	0.000		0	N.D.			
15) Methylene chloride	3.485	84	10683	0.2611	ppb		88
16) t-Butanol (TBA)	0.000		0	N.D.			
17) Acrylonitrile	0.000		0	N.D.			
18) Methyl t-butyl ether (...	0.000		0	N.D.			
19) trans-1,2-Dichloroethene	3.831	96	248	0.0414	ppb	#	62
20) n-Hexane	0.000		0	N.D.			
21) 1,1-Dichloroethane	0.000		0	N.D.			
22) Vinyl acetate	0.000		0	N.D.			
23) 2-chloro-1,3-butadiene	0.000		0	N.D.			
24) Diisopropyl ether (DIPE)	0.000		0	N.D.			
25) Ethyl t-butyl ether (E...	0.000		0	N.D.			
26) 2-Butanone (MEK)	0.000		0	N.D.			
27) cis-1,2-Dichloroethene	5.306	96	155	0.0233	ppb	#	67
28) 2,2-Dichloropropane	0.000		0	N.D.			
29) Propionitrile	0.000		0	N.D.			
30) Methyl acrylate	0.000		0	N.D.			
31) Methacrylonitrile	0.000		0	N.D.			
32) Bromochloromethane	0.000		0	N.D.			
33) Chloroform	0.000		0	N.D.			
34) Tetrahydrofuran	0.000		0	N.D.			
36) 1,1,1-Trichloroethane	0.000		0	N.D.			
37) 1-Chlorobutane	6.241	56	1559	No Calib			
38) 1,1-Dichloropropene	0.000		0	N.D.			
39) Carbon tetrachloride	0.000		0	N.D.			
40) Benzene	6.770	78	524	0.0224	ppb		63
41) 1,2-Dichloroethane	6.821	62	448	0.0621	ppb		69
43) t- Amyl methyl ether (...	0.000		0	N.D.			
44) Trichloroethene	0.000		0	N.D.			
45) 1,2-Dichloropropane	0.000		0	N.D.			
46) Methyl methacrylate	0.000		0	N.D.			

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324015.D
Acq On : 23 Feb 2024 17:55
Operator :
Sample : CPTP02232411 - 100ppb
Misc : PAV 1150, 1153, 1144J
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 26 12:50:29 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

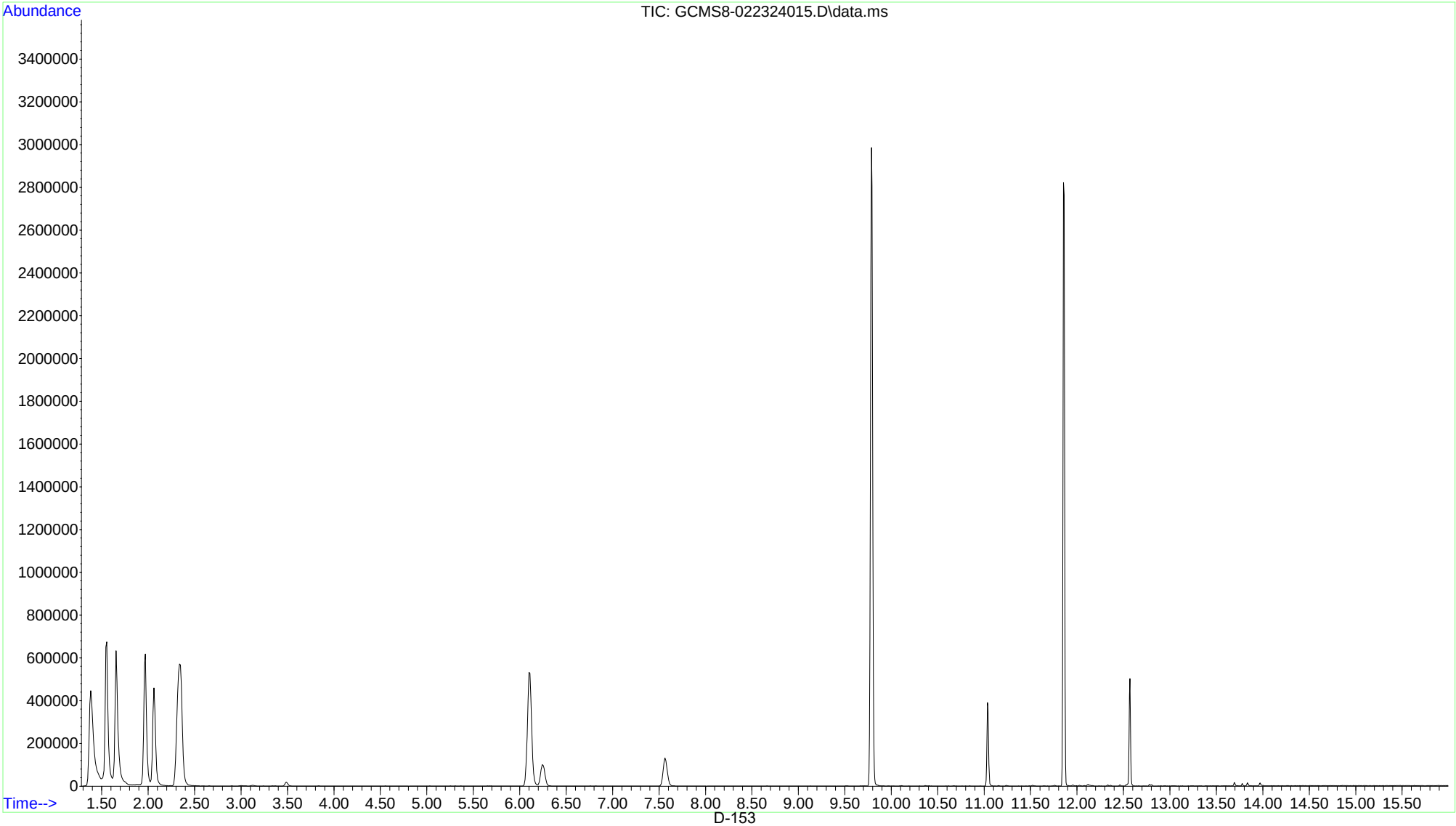
Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
47) Dibromomethane	8.661	93	182	0.0532 ppb	#	71
48) Bromodichloromethane	0.000		0	N.D.		
49) 2-nitro-propane	0.000		0	N.D.		
51) Chloromethyl cyanide	0.000		0	N.D.		
52) 2-Chloroethyl vinyl ether	0.000		0	N.D.		
53) cis-1,3-Dichloropropene	9.529	75	875	0.1066 ppb	#	39
54) 4-Methyl-2-pentanone	0.000		0	N.D.		
55) 1,1-Dichloro-2-propanone	9.781	83	1465	No Calib		
57) Toluene	9.849	92	778	0.0581 ppb	#	57
58) trans-1,3-Dichloropropene	10.107	75	1025	0.1377 ppb	#	63
59) Ethyl methacrylate	0.000		0	N.D.		
60) 1,1,2-Trichloroethane	0.000		0	N.D.		
61) 1,3-Dichloropropane	10.406	76	587	0.0670 ppb	#	32
62) 2-Hexanone	0.000		0	N.D.		
63) Tetrachloroethene	10.369	164	434	0.0952 ppb		88
64) Dibromochloromethane	0.000		0	N.D.		
65) 1,2-Dibromoethane	10.674	107	606	0.1230 ppb		90
66) Chlorobenzene	11.068	112	1108	0.0779 ppb		77
67) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.		
68) Ethylbenzene	11.152	91	1525	0.0624 ppb		77
69) m- & p-Xylenes	11.241	106	1148	0.1203 ppb	#	70
70) o-Xylene	11.514	106	228	0.0234 ppb	#	66
71) Styrene	11.525	104	1114	0.0754 ppb	#	60
72) Bromoform	11.651	173	466	0.3295 ppb	#	38
73) Isopropylbenzene	11.761	105	1600	0.0675 ppb		77
75) cis-1,4-dichloro-2-butene	0.000		0	N.D.		
77) 1,1,2,2-Tetrachloroethane	11.955	83	210	0.0300 ppb	#	12
78) trans-1,4-Dichloro-2-b...	11.997	53	208	0.3107 ppb	#	32
79) 1,2,3-Trichloropropane	0.000		0	N.D.		
80) Bromobenzene	11.955	156	757	0.1233 ppb	#	49
81) n-Propylbenzene	12.023	91	2480	0.0897 ppb		81
82) 2-Chlorotoluene	12.071	126	531	0.0909 ppb	#	7
83) 4-Ethyltoluene	12.092	105	93	No Calib		
84) 1,3,5-Trimethylbenzene	12.134	105	1746	0.0912 ppb		68
85) 4-Chlorotoluene	12.149	91	2101	0.1086 ppb		92
86) tert-Butylbenzene	12.339	134	586	0.1150 ppb	#	1
87) 1,2,4-Trimethylbenzene	12.360	105	1974	0.1008 ppb		87
88) Pentachloroethane	12.349	167	197	0.0544 ppb	#	15
89) sec-Butylbenzene	12.465	105	2991	0.1235 ppb		87
90) 4-Isopropyltoluene	12.543	119	2695	0.1275 ppb		94
91) 1,3-Dichlorobenzene	12.528	146	2048	0.1691 ppb		78
92) 1,4-Dichlorobenzene	12.585	146	2606	0.2110 ppb		98
93) n-Butylbenzene	12.780	92	1859	0.1754 ppb		93
94) 1,2-Dichlorobenzene	12.806	146	2118	0.1843 ppb		93
95) Hexachloroethane	12.948	201	91	No Calib	#	
96) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.		
97) Nitrobenzene	0.000		0	N.D.		
98) 1,2,4-Trichlorobenzene	13.693	180	3782	0.4846 ppb		97
99) Hexachlorobutadiene	13.777	225	1405	0.5175 ppb		93
100) Naphthalene	13.835	128	8552	0.3790 ppb		80
101) 1,2,3-Trichlorobenzene	13.972	180	3962	0.5219 ppb		78

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324015.D
Acq On : 23 Feb 2024 17:55
Operator :
Sample : CPTP02232411 - 100ppb
Misc : PAV 1150, 1153, 1144J
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 26 12:50:29 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration



D-153

Volatile Organic Analysis Initial Calibration Verification Summary (Recovery and Min. RF)

Lab Name: Orange Coast Analytical (Alliance TG) - Phoenix, AZ **Date of Acquisition:** 02/23/24 19:08
Lab Sample ID: SSCVTP0223241 **Calibration Method:** VOC022324Final
Standard ID: 1135F,1141A,1155A,1124A,1151A,1016A
File Name: GCMS8-022324018.D

#	Analyte	ppb Result	ppb Spike	% LCL	% UCL	P/F?
2	Dichlorodifluoromethane	8.0656	10	58.64	130	P
3	Chloromethane	7.6249	10	59.85	130	P
4	Vinyl chloride	8.7733	10	70	130	P
5	Bromomethane	8.6177	10	66.34	130	P
6	Chloroethane	9.3996	10	70	130	P
7	Trichlorofluoromethane	11.013	10	70	134.21	P
8	Diethyl ether	9.1615	10	70	130	P
9	1,1-Dichloroethene	9.9838	10	67	130	P
10	Freon 113	No Calibration		70	130	
11	Acetone	9.0688	10	25.96	171.55	P
12	Iodomethane	9.4247	10	70	130	P
13	Carbon disulfide	9.0775	10	67.68	130	P
14	Allyl chloride	9.7508	10	70	130	P
15	Methylene chloride	9.7063	10	70	130	P
16	t-Butanol (TBA)	No Calibration		70	130	
17	Acrylonitrile	9.3238	10	63.28	130	P
18	Methyl t-butyl ether (MTBE)	9.5905	10	70	130	P
19	trans-1,2-Dichloroethene	10.283	10	70	130	P
20	n-Hexane	No Calibration		70	149.57	
21	1,1-Dichloroethane	9.6319	10	70	130	P
22	Vinyl acetate	9.3608	10	62.15	130	P
23	2-chloro-1,3-butadiene	No Calibration		70	130	
24	Diisopropyl ether (DIPE)	No Calibration		70	130	
25	Ethyl t-butyl ether (ETBE)	No Calibration		70	130	
26	2-Butanone (MEK)	9.4596	10	70	130	P
27	cis-1,2-Dichloroethene	10.077	10	70	130	P
28	2,2-Dichloropropane	10.858	10	66.07	141.25	P
29	Propionitrile	8.9776	10	62.12	130	P
30	Methyl acrylate	9.5723	10	70	130	P
31	Methacrylonitrile	9.9574	10	67.34	130	P
32	Bromochloromethane	9.7839	10	70	130	P
33	Chloroform	10.141	10	70	130	P
34	Tetrahydrofuran	9.7767	10	70	130	P
35	Dibromofluoromethane (S)	11.144	10	51	135	P
36	1,1,1-Trichloroethane	10.891	10	70	130	P
37	1-Chlorobutane	No Calibration		70	130	
38	1,1-Dichloropropene	11.708	10	70	130	P
39	Carbon tetrachloride	10.883	10	70	130	P
40	Benzene	10.478	10	70	130	P
41	1,2-Dichloroethane	10.423	10	70	130	P
43	t- Amyl methyl ether (TAME)	No Calibration		70	130	
44	Trichloroethene	10.917	10	70	130	P
45	1,2-Dichloropropane	10.437	10	70	130	P
46	Methyl methacrylate	9.294	10	69.19	130	P
47	Dibromomethane	9.7852	10	70	130	P
48	Bromodichloromethane	9.9066	10	70	130	P
49	2-nitro-propane	9.4970	10	70	130	P
51	Chloromethyl cyanide	No Calibration		70	130	
52	2-Chloroethyl vinyl ether	9.653	10	70	130	P
53	cis-1,3-Dichloropropene	10.788	10	70	130	P

Volatile Organic Analysis Initial Calibration Verification Summary (Recovery and Min. RF)

#	Analyte	ppb Result	ppb Spike	% LCL	% UCL	P/F?
54	4-Methyl-2-pentanone	8.6930	10	70	130	P
55	1,1-Dichloro-2-propanone	No Calibration		70	130	
56	Toluene-d8 (S)	11.514	10	62	130	P
57	Toluene	10.942	10	70	130	P
58	trans-1,3-Dichloropropene	10.279	10	70	130	P
59	Ethyl methacrylate	10.326	10	70	130	P
60	1,1,2-Trichloroethane	10.003	10	70	130	P
61	1,3-Dichloropropane	10.32	10	70	130	P
62	2-Hexanone	8.9632	10	70	130	P
63	Tetrachloroethene	11.047	10	70	130	P
64	Dibromochloromethane	10.209	10	70	130	P
65	1,2-Dibromoethane	10.372	10	70	130	P
66	Chlorobenzene	11.258	10	70	130	P
67	1,1,1,2-Tetrachloroethane	10.878	10	70	130	P
68	Ethylbenzene	11.673	10	70	130	P
69	m- & p-Xylenes	23.17	20	70	130	P
70	o-Xylene	10.996	10	70	130	P
71	Styrene	11.607	10	70	130	P
72	Bromoform	10.033	10	70	130	P
73	Isopropylbenzene	12.23	10	70	130	P
75	cis-1,4-dichloro-2-butene	No Calibration		70	130	
76	4-Bromofluorobenzene (S)	11.527	10	51	135	P
77	1,1,2,2-Tetrachloroethane	10.689	10	70	130	P
78	trans-1,4-Dichloro-2-butene	10.947	10	70	135.23	P
79	1,2,3-Trichloropropane	9.6386	10	70	130	P
80	Bromobenzene	10.91	10	70	130	P
81	n-Propylbenzene	11.663	10	70	130	P
82	2-Chlorotoluene	11.548	10	70	130	P
83	4-Ethyltoluene	No Calibration		70	130	
84	1,3,5-Trimethylbenzene	11.641	10	70	130	P
85	4-Chlorotoluene	11.240	10	70	130	P
86	tert-Butylbenzene	11.835	10	70	130	P
87	1,2,4-Trimethylbenzene	11.657	10	70	130	P
88	Pentachloroethane	10.328	10	70	130	P
89	sec-Butylbenzene	12.373	10	70	138.55	P
90	4-Isopropyltoluene	12.095	10	70	130	P
91	1,3-Dichlorobenzene	10.86	10	70	130	P
92	1,4-Dichlorobenzene	10.6	10	70	130	P
93	n-Butylbenzene	12.301	10	70	131.98	P
94	1,2-Dichlorobenzene	11.072	10	70	130	P
95	Hexachloroethane	No Calibration		70	130	
96	1,2-Dibromo-3-chloropropane	10.004	10	70	130	P
97	Nitrobenzene	No Calibration		59.98	130	
98	1,2,4-Trichlorobenzene	11.118	10	70	130	P
99	Hexachlorobutadiene	12.403	10	70	134.02	P
100	Naphthalene	10.725	10	70	130	P
101	1,2,3-Trichlorobenzene	10.746	10	70	130	P

#	Analyte	Analyte Response	ISTD Referenced	ISTD Response	RRF	Min RF	P/F?
3	Chloromethane	63529	Pentafluorobenzene	120097	0.529	0.1	P
21	1,1-Dichloroethane	101935	Pentafluorobenzene	120097	0.8488	0.1	P
66	Chlorobenzene	162491	Chlorobenzene-d5	170804	0.9513	0.3	P
72	Bromoform	37140	Chlorobenzene-d5	170804	0.2174	0.1	P
77	1,1,2,2-Tetrachloroethane	77760	1,4-Dichlorobenzene-d4	96389	0.8067	0.3	P

8260 Quantitation Review Report

C:\msdchem\1\data\2024\02-FEB\022324\GCMS8-022324018.D

SSCV 02/23/24 018

Sample Name: SSCVTP0223241 PAV 1150, 1149
Data File Name: GCMS8-022324018.D
Date Acquired: 02/23/24 19:08
Vial Number: 17
Sample Multiplier: 1
Misc Info: 1135F,1141A,1155A,1124A,1151A,1016A

Operator:
Data File Path: C:\msdchem\1\data\2024\02-FEB\02232
Instrument Method: VOC092623 INSTRUMENT SCAN.M
Quant. Method: VOC022324Final
Last Result Mod: 02/26/24 12:50
Last Cal Update: 02/26/24 12:39
Last Cal Mod: 02/26/24 12:39

#	Internal Standard	Response
1)	Pentafluorobenzene	120,097
42)	1,4-Difluorobenzene	192,075
50)	Chlorobenzene-d5	170,804
74)	1,4-Dichlorobenzene-d4	96,389

#	Surrogate	% Rec	P/F	Water Range
35)	Dibromofluoromethane	**111**	P	51-135
56)	Toluene-d8	**115**	P	62-130
76)	4-Bromofluorobenzene	**115**	P	51-135

#	SPCC Compound	Min. RF	CCV RF	P/F
3)	Chloromethane	0.1	0.529	P
21)	1,1-Dichloroethane	0.1	0.849	P
66)	Chlorobenzene	0.3	0.951	P
72)	Bromoform	0.1	0.217	P
77)	1,1,2,2-Tetrachloroethane	0.3	0.807	P

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
1)	Pentafluorobenzene		10	-	-	6.25	0.01	-	100	120,097	168	-		-		-	
2)	**Dichlorodifluoromethane**		**8.0656**	RL	**8.1**	1.38	0.00	P	97	51,186	85	87	32.5 | 34.5	-		-	
3)	**Chloromethane**		**7.6249**	RL	**7.6**	1.55	0.01	P	97	63,529	50	52	33.1 | 31.3	-		-	
4)	**Vinyl chloride**		**8.7733**	RL	**8.8**	1.65	0.00	P	99	64,743	62	64	30.9 | 30.5	-		-	
5)	**Bromomethane**		**8.6177**	RL	**8.6**	1.97	0.00	P	91	40,858	94	96	96.7 | 88.5	-		-	
6)	**Chloroethane**		**9.3996**	RL	**9.4**	2.06	0.00	P	97	44,551	64	66	36.1 | 34.3	-		-	
7)	**Trichlorofluoromethane**		**11.013**	RL	**11**	2.35	0.00	P	91	90,576	101	103	69.6 | 61.6	66	12.0 | 12.7	-	
8)	**Diethyl ether**		**9.1615**	RL	**9.2**	2.65	0.00	P	98	33,576	74	45	106 | 103	59	132 | 129	-	
9)	**1,1-Dichloroethene**		**9.9838**	RL	**10**	2.90	0.00	P	79	50,807	96	61	169 | 139	63	52.6 | 47.0	-	
10)	Freon 113		No Cal.	-	-	2.93	0.03	P	96	53,678	101	151	78.2 | 82.4	103	65.1 | 64.1	153	48.5 | 53.1
11)	**Acetone**		**9.0688**	RL	**9.1**	2.99	0.02	P	93	6,354	58	43	253 | 266	-		-	
12)	**Iodomethane**		**9.4247**	RL	**9.4**	3.06	0.00	P	99	90,973	142	127	40.5 | 40.6	141	12.0 | 12.9	-	
13)	**Carbon disulfide**		**9.0775**	RL	**9.1**	3.13	0.01	P	97	149,930	76	78	8.24 | 9.20	-		-	
14)	**Allyl chloride**		**9.7508**	RL	**9.8**	3.33	0.00	P	92	32,704	76	78	34.8 | 30.7	41	294 | 283	39	190 | 175
15)	**Methylene chloride**		**9.7063**	RL	**9.7**	3.49	0.00	P	97	70,466	84	49	126 | 121	86	64.7 | 64.4	51	35.3 | 36.5
16)	t-Butanol (TBA)		No Cal.	-	-	(3.70)	-	-	0		59	57	0.00 | 8.40	-		-	
17)	**Acrylonitrile**		**9.3238**	RL	**9.3**	3.81	0.00	P	90	17,720	52	53	109 | 120	51	37.0 | 41.7	-	
18)	**Methyl t-butyl ether (MTBE)**		**9.5905**	RL	**9.6**	3.86	0.01	P	92	166,383	73	57	19.4 | 23.3	-		-	
19)	**trans-1,2-Dichloroethene**		**10.283**	RL	**10**	3.84	0.01	P	93	60,529	96	61	130 | 137	98	58.5 | 65.3	-	
20)	n-Hexane		No Cal.	-	-	(4.22)	-	-	0		57	43	0.00 | 64.9	41	0.00 | 72.0	56	0.00 | 47.3
21)	**1,1-Dichloroethane**		**9.6319**	RL	**9.6**	4.41	0.00	P	99	101,935	63	65	32.9 | 33.7	83	14.8 | 15.0	-	
22)	**Vinyl acetate**		**9.3608**	RL	**9.4**	4.52	0.00	P	**54**	12,087	86	43	750 | 949	-		-	
23)	2-chloro-1,3-butadiene		No Cal.	-	-	4.54	0.00	P	98	84,625	53	88	59.8 | 58.3	52	24.3 | 23.5	-	
24)	Diisopropyl ether (DIPE)		No Cal.	-	-	4.54	-0.03	**F**	**1**	697	45	43	**7930 | 38.9**	87	**191 | 24.3**	-	
25)	Ethyl t-butyl ether (ETBE)		No Cal.	-	-	(5.12)	-	-	0		59	57	0.00 | 31.8	87	0.00 | 34.1	-	
26)	**2-Butanone (MEK)**		**9.4596**	RL	**9.5**	5.35	0.00	P	84	7,210	72	43	391 | 353	57	30.9 | 29.9	-	
27)	**cis-1,2-Dichloroethene**		**10.077**	RL	**10**	5.30	0.01	P	93	65,868	96	61	127 | 132	98	65.1 | 56.2	-	
28)	**2,2-Dichloropropane**		**10.858**	RL	**11**	5.27	0.00	P	96	90,959	77	97	18.8 | 22.0	79	29.8 | 30.5	-	
29)	**Propionitrile**		**8.9776**	RL	**9.0**	5.45	-0.01	P	75	8,769	54	52	15.9 | 11.3	55	29.9 | 15.7	-	
30)	**Methyl acrylate**		**9.5723**	RL	**9.6**	5.52	0.01	P	98	55,960	55	85	16.4 | 17.1	-		-	
31)	**Methacrylonitrile**		**9.9574**	RL	**10**	5.68	0.01	P	93	25,031	67	41	137 | 147	39	77.8 | 83.1	52	38.6 | 37.0
32)	**Bromochloromethane**		**9.7839**	RL	**9.8**	5.67	0.01	P	94	31,576	128	49	157 | 167	130	139 | 134	-	
33)	**Chloroform**		**10.141**	RL	**10**	5.83	0.00	P	96	104,106	83	85	62.8 | 66.3	-		-	
34)	**Tetrahydrofuran**		**9.7767**	RL	**9.8**	5.75	0.01	P	93	10,098	72	71	97.3 | 96.8	42	224 | 241	-	
35)	Dibromofluoromethane (S)		11.144	Sur	-	6.11	0.01	P	97	54,708	113	111	98.9 | 102	192	21.1 | 22.1	81	13.6 | 14.3
36)	**1,1,1-Trichloroethane**		**10.891**	RL	**11**	6.11	0.01	P	99	96,221	97	99	61.3 | 60.3	61	38.3 | 38.9	63	14.7 | 14.3
37)	1-Chlorobutane		No Cal.	-	-	6.25	-0.05	**Inc**	90	3,418	56	49	**0.00 | 3.40**	-		-	
38)	**1,1-Dichloropropene**		**11.708**	RL	**12**	6.39	0.00	P	97	81,366	75	39	54.8 | 55.5	110	39.2 | 36.4	77	29.7 | 31.4

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8260 Quantitation Review Report

C:\msdchem\1\data\2024\02-FEB\022324\GCMS8-022324018.D **SSCV** 02/23/24 018

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
39)	**Carbon tetrachloride**		**10.883**	RL	**11**	6.38	0.00	P	95	80,914	117	119	95.3 | 100	-		-	
40)	**Benzene**		**10.478**	RL	**10**	6.76	0.01	P	96	240,807	78	51	13.8 | 15.3	-		-	
41)	**1,2-Dichloroethane**		**10.423**	RL	**10**	6.81	0.00	P	95	73,870	62	98	10.4 | 12.3	-		-	
42)	1,4-Difluorobenzene		10	-	-	7.56	0.00	-	100	192,075	114	-		-		-	
43)	t- Amyl methyl ether (TAME)		No Cal.	-	-	(7.05)	-	-	0		73	55	0.00 | 37.9	87	0.00 | 22.4	-	
44)	**Trichloroethene**		**10.917**	RL	**11**	8.03	0.00	P	88	59,121	95	132	96.7 | 115	130	101 | 113	97	66.7 | 64.2
45)	**1,2-Dichloropropane**		**10.437**	RL	**10**	8.46	0.00	P	91	56,843	63	112	5.00 | 5.70	76	41.3 | 47.7	-	
46)	**Methyl methacrylate**		**9.2940**	RL	**9.3**	8.77	0.00	P	98	42,918	69	41	131 | 133	100	38.7 | 40.0	39	64.0 | 64.9
47)	**Dibromomethane**		**9.7852**	RL	**9.8**	8.66	0.01	P	90	33,901	93	174	123 | 107	95	85.6 | 82.1	-	
48)	**Bromodichloromethane**		**9.9066**	RL	**9.9**	8.94	0.00	P	98	69,448	83	85	65.6 | 64.1	127	9.61 | 8.90	-	
49)	**2-nitro-propane**		**9.4970**	QL	**9.5**	9.26	0.00	P	86	15,665	43	39	35.7 | 28.5	-		-	
50)	Chlorobenzene-d5		10	-	-	11.04	0.00	P	96	170,804	117	82	52.0 | 54.8	119	30.4 | 31.9	54	19.8 | 22.3
51)	Chloromethyl cyanide		No Cal.	-	-	(9.38)	-	-	0		75	48	0.00 | 39.0	40	0.00 | 44.5	-	
52)	**2-Chloroethyl vinyl ether**		**9.6530**	RL	**9.7**	9.39	0.00	P	96	35,647	63	65	26.9 | 30.2	106	30.4 | 31.4	-	
53)	**cis-1,3-Dichloropropene**		**10.788**	RL	**11**	9.51	0.00	P	97	89,828	75	77	32.1 | 33.4	39	48.9 | 47.1	110	24.4 | 21.7
54)	**4-Methyl-2-pentanone**		**8.6930**	RL	**8.7**	9.72	0.00	P	92	22,882	58	41	46.9 | 52.2	100	44.3 | 44.0	85	53.0 | 42.0
55)	1,1-Dichloro-2-propanone		No Cal.	-	-	(9.71)	-	-	0		83	63	0.00 | 56.4	91	0.00 | 22.8	-	
56)	Toluene-d8 (S)		11.514	Sur	-	9.79	0.00	P	97	192,700	98	100	68.5 | 71.5	42	11.7 | 12.7	70	11.7 | 11.3
57)	**Toluene**		**10.942**	RL	**11**	9.85	0.00	P	100	148,524	92	91	167 | 168	65	18.5 | 18.5	39	15.6 | 16.3
58)	**trans-1,3-Dichloropropene**		**10.279**	RL	**10**	10.10	0.00	P	97	77,623	75	77	32.8 | 30.2	39.1	45.0 | 43.2	110	25.1 | 24.5
59)	**Ethyl methacrylate**		**10.326**	RL	**10**	10.22	0.00	P	96	71,570	69	41	65.7 | 69.2	99	17.5 | 18.5	86	15.1 | 16.1
60)	**1,1,2-Trichloroethane**		**10.003**	RL	**10**	10.26	0.00	P	96	40,553	83	97	123 | 125	61	73.3 | 70.3	85	64.5 | 59.8
61)	**1,3-Dichloropropane**		**10.320**	RL	**10**	10.40	0.00	P	97	91,656	76	41	63.3 | 61.7	78	30.9 | 32.5	39	20.3 | 22.8
62)	**2-Hexanone**		**8.9632**	RL	**9.0**	10.51	0.01	P	95	41,444	43	58	55.8 | 59.4	57	16.4 | 21.2	100	16.1 | 16.0
63)	**Tetrachloroethene**		**11.047**	RL	**11**	10.36	0.00	P	96	51,099	164	166	123 | 127	129	83.6 | 88.5	131	79.6 | 84.5
64)	**Dibromochloromethane**		**10.209**	RL	**10**	10.59	0.00	P	95	54,277	129	127	74.5 | 79.2	-		-	
65)	**1,2-Dibromoethane**		**10.372**	RL	**10**	10.67	0.01	P	91	51,827	107	109	97.2 | 89.0	188	4.46 | 2.80	-	
66)	**Chlorobenzene**		**11.258**	RL	**11**	11.06	0.01	P	93	162,491	112	77	53.6 | 61.4	114	31.8 | 33.1	-	
67)	**1,1,1,2-Tetrachloroethane**		**10.878**	RL	**11**	11.13	0.01	P	95	58,093	131	133	100 | 94.0	117	69.2 | 64.0	119	64.7 | 63.7
68)	**Ethylbenzene**		**11.673**	RL	**12**	11.15	0.00	P	98	289,592	91	106	31.6 | 32.6	51	8.69 | 7.80	-	
69)	**m- & p-Xylenes**		**23.170**	RL	**23**	11.24	0.00	P	94	224,199	106	91	198 | 188	105	43.8 | 41.4	77	25.7 | 24.3
70)	**o-Xylene**		**10.996**	RL	**11**	11.51	0.00	P	98	108,757	106	91	206 | 206	105	43.3 | 48.7	-	
71)	**Styrene**		**11.607**	RL	**12**	11.52	0.00	P	97	173,906	104	103	46.0 | 46.8	78	39.2 | 41.6	51	24.8 | 22.7
72)	**Bromoform**		**10.033**	RL	**10**	11.65	0.00	P	98	37,140	173	175	45.4 | 46.3	254	10.0 | 12.5	-	
73)	**Isopropylbenzene**		**12.230**	RL	**12**	11.76	0.00	P	99	293,994	105	120	27.3 | 27.0	77	14.0 | 14.5	79	11.4 | 11.8
74)	1,4-Dichlorobenzene-d4		10	-	-	12.57	0.00	P	99	96,389	152	115	53.4 | 55.2	150	157 | 157	-	
75)	cis-1,4-dichloro-2-butene		No Cal.	-	-	11.80	-0.01	P	92	22,457	75	53	115 | 106	89	42.6 | 47.5	-	
76)	4-Bromofluorobenzene (S)		11.527	Sur	-	11.86	0.01	P	84	76,791	95	174	93.3 | 75.6	176	90.5 | 73.8	75	47.1 | 47.6
77)	**1,1,2,2-Tetrachloroethane**		**10.689**	RL	**11**	11.96	0.00	P	91	77,760	83	85	62.4 | 70.8	131	8.99 | 11.0	95	15.7 | 18.7
78)	**trans-1,4-Dichloro-2-butene**		**10.947**	RL	**11**	11.99	0.00	P	88	21,100	53	88	48.4 | 55.9	124	30.2 | 23.1	-	
79)	**1,2,3-Trichloropropane**		**9.6386**	RL	**9.6**	11.98	0.00	P	87	25,620	110	75	297 | 269	39	85.5 | 79.2	-	
80)	**Bromobenzene**		**10.910**	RL	**11**	11.96	0.00	P	98	69,601	156	158	92.6 | 94.7	-		-	
81)	**n-Propylbenzene**		**11.663**	RL	**12**	12.02	0.00	P	99	335,203	91	120	23.5 | 23.6	92	10.6 | 11.4	65	9.18 | 9.90
82)	**2-Chlorotoluene**		**11.548**	RL	**12**	12.08	0.00	P	96	70,142	126	91	296 | 289	63	38.5 | 36.0	-	
83)	4-Ethyltoluene		No Cal.	-	-	12.08	-0.02	**F**	**43**	1,710	105	120	40.6 | 29.9	77	**72.2 | 10.6**	-	
84)	**1,3,5-Trimethylbenzene**		**11.641**	RL	**12**	12.13	0.00	P	98	231,779	105	120	52.1 | 50.6	119	10.8 | 11.0	77	12.8 | 12.6
85)	**4-Chlorotoluene**		**11.240**	RL	**11**	12.14	0.00	P	99	225,996	91	126	33.7 | 34.5	63	11.5 | 11.3	-	
86)	**tert-Butylbenzene**		**11.835**	RL	**12**	12.33	0.00	P	96	62,676	134	119	351 | 340	91	209 | 215	-	
87)	**1,2,4-Trimethylbenzene**		**11.657**	RL	**12**	12.36	0.00	P	97	237,399	105	120	52.2 | 50.1	-		-	
88)	**Pentachloroethane**		**10.328**	RL	**10**	12.35	0.00	P	93	38,887	167	165	78.7 | 86.1	132	45.3 | 42.9	-	
89)	**sec-Butylbenzene**		**12.373**	RL	**12**	12.46	0.00	P	98	311,531	105	134	19.6 | 20.4	-		-	
90)	**4-Isopropyltoluene**		**12.095**	RL	**12**	12.54	0.00	P	99	265,723	119	134	27.5 | 28.5	91	22.7 | 22.4	-	
91)	**1,3-Dichlorobenzene**		**10.860**	RL	**11**	12.53	0.00	P	96	136,712	146	148	59.9 | 63.8	111	34.3 | 35.3	-	
92)	**1,4-Dichlorobenzene**		**10.600**	RL	**11**	12.58	0.00	P	97	136,058	146	111	36.5 | 37.8	148	63.7 | 61.5	-	
93)	**n-Butylbenzene**		**12.301**	RL	**12**	12.78	0.00	P	96	135,496	92	91	171 | 179	134	51.0 | 50.5	-	
94)	**1,2-Dichlorobenzene**		**11.072**	RL	**11**	12.80	0.00	P	97	132,247	146	148	60.7 | 64.6	111	40.9 | 40.4	-	
95)	Hexachloroethane		No Cal.	-	-	12.95	0.00	**F**	**58**	553	201	117	**85.1 | 129**	199	56.4 | 65.0	203	**0.00 | 64.5**

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8260 Quantitation Review Report

C:\msdchem\1\data\2024\02-FEB\022324\GCMS8-022324018.D **SSCV** 02/23/24 018

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
96)	**1,2-Dibromo-3-chloropropane**		**10.004**	RL	**10**	13.24	-0.01	P	87	14,191	75	155	90.8 | 104	157	109 | 123	-	
97)	Nitrobenzene		No Cal.	-	-	13.36	0.01	P	49	990	123	51	90.8 | 62.1	77	218 | 146	-	
98)	**1,2,4-Trichlorobenzene**		**11.118**	RL	**11**	13.69	0.00	P	96	90,189	180	182	92.4 | 97.2	184	30.8 | 29.6	145	28.1 | 30.6
99)	**Hexachlorobutadiene**		**12.403**	RL	**12**	13.78	0.00	P	90	35,001	225	227	65.9 | 59.6	260	27.2 | 22.3	223	67.9 | 59.4
100	**Naphthalene**		**10.725**	RL	**11**	13.84	0.00	P	99	251,530	128	127	12.4 | 12.5	129	10.7 | 11.6	-	
101	**1,2,3-Trichlorobenzene**		**10.746**	RL	**11**	13.97	0.00	P	96	84,794	180	182	96.9 | 91.8	184	31.9 | 29.8	145	28.8 | 29.8

Uses lowest known RLs; project RLs may be higher. Qualitative P/F based only on output ratios at apex and may not reflect full peak or analyst review.

For analyst review assistance only.

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
Data File : GCMS8-022324018.D
Acq On : 23 Feb 2024 19:08
Operator :
Sample : SSCVTP0223241 PAV 1150, 1149
Misc : 1135F,1141A,1155A,1124A,1151A,1016A
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 26 12:50:43 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	6.251	168	120097	10.00	ppb		0.01
42) 1,4-Difluorobenzene	7.563	114	192075	10.00	ppb		0.00
50) Chlorobenzene-d5	11.036	117	170804	10.00	ppb		0.00
74) 1,4-Dichlorobenzene-d4	12.569	152	96389	10.00	ppb		0.00
System Monitoring Compounds							
35) Dibromofluoromethane (S)	6.109	113	54708	11.14	ppb		0.00
Spiked Amount 10.000			Recovery = 111.40%				
56) Toluene-d8 (S)	9.786	98	192700	11.51	ppb		0.00
Spiked Amount 10.000			Recovery = 115.10%				
76) 4-Bromofluorobenzene (S)	11.860	95	76791	11.53	ppb		0.00
Spiked Amount 10.000			Recovery = 115.30%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.380	85	51186	8.0656	ppb		97
3) Chloromethane	1.553	50	63529	7.6249	ppb		97
4) Vinyl chloride	1.655	62	64743	8.7733	ppb		99
5) Bromomethane	1.970	94	40858	8.6177	ppb		91
6) Chloroethane	2.062	64	44551	9.3996	ppb		97
7) Trichlorofluoromethane	2.346	101	90576	11.0134	ppb		91
8) Diethyl ether	2.651	74	33576	9.1615	ppb		98
9) 1,1-Dichloroethene	2.895	96	50807	9.9838	ppb	#	79
10) Freon 113	2.926	101	53678	No Calib			
11) Acetone	2.987	58	6354	9.0688	ppb		93
12) Iodomethane	3.058	142	90973	9.4247	ppb		99
13) Carbon disulfide	3.129	76	149930	9.0775	ppb		97
14) Allyl chloride	3.333	76	32704	9.7508	ppb		92
15) Methylene chloride	3.485	84	70466	9.7063	ppb		97
16) t-Butanol (TBA)	0.000		0	N.D.			
17) Acrylonitrile	3.811	52	17720	9.3238	ppb		90
18) Methyl t-butyl ether (...	3.861	73	166383	9.5905	ppb		92
19) trans-1,2-Dichloroethene	3.841	96	60529	10.2825	ppb		93
20) n-Hexane	0.000		0	N.D.			
21) 1,1-Dichloroethane	4.411	63	101935	9.6319	ppb		99
22) Vinyl acetate	4.522	86	12087	9.3608	ppb	#	54
23) 2-chloro-1,3-butadiene	4.543	53	84625	No Calib			
24) Diisopropyl ether (DIPE)	4.543	45	697	No Calib	#		
25) Ethyl t-butyl ether (E...	0.000		0	N.D.			
26) 2-Butanone (MEK)	5.346	72	7210	9.4596	ppb	#	84
27) cis-1,2-Dichloroethene	5.295	96	65868	10.0770	ppb		93
28) 2,2-Dichloropropane	5.275	77	90959	10.8585	ppb		96
29) Propionitrile	5.448	54	8769	8.9776	ppb		75
30) Methyl acrylate	5.519	55	55960	9.5723	ppb		98
31) Methacrylonitrile	5.682	67	25031	9.9574	ppb		93
32) Bromochloromethane	5.672	128	31576	9.7839	ppb		94
33) Chloroform	5.834	83	104106	10.1411	ppb		96
34) Tetrahydrofuran	5.753	72	10098	9.7767	ppb		93
36) 1,1,1-Trichloroethane	6.109	97	96221	10.8912	ppb		99
37) 1-Chlorobutane	6.251	56	3418	No Calib			
38) 1,1-Dichloropropene	6.394	75	81366	11.7078	ppb		97
39) Carbon tetrachloride	6.383	117	80914	10.8835	ppb		95
40) Benzene	6.760	78	240807	10.4780	ppb		96
41) 1,2-Dichloroethane	6.810	62	73870	10.4231	ppb		95
43) t- Amyl methyl ether (...	0.000		0	N.D.			
44) Trichloroethene	8.031	95	59121	10.9168	ppb		88
45) 1,2-Dichloropropane	8.458	63	56843	10.4370	ppb		91
46) Methyl methacrylate	8.773	69	42918	9.2940	ppb		98

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ALS Vial : 17 Sample Multiplier: 1

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Quant Title : 8260 Calibration
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Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
47) Dibromomethane	8.661	93	33901	9.7852	ppb	90
48) Bromodichloromethane	8.936	83	69448	9.9066	ppb	98
49) 2-nitro-propane	9.261	43	15665	9.4970	ppb	86
51) Chloromethyl cyanide	0.000		0	N.D.		
52) 2-Chloroethyl vinyl ether	9.387	63	35647	9.6530	ppb	96
53) cis-1,3-Dichloropropene	9.513	75	89828	10.7885	ppb	97
54) 4-Methyl-2-pentanone	9.718	58	22882	8.6930	ppb	92
55) 1,1-Dichloro-2-propanone	0.000		0	N.D.		
57) Toluene	9.854	92	148524	10.9422	ppb	100
58) trans-1,3-Dichloropropene	10.101	75	77623	10.2794	ppb	97
59) Ethyl methacrylate	10.217	69	71570	10.3264	ppb	96
60) 1,1,2-Trichloroethane	10.259	83	40553	10.0028	ppb	96
61) 1,3-Dichloropropane	10.401	76	91656	10.3200	ppb	97
62) 2-Hexanone	10.506	43	41444	8.9632	ppb	95
63) Tetrachloroethene	10.364	164	51099	11.0473	ppb	96
64) Dibromochloromethane	10.590	129	54277	10.2090	ppb	95
65) 1,2-Dibromoethane	10.668	107	51827	10.3723	ppb	91
66) Chlorobenzene	11.062	112	162491	11.2585	ppb	93
67) 1,1,1,2-Tetrachloroethane	11.131	131	58093	10.8778	ppb	95
68) Ethylbenzene	11.152	91	289592	11.6735	ppb	98
69) m- & p-Xylenes	11.236	106	224199	23.1696	ppb	94
70) o-Xylene	11.514	106	108757	10.9962	ppb	98
71) Styrene	11.524	104	173906	11.6067	ppb	97
72) Bromoform	11.645	173	37140	10.0332	ppb	98
73) Isopropylbenzene	11.761	105	293994	12.2298	ppb	99
75) cis-1,4-dichloro-2-butene	11.803	75	22457	No Calib		
77) 1,1,2,2-Tetrachloroethane	11.955	83	77760	10.6891	ppb	91
78) trans-1,4-Dichloro-2-b...	11.987	53	21100	10.9470	ppb	88
79) 1,2,3-Trichloropropane	11.981	110	25620	9.6386	ppb	87
80) Bromobenzene	11.955	156	69601	10.9096	ppb	98
81) n-Propylbenzene	12.023	91	335203	11.6628	ppb	99
82) 2-Chlorotoluene	12.076	126	70142	11.5478	ppb	96
83) 4-Ethyltoluene	12.076	105	1710	No Calib	#	
84) 1,3,5-Trimethylbenzene	12.128	105	231779	11.6406	ppb	98
85) 4-Chlorotoluene	12.144	91	225996	11.2401	ppb	99
86) tert-Butylbenzene	12.333	134	62676	11.8345	ppb	96
87) 1,2,4-Trimethylbenzene	12.359	105	237399	11.6572	ppb	97
88) Pentachloroethane	12.349	167	38887	10.3279	ppb	93
89) sec-Butylbenzene	12.459	105	311531	12.3730	ppb	98
90) 4-Isopropyltoluene	12.543	119	265723	12.0945	ppb	99
91) 1,3-Dichlorobenzene	12.533	146	136712	10.8596	ppb	96
92) 1,4-Dichlorobenzene	12.580	146	136058	10.5995	ppb	97
93) n-Butylbenzene	12.780	92	135496	12.3009	ppb	96
94) 1,2-Dichlorobenzene	12.801	146	132247	11.0717	ppb	97
95) Hexachloroethane	12.953	201	553	No Calib	#	
96) 1,2-Dibromo-3-chloropr...	13.236	75	14191	10.0038	ppb	87
97) Nitrobenzene	13.357	123	990	No Calib	#	
98) 1,2,4-Trichlorobenzene	13.693	180	90189	11.1175	ppb	96
99) Hexachlorobutadiene	13.777	225	35001	12.4033	ppb	90
100) Naphthalene	13.835	128	251530	10.7251	ppb	99
101) 1,2,3-Trichlorobenzene	13.972	180	84794	10.7460	ppb	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

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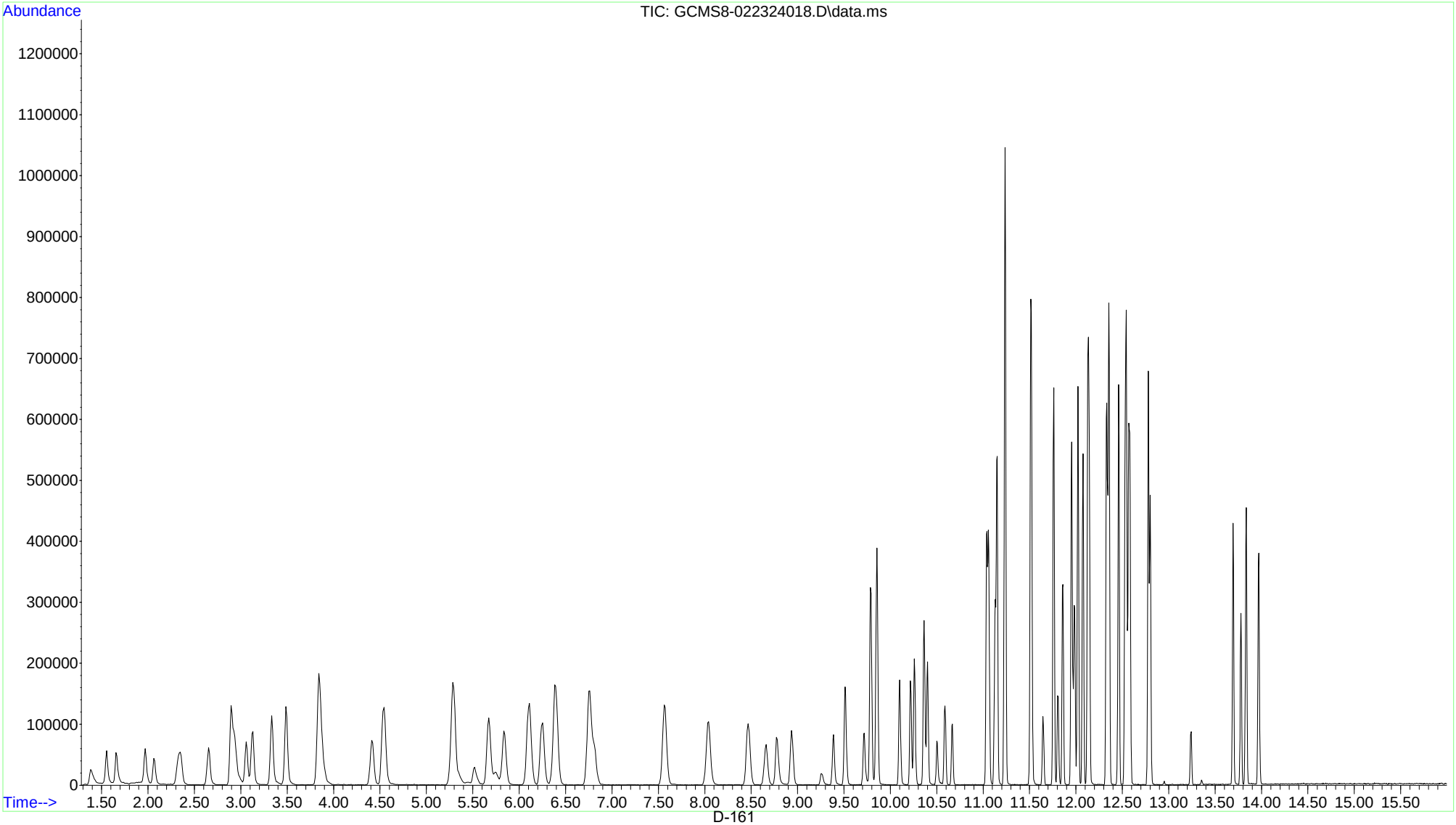

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2024\02-FEB\022324\
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Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	100	0.01
2	T	Dichlorodifluoromethane	0.528	0.426	19.3	69	0.00
3	T	Chloromethane	0.694	0.529	23.8	73	0.01
4	T	Vinyl chloride	0.614	0.539	12.2	80	0.00
5	T	Bromomethane	0.395	0.340	13.9	84	0.00
6	T	Chloroethane	0.395	0.371	6.1	94	0.00
7	T	Trichlorofluoromethane	0.685	0.754	-10.1	104	0.00
8		Diethyl ether	0.305	0.280	8.2	91	0.00
9	M	1,1-Dichloroethene	0.424	0.423	0.2	97	0.00
10	UN	Freon 113	0.000	0.000	0.0	0#	0.03
11	T	Acetone	0.074	0.053	28.4#	95	0.02
12		Iodomethane	0.804	0.757	5.8	91	0.00
13	T	Carbon disulfide	1.375	1.248	9.2	90	0.01
14		Allyl chloride	0.279	0.272	2.5	100	0.00
15	T	Methylene chloride	1.112	0.587	47.2#	98	0.00
16		t-Butanol (TBA)	0.000	0.000	0.0	0#	-3.70#
17	T	Acrylonitrile	0.146	0.148	-1.4	94	0.00
18	T	Methyl t-butyl ether (MTBE)	1.445	1.385	4.2	94	0.01
19	T	trans-1,2-Dichloroethene	0.490	0.504	-2.9	103	0.01
20	T	n-Hexane	0.000	0.000	0.0	0#	-4.22#
21	T	1,1-Dichloroethane	0.881	0.849	3.6	100	0.00
22	T	Vinyl acetate	0.102	0.101	1.0	94	0.00
23	UN	2-chloro-1,3-butadiene	0.000	0.000	0.0	0#	0.00
24	UN	Diisopropyl ether (DIPE)	0.000	0.000	0.0	0#	-0.03
25	UN	Ethyl t-butyl ether (ETBE)	0.000	0.000	0.0	0#	-5.12#
26		2-Butanone (MEK)	0.067	0.060	10.4	91	0.00
27	T	cis-1,2-Dichloroethene	0.544	0.548	-0.7	97	0.01
28	T	2,2-Dichloropropane	0.698	0.757	-8.5	105	0.00
29		Propionitrile	0.079	0.073	7.6	86	-0.01
30		Methyl acrylate	0.448	0.466	-4.0	101	0.01
31		Methacrylonitrile	0.209	0.208	0.5	99	0.00
32	T	Bromochloromethane	0.269	0.263	2.2	102	0.01
33	T	Chloroform	0.855	0.867	-1.4	102	0.00
34		Tetrahydrofuran	0.086	0.084	2.3	90	0.00
35	S	Dibromofluoromethane (S)	0.409	0.456	-11.5	110	0.00
36	T	1,1,1-Trichloroethane	0.736	0.801	-8.8	106	0.00
37	UN	1-Chlorobutane	0.000	0.028	0.0	0#	-0.05
38	T	1,1-Dichloropropene	0.579	0.678	-17.1	118	0.00
39	T	Carbon tetrachloride	0.619	0.674	-8.9	110	0.00
40	M	Benzene	1.914	2.005	-4.8	104	0.01
41	T	1,2-Dichloroethane	0.590	0.615	-4.2	103	0.00
42	I	1,4-Difluorobenzene	1.000	1.000	0.0	100	0.00
43	UN	t- Amyl methyl ether (TAME)	0.000	0.000	0.0	0#	-7.05#
44	M	Trichloroethene	0.282	0.308	-9.2	110	0.00
45	T	1,2-Dichloropropane	0.284	0.296	-4.2	102	0.00
46		Methyl methacrylate	0.229	0.223	2.6	96	0.00
47	T	Dibromomethane	0.180	0.176	2.2	95	0.01
48	T	Bromodichloromethane	0.365	0.362	0.8	96	0.00
49		2-nitro-propane	0.086	0.082	4.7	96	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	96	0.00
51		Chloromethyl cyanide	0.000	0.000	0.0	0#	-9.38#
52	T	2-Chloroethyl vinyl ether	0.216	0.209	3.2	98	0.00

Evaluate Continuing Calibration Report

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Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
53	T	cis-1,3-Dichloropropene	0.487	0.526	-8.0	107	0.00
54	T	4-Methyl-2-pentanone	0.145	0.134	7.6	90	0.00
55		1,1-Dichloro-2-propanone	0.000	0.000	0.0	0#	-9.71#
56	S	Toluene-d8 (S)	0.980	1.128	-15.1	112	0.00
57	M	Toluene	0.795	0.870	-9.4	106	0.00
58	T	trans-1,3-Dichloropropene	0.442	0.454	-2.7	100	0.00
59		Ethyl methacrylate	0.406	0.419	-3.2	98	0.00
60	T	1,1,2-Trichloroethane	0.237	0.237	0.0	97	0.00
61	T	1,3-Dichloropropane	0.520	0.537	-3.3	101	0.00
62	T	2-Hexanone	0.244	0.243	0.4	94	0.00
63	T	Tetrachloroethene	0.271	0.299	-10.3	112	0.00
64	T	Dibromochloromethane	0.311	0.318	-2.3	101	0.00
65	T	1,2-Dibromoethane	0.293	0.303	-3.4	102	0.00
66	M	Chlorobenzene	0.845	0.951	-12.5	112	0.00
67	T	1,1,1,2-Tetrachloroethane	0.313	0.340	-8.6	107	0.00
68	T	Ethylbenzene	1.452	1.695	-16.7	114	0.00
69	T	m- & p-Xylenes	0.567	0.656	-15.7	108	0.00
70	T	o-Xylene	0.579	0.637	-10.0	110	0.00
71	T	Styrene	0.877	1.018	-16.1	109	0.00
72	T	Bromoform	0.201	0.217	-8.0	105	0.00
73	T	Isopropylbenzene	1.407	1.721	-22.3	116	0.00
74	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	99	0.00
75		cis-1,4-dichloro-2-butene	0.000	0.000	0.0	0#	0.00
76	S	4-Bromofluorobenzene (S)	0.691	0.797	-15.3	112	0.00
77	T	1,1,2,2-Tetrachloroethane	0.755	0.807	-6.9	107	0.00
78	T	trans-1,4-Dichloro-2-butene	0.186	0.219	-17.7	119	0.00
79	T	1,2,3-Trichloropropane	0.276	0.266	3.6	99	0.00
80	T	Bromobenzene	0.662	0.722	-9.1	108	0.00
81	T	n-Propylbenzene	2.982	3.478	-16.6	112	0.00
82	T	2-Chlorotoluene	0.630	0.728	-15.6	112	0.00
83	UN	4-Ethyltoluene	0.000	0.018	0.0	0#	-0.02
84	T	1,3,5-Trimethylbenzene	2.066	2.405	-16.4	110	0.00
85	T	4-Chlorotoluene	2.086	2.345	-12.4	110	0.00
86	T	tert-Butylbenzene	0.549	0.650	-18.4	121	0.00
87	T	1,2,4-Trimethylbenzene	2.113	2.463	-16.6	111	0.00
88		Pentachloroethane	0.391	0.403	-3.1	105	0.00
89	T	sec-Butylbenzene	2.612	3.232	-23.7	120	0.00
90	T	4-Isopropyltoluene	2.279	2.757	-21.0	118	0.00
91	T	1,3-Dichlorobenzene	1.306	1.418	-8.6	109	0.00
92	T	1,4-Dichlorobenzene	1.332	1.412	-6.0	106	0.00
93	T	n-Butylbenzene	1.143	1.406	-23.0	121	0.00
94	T	1,2-Dichlorobenzene	1.239	1.372	-10.7	109	0.00
95	UN	Hexachloroethane	0.000	0.006	0.0	0#	0.00
96	T	1,2-Dibromo-3-chloropropane	0.147	0.147	0.0	98	0.00
97		Nitrobenzene	0.000	0.010	0.0	0#	0.00
98	T	1,2,4-Trichlorobenzene	0.842	0.936	-11.2	114	0.00
99	Y	Hexachlorobutadiene	0.293	0.363	-23.9	119	0.00
100	T	Naphthalene	2.433	2.610	-7.3	105	0.00
101	T	1,2,3-Trichlorobenzene	0.819	0.880	-7.4	108	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Volatile Organic Analysis Continuing Calibration Verification Summary (Recovery and Min. RF)

Lab Name: Orange Coast Analytical (Alliance TG) - Phoenix, AZ **Date of Acquisition:** 04/22/24 13:28
Lab Sample ID: CCVTP0422242 **Calibration Method:** VOC022324Final
Standard ID: PAV 1150,1149,1144J,1142E,1157A,1148C
File Name: GCMS8-042224007.D

#	Analyte	ppb Result	ppb Spike	% LCL	% UCL	P/F?
2	Dichlorodifluoromethane	11.887	10	49.25	136.24	P
3	Chloromethane	9.338	10	66.67	130	P
4	Vinyl chloride	10.079	10	80	120	P
5	Bromomethane	8.7751	10	70	130	P
6	Chloroethane	9.7423	10	70	130	P
7	Trichlorofluoromethane	11.766	10	70	137.66	P
8	Diethyl ether	9.6714	10	70	130	P
9	1,1-Dichloroethene	10.454	10	80	120	P
10	Freon 113	No Calibration		70	130	
11	Acetone	6.6423	10	36.54	188.76	P
12	Iodomethane	9.75	10	70	130	P
13	Carbon disulfide	9.2199	10	67.69	130	P
14	Allyl chloride	10.113	10	70	130	P
15	Methylene chloride	10.756	10	65.16	134.74	P
16	t-Butanol (TBA)	No Calibration		70	130	
17	Acrylonitrile	10.219	10	66.96	130	P
18	Methyl t-butyl ether (MTBE)	10.239	10	70	130	P
19	trans-1,2-Dichloroethene	10.438	10	70	130	P
20	n-Hexane	No Calibration		61.28	139.45	
21	1,1-Dichloroethane	10.211	10	70	130	P
22	Vinyl acetate	10.921	10	60.49	134.53	P
23	2-chloro-1,3-butadiene	No Calibration		70	130	
24	Diisopropyl ether (DIPE)	No Calibration		70	130	
25	Ethyl t-butyl ether (ETBE)	No Calibration		70	130	
26	2-Butanone (MEK)	8.8832	10	65.68	132.67	P
27	cis-1,2-Dichloroethene	10.213	10	70	130	P
28	2,2-Dichloropropane	12.131	10	70	134.09	P
29	Propionitrile	9.4721	10	65.24	130	P
30	Methyl acrylate	9.6949	10	70	130	P
31	Methacrylonitrile	10.039	10	70	130	P
32	Bromochloromethane	9.6459	10	70	130	P
33	Chloroform	10.552	10	80	120	P
34	Tetrahydrofuran	9.5502	10	70	130	P
35	Dibromofluoromethane (S)	11.084	10	51	135	P
36	1,1,1-Trichloroethane	11.380	10	70	130	P
37	1-Chlorobutane	No Calibration		70	130	
38	1,1-Dichloropropene	11.096	10	70	130	P
39	Carbon tetrachloride	11.786	10	70	132.07	P
40	Benzene	10.169	10	70	130	P
41	1,2-Dichloroethane	11.026	10	68.99	130	P
43	t- Amyl methyl ether (TAME)	No Calibration		70	130	
44	Trichloroethene	10.184	10	70	130	P
45	1,2-Dichloropropane	9.8397	10	80	120	P
46	Methyl methacrylate	8.912	10	70	130	P
47	Dibromomethane	9.8160	10	70	130	P
48	Bromodichloromethane	10.044	10	70	130	P
49	2-nitro-propane	9.8854	10	51.38	130.89	P
51	Chloromethyl cyanide	No Calibration		70	130	
52	2-Chloroethyl vinyl ether	9.6203	10	70	130	P
53	cis-1,3-Dichloropropene	10.207	10	70	130	P

Volatile Organic Analysis Continuing Calibration Verification Summary (Recovery and Min. RF)

#	Analyte	ppb Result	ppb Spike	% LCL	% UCL	P/F?
54	4-Methyl-2-pentanone	9.5939	10	70	130	P
55	1,1-Dichloro-2-propanone	No Calibration		70	130	
56	Toluene-d8 (S)	11.527	10	62	130	P
57	Toluene	10.126	10	80	120	P
58	trans-1,3-Dichloropropene	10.180	10	70	130	P
59	Ethyl methacrylate	10.604	10	67.9	130	P
60	1,1,2-Trichloroethane	9.7039	10	70	130	P
61	1,3-Dichloropropane	9.6724	10	70	130	P
62	2-Hexanone	9.4170	10	62.71	130	P
63	Tetrachloroethene	10.216	10	70	130	P
64	Dibromochloromethane	9.3665	10	70	130	P
65	1,2-Dibromoethane	9.772	10	70	130	P
66	Chlorobenzene	10.205	10	70	130	P
67	1,1,1,2-Tetrachloroethane	9.8835	10	70	130	P
68	Ethylbenzene	10.909	10	80	120	P
69	m- & p-Xylenes	21.339	20	70	130	P
70	o-Xylene	10.254	10	70	130	P
71	Styrene	10.599	10	70	130	P
72	Bromoform	9.0317	10	69.38	130	P
73	Isopropylbenzene	11.551	10	70	130	P
75	cis-1,4-dichloro-2-butene	No Calibration		70	130	
76	4-Bromofluorobenzene (S)	12.056	10	51	135	P
77	1,1,2,2-Tetrachloroethane	9.3938	10	70	130	P
78	trans-1,4-Dichloro-2-butene	9.8564	10	60.98	130	P
79	1,2,3-Trichloropropane	9.2090	10	70	130	P
80	Bromobenzene	9.5256	10	70	130	P
81	n-Propylbenzene	11.324	10	70	130	P
82	2-Chlorotoluene	10.037	10	70	130	P
83	4-Ethyltoluene	No Calibration		70	130	
84	1,3,5-Trimethylbenzene	11.012	10	70	130	P
85	4-Chlorotoluene	10.788	10	70	130	P
86	tert-Butylbenzene	10.209	10	70	130	P
87	1,2,4-Trimethylbenzene	10.831	10	70	130	P
88	Pentachloroethane	9.4709	10	70	130	P
89	sec-Butylbenzene	11.404	10	70	130	P
90	4-Isopropyltoluene	10.898	10	70	130	P
91	1,3-Dichlorobenzene	9.6306	10	70	130	P
92	1,4-Dichlorobenzene	9.5957	10	70	130	P
93	n-Butylbenzene	11.487	10	70	132.13	P
94	1,2-Dichlorobenzene	9.73	10	70	130	P
95	Hexachloroethane	No Calibration		70	130	
96	1,2-Dibromo-3-chloropropane	9.8631	10	61.68	130	P
97	Nitrobenzene	No Calibration		40.11	142.92	
98	1,2,4-Trichlorobenzene	9.4298	10	70	130	P
99	Hexachlorobutadiene	10.365	10	70	130.67	P
100	Naphthalene	9.7554	10	70	130	P
101	1,2,3-Trichlorobenzene	9.4896	10	70	130	P

#	Analyte	Analyte Response	ISTD Referenced	ISTD Response	RRF	Min RF	P/F?
3	Chloromethane	82596	Pentafluorobenzene	127498	0.6478	0.1	P
21	1,1-Dichloroethane	114728	Pentafluorobenzene	127498	0.8998	0.1	P
66	Chlorobenzene	163654	Chlorobenzene-d5	189793	0.8623	0.3	P
72	Bromoform	37064	Chlorobenzene-d5	189793	0.1953	0.1	P
77	1,1,2,2-Tetrachloroethane	76355	1,4-Dichlorobenzene-d4	107698	0.709	0.3	P

8260 Quantitation Review Report

C:\msdchem\1\data\2024\04-APR\VB042224\GCMS8-042224007.D **CCV** 04/22/24 007

Sample Name: CCVTP0422242
Data File Name: GCMS8-042224007.D
Date Acquired: 04/22/24 13:28
Vial Number: 2
Sample Multiplier: 1
Misc Info: PAV 1150,1149,1144J,1142E,1157A,1148C

Operator:
Data File Path: C:\msdchem\1\data\2024\04-APR\VB042
Instrument Method: VOC092623 INSTRUMENT SCAN.M
Quant. Method: VOC022324Final
Last Result Mod: 04/22/24 13:45
Last Cal Update: 02/26/24 12:39
Last Cal Mod: 02/26/24 12:39

#	Internal Standard	Response	Cal Mid Resp	%	P/F
1)	Pentafluorobenzene	**127,498**	119,747	106	P
42)	1,4-Difluorobenzene	**209,172**	192,189	109	P
50)	Chlorobenzene-d5	**189,793**	177,566	107	P
74)	1,4-Dichlorobenzene-d4	**107,698**	97,720	110	P

#	Surrogate	% Rec	P/F	Water Range
35)	Dibromofluoromethane	**111**	P	51-135
56)	Toluene-d8	**115**	P	62-130
76)	4-Bromofluorobenzene	**121**	P	51-135

#	SPCC Compound	Min. RF	CCV RF	P/F
3)	Chloromethane	0.1	0.648	P
21)	1,1-Dichloroethane	0.1	0.90	P
66)	Chlorobenzene	0.3	0.862	P
72)	Bromoform	0.1	0.195	P
77)	1,1,2,2-Tetrachloroethane	0.3	0.709	P

#	CCC Compound	Conc.	% Rec	P/F	Accept Range
4)	Vinyl chloride	10.1	101	P	80-120
9)	1,1-Dichloroethene	10.5	105	P	80-120
33)	Chloroform	10.6	106	P	80-120
45)	1,2-Dichloropropane	9.84	98	P	80-120
57)	Toluene	10.1	101	P	80-120
68)	Ethylbenzene	10.9	109	P	80-120

#	Name	MI	Conc. (ppb)	Det	RRT	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
1)	Pentafluorobenzene		10	-	1.00	6.24	0.00	-	100	127,498	168	-		-		-	
2)	**Dichlorodifluoromethane**		**11.887**	RL	0.22	1.38	0.00	P	93	80,085	85	87	30.6 | 34.5	-		-	
3)	**Chloromethane**		**9.3380**	RL	0.25	1.54	0.00	P	97	82,596	50	52	29.8 | 31.3	-		-	
4)	**Vinyl chloride**		**10.079**	RL	0.27	1.65	0.00	P	96	78,962	62	64	28.5 | 30.5	-		-	
5)	**Bromomethane**		**8.7751**	RL	0.32	1.97	0.00	P	91	44,168	94	96	97.3 | 88.5	-		-	
6)	**Chloroethane**		**9.7423**	RL	0.33	2.06	0.00	P	94	49,021	64	66	31.1 | 34.3	-		-	
7)	**Trichlorofluoromethane**		**11.766**	RL	0.37	2.34	-0.01	P	97	102,732	101	103	60.0 | 61.6	66	10.8 | 12.7	-	
8)	**Diethyl ether**		**9.6714**	RL	0.42	2.64	-0.01	P	95	37,629	74	45	97.5 | 103	59	134 | 129	-	
9)	**1,1-Dichloroethene**		**10.454**	RL	0.46	2.90	0.00	P	92	56,477	96	61	150 | 139	63	51.7 | 47.0	-	
10)	Freon 113		No Cal.	-	-	(2.90)	-	-	0		101	151	0.00 | 82.4	103	0.00 | 64.1	153	0.00 | 53.1
11)	**Acetone**		**6.6423**	RL	0.48	2.99	0.02	P	92	5,104	58	43	281 | 266	-		-	
12)	**Iodomethane**		**9.7500**	RL	0.49	3.06	0.00	P	99	99,913	142	127	41.1 | 40.6	141	11.6 | 12.9	-	
13)	**Carbon disulfide**		**9.2199**	RL	0.50	3.12	0.00	P	99	161,666	76	78	8.70 | 9.20	-		-	
14)	**Allyl chloride**		**10.113**	RL	0.53	3.33	0.00	P	94	36,010	76	78	32.5 | 30.7	41	289 | 283	39	192 | 175
15)	**Methylene chloride**		**10.756**	RL	0.56	3.49	0.00	P	96	81,884	84	49	123 | 121	86	58.5 | 64.4	51	40.0 | 36.5
16)	t-Butanol (TBA)		No Cal.	-	-	(3.70)	-	-	0		59	57	0.00 | 8.40	-		-	
17)	**Acrylonitrile**		**10.219**	RL	0.61	3.81	0.00	P	96	20,728	52	53	115 | 120	51	43.7 | 41.7	-	
18)	**Methyl t-butyl ether (MTBE)**		**10.239**	RL	0.62	3.85	0.00	P	99	188,589	73	57	22.9 | 23.3	-		-	
19)	**trans-1,2-Dichloroethene**		**10.438**	RL	0.61	3.83	0.00	P	95	65,229	96	61	147 | 137	98	65.3 | 65.3	-	
20)	n-Hexane		No Cal.	-	-	(4.22)	-	-	0		57	43	0.00 | 64.9	41	0.00 | 72.0	56	0.00 | 47.3
21)	**1,1-Dichloroethane**		**10.211**	RL	0.71	4.41	0.00	P	95	114,728	63	65	30.7 | 33.7	83	13.1 | 15.0	-	
22)	**Vinyl acetate**		**10.921**	RL	0.72	4.52	0.00	P	83	15,061	86	43	877 | 949	-		-	
23)	2-chloro-1,3-butadiene		No Cal.	-	-	(4.54)	-	-	0		53	88	0.00 | 58.3	52	0.00 | 23.5	-	
24)	Diisopropyl ether (DIPE)		No Cal.	-	0.72	4.51	-0.06	F	1	985	45	43	**11800 | 38.9**	87	**0.00 | 24.3**	-	
25)	Ethyl t-butyl ether (ETBE)		No Cal.	-	-	(5.12)	-	-	0		59	57	0.00 | 31.8	87	0.00 | 34.1	-	
26)	**2-Butanone (MEK)**		**8.8832**	RL	0.86	5.35	0.00	P	96	7,118	72	43	343 | 353	57	28.7 | 29.9	-	
27)	**cis-1,2-Dichloroethene**		**10.213**	RL	0.85	5.29	0.00	P	88	70,874	96	61	145 | 132	98	66.2 | 56.2	-	
28)	**2,2-Dichloropropane**		**12.131**	RL	0.85	5.28	0.00	P	99	107,885	77	97	21.4 | 22.0	79	30.6 | 30.5	-	
29)	**Propionitrile**		**9.4721**	RL	0.87	5.44	-0.02	P	86	9,885	54	52	17.9 | 11.3	55	20.3 | 15.7	-	
30)	**Methyl acrylate**		**9.6949**	RL	0.88	5.51	0.00	P	98	60,189	55	85	17.9 | 17.1	-		-	
31)	**Methacrylonitrile**		**10.039**	RL	0.91	5.67	0.00	P	90	26,792	67	41	165 | 147	39	84.9 | 83.1	52	45.1 | 37.0
32)	**Bromochloromethane**		**9.6459**	RL	0.91	5.66	0.00	P	93	33,049	128	49	177 | 167	130	128 | 134	-	
33)	**Chloroform**		**10.552**	RL	0.93	5.83	0.00	P	90	115,004	83	85	58.1 | 66.3	-		-	
34)	**Tetrahydrofuran**		**9.5502**	RL	0.92	5.73	-0.01	P	86	10,472	72	71	74.2 | 96.8	42	223 | 241	-	
35)	Dibromofluoromethane (S)		11.084	Sur	0.98	6.10	0.00	P	98	57,766	113	111	99.2 | 102	192	21.7 | 22.1	81	14.9 | 14.3
36)	**1,1,1-Trichloroethane**		**11.380**	RL	0.98	6.10	0.00	P	97	106,740	97	99	63.9 | 60.3	61	40.3 | 38.9	63	14.8 | 14.3
37)	1-Chlorobutane		No Cal.	-	1.01	6.30	0.00	P	95	135,885	56	49	4.98 | 3.40	-		-	
38)	**1,1-Dichloropropene**		**11.096**	RL	1.02	6.38	-0.01	P	93	81,870	75	39	65.3 | 55.5	110	34.5 | 36.4	77	31.9 | 31.4

For analyst review assistance only.

8260 Quantitation Review Report

C:\msdchem\1\data\2024\04-APR\VB042224\GCMS8-042224007.D **CCV** 04/22/24 007

#	Name	MI	Conc. (ppb)	Det	RRT	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
39)	**Carbon tetrachloride**		**11.786**	RL	1.02	6.38	0.00	P	96	93,025	117	119	96.5 | 100	-		-	
40)	**Benzene**		**10.169**	RL	1.08	6.75	0.00	P	91	248,113	78	51	19.1 | 15.3	-		-	
41)	**1,2-Dichloroethane**		**11.026**	RL	1.09	6.80	-0.01	P	97	82,955	62	98	11.0 | 12.3	-		-	
42)	1,4-Difluorobenzene		10	-	1.00	7.56	0.00	-	100	209,172	114	-		-		-	
43)	t- Amyl methyl ether (TAME)		No Cal.	-	-	(7.05)	-	-	0		73	55	0.00 | 37.9	87	0.00 | 22.4	-	
44)	**Trichloroethene**		**10.184**	RL	1.06	8.03	0.00	P	90	60,061	95	132	99.2 | 115	130	102 | 113	97	64.8 | 64.2
45)	**1,2-Dichloropropane**		**9.8397**	RL	1.12	8.47	0.01	P	96	58,360	63	112	8.11 | 5.70	76	50.3 | 47.7	-	
46)	**Methyl methacrylate**		**8.9120**	RL	1.16	8.77	0.00	P	95	44,742	69	41	140 | 133	100	40.3 | 40.0	39	71.5 | 64.9
47)	**Dibromomethane**		**9.8160**	RL	1.14	8.65	0.00	P	92	37,035	93	174	96.4 | 107	95	78.6 | 82.1	-	
48)	**Bromodichloromethane**		**10.044**	RL	1.18	8.94	0.00	P	99	76,677	83	85	65.1 | 64.1	127	8.67 | 8.90	-	
49)	**2-nitro-propane**		**9.8854**	QL	1.22	9.26	0.00	P	93	17,757	43	39	25.0 | 28.5	-		-	
50)	Chlorobenzene-d5		10	-	1.00	11.04	0.00	P	97	189,793	117	82	58.4 | 54.8	119	32.5 | 31.9	54	22.9 | 22.3
51)	Chloromethyl cyanide		No Cal.	-	0.85	9.38	-0.01	F	44	3,130	75	48	110 | 39.0	40	42.2 | 44.5	-	
52)	**2-Chloroethyl vinyl ether**		**9.6203**	RL	0.85	9.38	0.00	P	90	39,476	63	65	35.6 | 30.2	106	25.8 | 31.4	-	
53)	**cis-1,3-Dichloropropene**		**10.207**	RL	0.86	9.51	-0.01	P	92	94,439	75	77	30.2 | 33.4	39	54.8 | 47.1	110	20.0 | 21.7
54)	**4-Methyl-2-pentanone**		**9.5939**	RL	0.88	9.71	0.00	P	90	28,116	58	41	60.9 | 52.2	100	43.9 | 44.0	85	53.2 | 42.0
55)	1,1-Dichloro-2-propanone		No Cal.	-	0.88	9.71	0.00	F	40	1,926	83	63	103 | 56.4	91	46.7 | 22.8	-	
56)	Toluene-d8 (S)		11.527	Sur	0.89	9.79	0.00	P	98	214,360	98	100	69.6 | 71.5	42	13.8 | 12.7	70	11.3 | 11.3
57)	**Toluene**		**10.126**	RL	0.89	9.85	0.00	P	98	152,730	92	91	171 | 168	65	18.9 | 18.5	39	19.4 | 16.3
58)	**trans-1,3-Dichloropropene**		**10.180**	RL	0.91	10.10	0.00	P	93	85,419	75	77	28.2 | 30.2	39.1	50.0 | 43.2	110	23.1 | 24.5
59)	**Ethyl methacrylate**		**10.604**	RL	0.93	10.22	0.00	P	98	81,666	69	41	70.9 | 69.2	99	19.7 | 18.5	86	16.4 | 16.1
60)	**1,1,2-Trichloroethane**		**9.7039**	RL	0.93	10.26	0.00	P	92	43,715	83	97	108 | 125	61	71.4 | 70.3	85	58.8 | 59.8
61)	**1,3-Dichloropropane**		**9.6724**	RL	0.94	10.40	-0.01	P	93	95,455	76	41	69.3 | 61.7	78	29.9 | 32.5	39	23.5 | 22.8
62)	**2-Hexanone**		**9.4170**	RL	0.95	10.50	0.00	P	91	48,462	43	58	52.3 | 59.4	57	17.0 | 21.2	100	13.1 | 16.0
63)	**Tetrachloroethene**		**10.216**	RL	0.94	10.36	-0.01	P	99	52,508	164	166	127 | 127	129	89.2 | 88.5	131	86.6 | 84.5
64)	**Dibromochloromethane**		**9.3665**	RL	0.96	10.58	-0.01	P	93	55,334	129	127	85.2 | 79.2	-		-	
65)	**1,2-Dibromoethane**		**9.7720**	RL	0.97	10.66	0.00	P	95	54,256	107	109	93.7 | 89.0	188	3.91 | 2.80	-	
66)	**Chlorobenzene**		**10.205**	RL	1.00	11.06	0.00	P	93	163,654	112	77	56.7 | 61.4	114	28.9 | 33.1	-	
67)	**1,1,1,2-Tetrachloroethane**		**9.8835**	RL	1.01	11.13	0.00	P	98	58,651	131	133	91.6 | 94.0	117	63.0 | 64.0	119	61.2 | 63.7
68)	**Ethylbenzene**		**10.909**	RL	1.01	11.15	0.00	P	96	300,703	91	106	31.1 | 32.6	51	10.4 | 7.80	-	
69)	**m- & p-Xylenes**		**21.339**	RL	1.02	11.24	0.00	P	92	229,437	106	91	202 | 188	105	43.5 | 41.4	77	25.4 | 24.3
70)	**o-Xylene**		**10.254**	RL	1.04	11.51	-0.01	P	92	112,689	106	91	221 | 206	105	47.7 | 48.7	-	
71)	**Styrene**		**10.599**	RL	1.04	11.52	0.00	P	95	176,470	104	103	46.9 | 46.8	78	45.6 | 41.6	51	29.5 | 22.7
72)	**Bromoform**		**9.0317**	RL	1.06	11.65	0.00	P	95	37,064	173	175	49.4 | 46.3	254	10.1 | 12.5	-	
73)	**Isopropylbenzene**		**11.551**	RL	1.07	11.76	-0.01	P	98	308,541	105	120	25.4 | 27.0	77	15.1 | 14.5	79	11.2 | 11.8
74)	1,4-Dichlorobenzene-d4		10	-	1.00	12.56	0.00	P	97	107,698	152	115	59.4 | 55.2	150	160 | 157	-	
75)	cis-1,4-dichloro-2-butene		No Cal.	-	0.94	11.80	-0.01	F	1	1,558	75	53	138 | 106	89	238 | 47.5	-	
76)	4-Bromofluorobenzene (S)		12.056	Sur	0.94	11.86	0.00	P	98	89,740	95	174	75.3 | 75.6	176	69.9 | 73.8	75	48.3 | 47.6
77)	**1,1,2,2-Tetrachloroethane**		**9.3938**	RL	0.95	11.95	-0.01	P	96	76,355	83	85	67.2 | 70.8	131	11.0 | 11.0	95	16.2 | 18.7
78)	**trans-1,4-Dichloro-2-butene**		**9.8564**	RL	0.95	11.99	0.00	P	94	21,183	53	88	50.1 | 55.9	124	24.2 | 23.1	-	
79)	**1,2,3-Trichloropropane**		**9.2090**	RL	0.95	11.98	0.00	P	98	27,350	110	75	272 | 269	39	80.9 | 79.2	-	
80)	**Bromobenzene**		**9.5256**	RL	0.95	11.95	-0.01	P	98	67,901	156	158	92.3 | 94.7	-		-	
81)	**n-Propylbenzene**		**11.324**	RL	0.96	12.02	0.00	P	99	363,656	91	120	23.2 | 23.6	92	10.5 | 11.4	65	10.2 | 9.90
82)	**2-Chlorotoluene**		**10.037**	RL	0.96	12.08	0.00	P	98	68,120	126	91	292 | 289	63	38.4 | 36.0	-	
83)	4-Ethyltoluene		No Cal.	-	0.96	12.07	-0.02	F	2	1,389	105	120	0.00 | 29.9	77	92.8 | 10.6	-	
84)	**1,3,5-Trimethylbenzene**		**11.012**	RL	0.97	12.13	0.00	P	99	244,990	105	120	51.5 | 50.6	119	10.8 | 11.0	77	12.0 | 12.6
85)	**4-Chlorotoluene**		**10.788**	RL	0.97	12.14	-0.01	P	94	242,358	91	126	30.2 | 34.5	63	12.6 | 11.3	-	
86)	**tert-Butylbenzene**		**10.209**	RL	0.98	12.33	-0.01	P	88	60,408	134	119	369 | 340	91	232 | 215	-	
87)	**1,2,4-Trimethylbenzene**		**10.831**	RL	0.98	12.35	0.00	P	97	246,442	105	120	47.7 | 50.1	-		-	
88)	**Pentachloroethane**		**9.4709**	RL	0.98	12.34	-0.01	P	92	39,844	167	165	78.2 | 86.1	132	47.7 | 42.9	-	
89)	**sec-Butylbenzene**		**11.404**	RL	0.99	12.46	0.00	P	99	320,827	105	134	19.8 | 20.4	-		-	
90)	**4-Isopropyltoluene**		**10.898**	RL	1.00	12.54	0.00	P	98	267,524	119	134	28.0 | 28.5	91	24.1 | 22.4	-	
91)	**1,3-Dichlorobenzene**		**9.6306**	RL	1.00	12.53	-0.01	P	96	135,465	146	148	65.4 | 63.8	111	38.9 | 35.3	-	
92)	**1,4-Dichlorobenzene**		**9.5957**	RL	1.00	12.58	0.00	P	97	137,624	146	111	34.5 | 37.8	148	60.8 | 61.5	-	
93)	**n-Butylbenzene**		**11.487**	RL	1.02	12.77	0.00	P	92	141,382	92	91	168 | 179	134	45.7 | 50.5	-	
94)	**1,2-Dichlorobenzene**		**9.7300**	RL	1.02	12.80	0.00	P	99	129,856	146	148	63.5 | 64.6	111	39.6 | 40.4	-	
95)	Hexachloroethane		No Cal.	-	1.03	12.95	-0.01	P	92	30,861	201	117	140 | 129	199	62.9 | 65.0	203	70.7 | 64.5

For analyst review assistance only.

8260 Quantitation Review Report

C:\msdchem\1\data\2024\04-APR\VB042224\GCMS8-042224007.D **CCV** 04/22/24 007

#	Name	MI	Conc. (ppb)	Det	RRT	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
96)	**1,2-Dibromo-3-chloropropane**		**9.8631**	RL	1.05	13.23	-0.01	P	88	15,633	75	155	91.5 | 104	157	109 | 123	-	
97)	Nitrobenzene		No Cal.	-	1.06	13.35	-0.01	P	90	1,429	123	51	79.0 | 62.1	77	152 | 146	-	
98)	**1,2,4-Trichlorobenzene**		**9.4298**	RL	1.09	13.69	0.00	P	100	85,473	180	182	97.0 | 97.2	184	29.3 | 29.6	145	30.3 | 30.6
99)	**Hexachlorobutadiene**		**10.365**	RL	1.10	13.77	0.00	P	94	32,680	225	227	64.1 | 59.6	260	32.6 | 22.3	223	59.3 | 59.4
100	**Naphthalene**		**9.7554**	RL	1.10	13.82	-0.01	P	98	255,632	128	127	12.0 | 12.5	129	10.6 | 11.6	-	
101	**1,2,3-Trichlorobenzene**		**9.4896**	RL	1.11	13.96	-0.01	P	98	83,665	180	182	90.9 | 91.8	184	29.0 | 29.8	145	32.6 | 29.8

Uses lowest known RLs; project RLs may be higher. Qualitative P/F based only on output ratios at apex and may not reflect full peak or analyst review.

For analyst review assistance only.

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224007.D
Acq On : 22 Apr 2024 13:28
Operator :
Sample : CCVTP0422242
Misc : PAV 1150,1149,1144J,1142E,1157A,1148C
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 22 13:45:49 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	6.241	168	127498	10.00	ppb		0.00
42) 1,4-Difluorobenzene	7.563	114	209172	10.00	ppb		0.00
50) Chlorobenzene-d5	11.036	117	189793	10.00	ppb		0.00
74) 1,4-Dichlorobenzene-d4	12.564	152	107698	10.00	ppb		0.00
System Monitoring Compounds							
35) Dibromofluoromethane (S)	6.099	113	57766	11.08	ppb		0.00
Spiked Amount 10.000			Recovery = 110.80%				
56) Toluene-d8 (S)	9.786	98	214360	11.53	ppb		0.00
Spiked Amount 10.000			Recovery = 115.30%				
76) 4-Bromofluorobenzene (S)	11.855	95	89740	12.06	ppb		0.00
Spiked Amount 10.000			Recovery = 120.60%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.380	85	80085	11.8869	ppb		93
3) Chloromethane	1.543	50	82596	9.3380	ppb		97
4) Vinyl chloride	1.655	62	78962	10.0789	ppb		96
5) Bromomethane	1.970	94	44168	8.7751	ppb		91
6) Chloroethane	2.062	64	49021	9.7423	ppb		94
7) Trichlorofluoromethane	2.336	101	102732	11.7663	ppb		97
8) Diethyl ether	2.641	74	37629	9.6714	ppb		95
9) 1,1-Dichloroethene	2.896	96	56477	10.4538	ppb		92
10) Freon 113	0.000		0	N.D.			
11) Acetone	2.987	58	5104	6.6423	ppb		92
12) Iodomethane	3.058	142	99913	9.7500	ppb		99
13) Carbon disulfide	3.119	76	161666	9.2199	ppb		99
14) Allyl chloride	3.333	76	36010	10.1133	ppb		94
15) Methylene chloride	3.485	84	81884	10.7560	ppb		96
16) t-Butanol (TBA)	0.000		0	N.D.			
17) Acrylonitrile	3.811	52	20728	10.2188	ppb		96
18) Methyl t-butyl ether (...	3.851	73	188589	10.2395	ppb		99
19) trans-1,2-Dichloroethene	3.831	96	65229	10.4377	ppb		95
20) n-Hexane	0.000		0	N.D.			
21) 1,1-Dichloroethane	4.411	63	114728	10.2114	ppb		95
22) Vinyl acetate	4.523	86	15061	10.9211	ppb	#	83
23) 2-chloro-1,3-butadiene	0.000		0	N.D.			
24) Diisopropyl ether (DIPE)	4.512	45	985	No Calib	#		
25) Ethyl t-butyl ether (E...	0.000		0	N.D.			
26) 2-Butanone (MEK)	5.346	72	7118	8.8832	ppb		96
27) cis-1,2-Dichloroethene	5.285	96	70874	10.2134	ppb		88
28) 2,2-Dichloropropane	5.275	77	107885	12.1314	ppb		99
29) Propionitrile	5.438	54	9885	9.4721	ppb		86
30) Methyl acrylate	5.509	55	60189	9.6949	ppb		98
31) Methacrylonitrile	5.672	67	26792	10.0392	ppb		90
32) Bromochloromethane	5.661	128	33049	9.6459	ppb		93
33) Chloroform	5.834	83	115004	10.5524	ppb		90
34) Tetrahydrofuran	5.733	72	10472	9.5502	ppb		86
36) 1,1,1-Trichloroethane	6.099	97	106740	11.3805	ppb		97
37) 1-Chlorobutane	6.302	56	135885	No Calib			
38) 1,1-Dichloropropene	6.383	75	81870	11.0965	ppb		93
39) Carbon tetrachloride	6.383	117	93025	11.7861	ppb		96
40) Benzene	6.750	78	248113	10.1692	ppb		91
41) 1,2-Dichloroethane	6.800	62	82955	11.0255	ppb		97
43) t- Amyl methyl ether (...	0.000		0	N.D.			
44) Trichloroethene	8.031	95	60061	10.1839	ppb		90
45) 1,2-Dichloropropane	8.468	63	58360	9.8397	ppb		96
46) Methyl methacrylate	8.773	69	44742	8.9120	ppb		95

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224007.D
Acq On : 22 Apr 2024 13:28
Operator :
Sample : CCVTP0422242
Misc : PAV 1150,1149,1144J,1142E,1157A,1148C
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 22 13:45:49 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

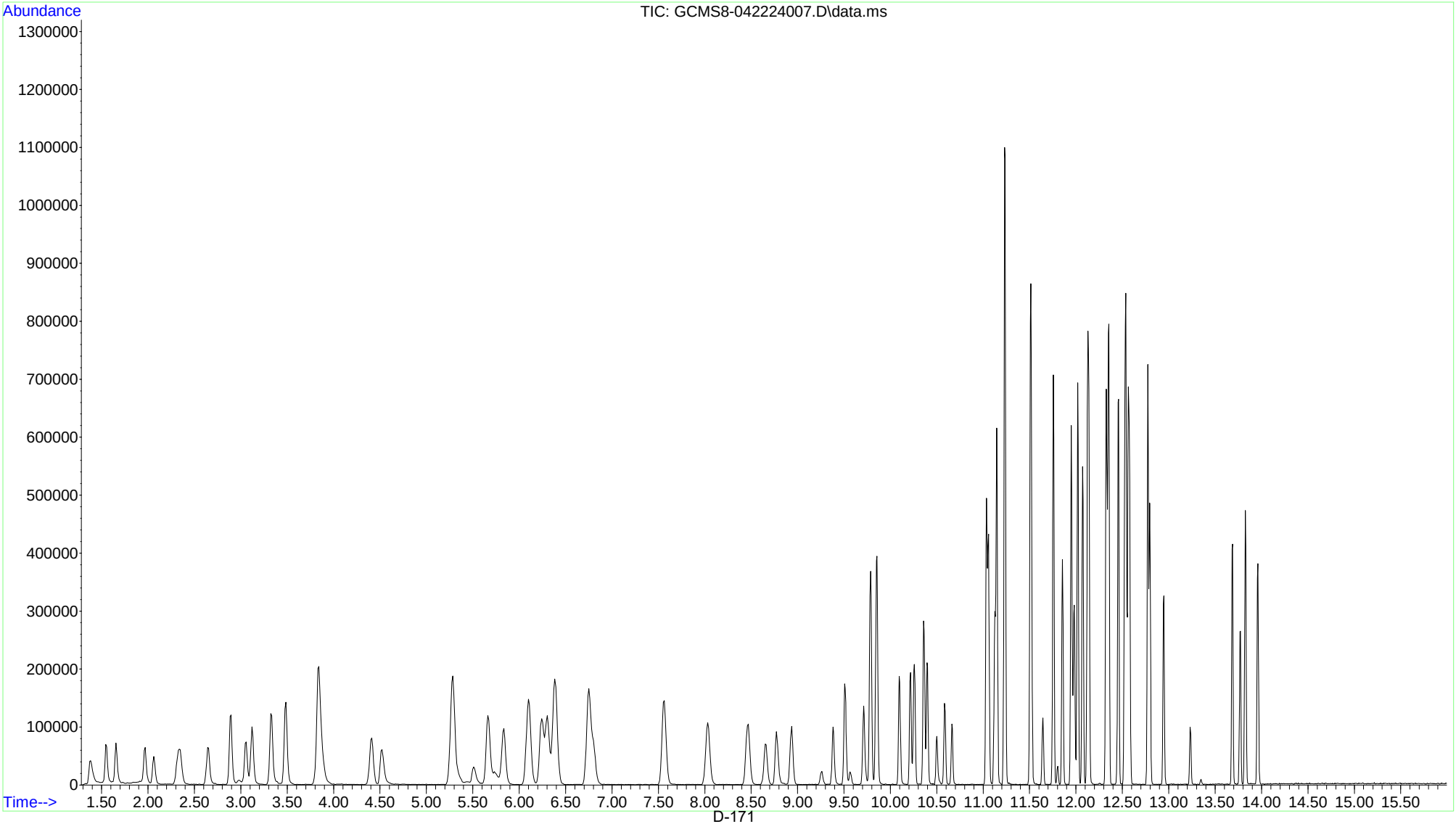
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
47) Dibromomethane	8.651	93	37035	9.8160	ppb	92
48) Bromodichloromethane	8.936	83	76677	10.0438	ppb	99
49) 2-nitro-propane	9.261	43	17757	9.8854	ppb	93
51) Chloromethyl cyanide	9.377	75	3130	No Calib	#	
52) 2-Chloroethyl vinyl ether	9.382	63	39476	9.6203	ppb	90
53) cis-1,3-Dichloropropene	9.508	75	94439	10.2075	ppb	92
54) 4-Methyl-2-pentanone	9.713	58	28116	9.5939	ppb	90
55) 1,1-Dichloro-2-propanone	9.713	83	1926	No Calib	#	
57) Toluene	9.854	92	152730	10.1263	ppb	98
58) trans-1,3-Dichloropropene	10.096	75	85419	10.1801	ppb	93
59) Ethyl methacrylate	10.217	69	81666	10.6041	ppb	98
60) 1,1,2-Trichloroethane	10.259	83	43715	9.7039	ppb	92
61) 1,3-Dichloropropane	10.395	76	95455	9.6724	ppb	93
62) 2-Hexanone	10.500	43	48462	9.4170	ppb	91
63) Tetrachloroethene	10.359	164	52508	10.2162	ppb	99
64) Dibromochloromethane	10.584	129	55334	9.3665	ppb	93
65) 1,2-Dibromoethane	10.663	107	54256	9.7720	ppb	95
66) Chlorobenzene	11.057	112	163654	10.2046	ppb	93
67) 1,1,1,2-Tetrachloroethane	11.125	131	58651	9.8835	ppb	98
68) Ethylbenzene	11.146	91	300703	10.9086	ppb	96
69) m- & p-Xylenes	11.236	106	229437	21.3386	ppb	92
70) o-Xylene	11.509	106	112689	10.2538	ppb	92
71) Styrene	11.519	104	176470	10.5994	ppb	95
72) Bromoform	11.645	173	37064	9.0317	ppb	95
73) Isopropylbenzene	11.756	105	308541	11.5508	ppb	98
75) cis-1,4-dichloro-2-butene	11.803	75	1558	No Calib	#	
77) 1,1,2,2-Tetrachloroethane	11.950	83	76355	9.3938	ppb	96
78) trans-1,4-Dichloro-2-b...	11.987	53	21183	9.8564	ppb	94
79) 1,2,3-Trichloropropane	11.976	110	27350	9.2090	ppb	98
80) Bromobenzene	11.950	156	67901	9.5256	ppb	98
81) n-Propylbenzene	12.018	91	363656	11.3241	ppb	99
82) 2-Chlorotoluene	12.076	126	68120	10.0372	ppb	98
83) 4-Ethyltoluene	12.071	105	1389	No Calib	#	
84) 1,3,5-Trimethylbenzene	12.128	105	244990	11.0120	ppb	99
85) 4-Chlorotoluene	12.139	91	242358	10.7882	ppb	94
86) tert-Butylbenzene	12.328	134	60408	10.2085	ppb	88
87) 1,2,4-Trimethylbenzene	12.354	105	246442	10.8305	ppb	97
88) Pentachloroethane	12.344	167	39844	9.4709	ppb	92
89) sec-Butylbenzene	12.459	105	320827	11.4042	ppb	99
90) 4-Isopropyltoluene	12.538	119	267524	10.8979	ppb	98
91) 1,3-Dichlorobenzene	12.528	146	135465	9.6306	ppb	96
92) 1,4-Dichlorobenzene	12.580	146	137624	9.5957	ppb	97
93) n-Butylbenzene	12.774	92	141382	11.4874	ppb	92
94) 1,2-Dichlorobenzene	12.795	146	129856	9.7300	ppb	99
95) Hexachloroethane	12.948	201	30861	No Calib		
96) 1,2-Dibromo-3-chloropr...	13.231	75	15633	9.8631	ppb	88
97) Nitrobenzene	13.347	123	1429	No Calib		
98) 1,2,4-Trichlorobenzene	13.688	180	85473	9.4298	ppb	100
99) Hexachlorobutadiene	13.772	225	32680	10.3647	ppb	94
100) Naphthalene	13.825	128	255632	9.7554	ppb	98
101) 1,2,3-Trichlorobenzene	13.961	180	83665	9.4896	ppb	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224007.D
Acq On : 22 Apr 2024 13:28
Operator :
Sample : CCVTP0422242
Misc : PAV 1150,1149,1144J,1142E,1157A,1148C
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 22 13:45:49 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration



D-171

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224007.D
Acq On : 22 Apr 2024 13:28
Operator :
Sample : CCVTP0422242
Misc : PAV 1150,1149,1144J,1142E,1157A,1148C
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 22 13:45:49 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	106	0.00
2	T	Dichlorodifluoromethane	0.528	0.628	-18.9	107	0.00
3	T	Chloromethane	0.694	0.648	6.6	95	0.00
4	T	Vinyl chloride	0.614	0.619	-0.8	98	0.00
5	T	Bromomethane	0.395	0.346	12.4	91	0.00
6	T	Chloroethane	0.395	0.384	2.8	103	0.00
7	T	Trichlorofluoromethane	0.685	0.806	-17.7	118	0.00
8		Diethyl ether	0.305	0.295	3.3	102	0.00
9	M	1,1-Dichloroethene	0.424	0.443	-4.5	107	0.00
10	UN	Freon 113	0.000	0.000	0.0	0#	-2.90#
11	T	Acetone	0.074	0.040	45.9#	76	0.02
12		Iodomethane	0.804	0.784	2.5	100	0.00
13	T	Carbon disulfide	1.375	1.268	7.8	97	0.00
14		Allyl chloride	0.279	0.282	-1.1	110	0.00
15	T	Methylene chloride	1.112	0.642	42.3#	114	0.00
16		t-Butanol (TBA)	0.000	0.000	0.0	0#	-3.70#
17	T	Acrylonitrile	0.146	0.163	-11.6	110	0.00
18	T	Methyl t-butyl ether (MTBE)	1.445	1.479	-2.4	107	0.00
19	T	trans-1,2-Dichloroethene	0.490	0.512	-4.5	111	0.00
20	T	n-Hexane	0.000	0.000	0.0	0#	-4.22#
21	T	1,1-Dichloroethane	0.881	0.900	-2.2	112	0.00
22	T	Vinyl acetate	0.102	0.118	-15.7	118	0.00
23	UN	2-chloro-1,3-butadiene	0.000	0.000	0.0	0#	-4.54#
24	UN	Diisopropyl ether (DIPE)	0.000	0.000	0.0	0#	-0.06
25	UN	Ethyl t-butyl ether (ETBE)	0.000	0.000	0.0	0#	-5.12#
26		2-Butanone (MEK)	0.067	0.056	16.4	89	0.00
27	T	cis-1,2-Dichloroethene	0.544	0.556	-2.2	105	0.00
28	T	2,2-Dichloropropane	0.698	0.846	-21.2	124	0.00
29		Propionitrile	0.079	0.078	1.3	97	-0.02
30		Methyl acrylate	0.448	0.472	-5.4	109	0.00
31		Methacrylonitrile	0.209	0.210	-0.5	106	0.00
32	T	Bromochloromethane	0.269	0.259	3.7	106	0.00
33	T	Chloroform	0.855	0.902	-5.5	113	0.00
34		Tetrahydrofuran	0.086	0.082	4.7	93	-0.01
35	S	Dibromofluoromethane (S)	0.409	0.453	-10.8	116	0.00
36	T	1,1,1-Trichloroethane	0.736	0.837	-13.7	117	0.00
37	UN	1-Chlorobutane	0.000	1.066	0.0	0#	0.00
38	T	1,1-Dichloropropene	0.579	0.642	-10.9	119	-0.01
39	T	Carbon tetrachloride	0.619	0.730	-17.9	127	0.00
40	M	Benzene	1.914	1.946	-1.7	108	0.00
41	T	1,2-Dichloroethane	0.590	0.651	-10.3	116	0.00
42	I	1,4-Difluorobenzene	1.000	1.000	0.0	109	0.00
43	UN	t- Amyl methyl ether (TAME)	0.000	0.000	0.0	0#	-7.05#
44	M	Trichloroethene	0.282	0.287	-1.8	111	0.00
45	T	1,2-Dichloropropane	0.284	0.279	1.8	105	0.01
46		Methyl methacrylate	0.229	0.214	6.6	100	0.00
47	T	Dibromomethane	0.180	0.177	1.7	104	0.00
48	T	Bromodichloromethane	0.365	0.367	-0.5	106	0.00
49		2-nitro-propane	0.086	0.085	1.2	109	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	107	0.00
51		Chloromethyl cyanide	0.000	0.016	0.0	0#	0.00
52	T	2-Chloroethyl vinyl ether	0.216	0.208	3.7	109	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224007.D
Acq On : 22 Apr 2024 13:28
Operator :
Sample : CCVTP0422242
Misc : PAV 1150,1149,1144J,1142E,1157A,1148C
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 22 13:45:49 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
53	T	cis-1,3-Dichloropropene	0.487	0.498	-2.3	113	0.00
54	T	4-Methyl-2-pentanone	0.145	0.148	-2.1	111	0.00
55		1,1-Dichloro-2-propanone	0.000	0.000	0.0	0#	0.00
56	S	Toluene-d8 (S)	0.980	1.129	-15.2	125	0.00
57	M	Toluene	0.795	0.805	-1.3	109	0.00
58	T	trans-1,3-Dichloropropene	0.442	0.450	-1.8	110	0.00
59		Ethyl methacrylate	0.406	0.430	-5.9	112	0.00
60	T	1,1,2-Trichloroethane	0.237	0.230	3.0	105	0.00
61	T	1,3-Dichloropropane	0.520	0.503	3.3	105	0.00
62	T	2-Hexanone	0.244	0.255	-4.5	110	0.00
63	T	Tetrachloroethene	0.271	0.277	-2.2	115	0.00
64	T	Dibromochloromethane	0.311	0.292	6.1	103	0.00
65	T	1,2-Dibromoethane	0.293	0.286	2.4	107	0.00
66	M	Chlorobenzene	0.845	0.862	-2.0	112	0.00
67	T	1,1,1,2-Tetrachloroethane	0.313	0.309	1.3	108	0.00
68	T	Ethylbenzene	1.452	1.584	-9.1	118	0.00
69	T	m- & p-Xylenes	0.567	0.604	-6.5	111	0.00
70	T	o-Xylene	0.579	0.594	-2.6	114	0.00
71	T	Styrene	0.877	0.930	-6.0	111	0.00
72	T	Bromoform	0.201	0.195	3.0	104	0.00
73	T	Isopropylbenzene	1.407	1.626	-15.6	121	0.00
74	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	110	0.00
75		cis-1,4-dichloro-2-butene	0.000	0.000	0.0	0#	0.00
76	S	4-Bromofluorobenzene (S)	0.691	0.833	-20.5	131	0.00
77	T	1,1,2,2-Tetrachloroethane	0.755	0.709	6.1	105	0.00
78	T	trans-1,4-Dichloro-2-butene	0.186	0.197	-5.9	120	0.00
79	T	1,2,3-Trichloropropane	0.276	0.254	8.0	105	0.00
80	T	Bromobenzene	0.662	0.630	4.8	105	0.00
81	T	n-Propylbenzene	2.982	3.377	-13.2	121	0.00
82	T	2-Chlorotoluene	0.630	0.633	-0.5	109	0.00
83	UN	4-Ethyltoluene	0.000	0.013	0.0	0#	-0.02
84	T	1,3,5-Trimethylbenzene	2.066	2.275	-10.1	117	0.00
85	T	4-Chlorotoluene	2.086	2.250	-7.9	118	0.00
86	T	tert-Butylbenzene	0.549	0.561	-2.2	116	0.00
87	T	1,2,4-Trimethylbenzene	2.113	2.288	-8.3	116	0.00
88		Pentachloroethane	0.391	0.370	5.4	107	0.00
89	T	sec-Butylbenzene	2.612	2.979	-14.1	123	0.00
90	T	4-Isopropyltoluene	2.279	2.484	-9.0	119	0.00
91	T	1,3-Dichlorobenzene	1.306	1.258	3.7	108	0.00
92	T	1,4-Dichlorobenzene	1.332	1.278	4.1	107	0.00
93	T	n-Butylbenzene	1.143	1.313	-14.9	126	0.00
94	T	1,2-Dichlorobenzene	1.239	1.206	2.7	107	0.00
95	UN	Hexachloroethane	0.000	0.287	0.0	0#	0.00
96	T	1,2-Dibromo-3-chloropropane	0.147	0.145	1.4	108	-0.01
97		Nitrobenzene	0.000	0.013	0.0	0#	0.00
98	T	1,2,4-Trichlorobenzene	0.842	0.794	5.7	108	0.00
99	Y	Hexachlorobutadiene	0.293	0.303	-3.4	111	0.00
100	T	Naphthalene	2.433	2.374	2.4	107	-0.01
101	T	1,2,3-Trichlorobenzene	0.819	0.777	5.1	107	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Volatile Organic Analysis Data Summary

Lab Name:	Orange Coast Analytical (Alliance TG) - Phoenix, AZ	Data File Name:	GCMS8-042224008.D
Lab Reference #:	NRE AZ14434	Project Name:	Nasa White Sands Test Facility
Lab Sample ID:	MBTT0418243	Client Sample ID:	Method Blank
Sample Type:	MB	Date Sampled:	NA
Analysis Method:	8260B	Date Received:	NA
Prep. Method:	5035A	Date Extracted:	04/18/24 10:40
Initial Sample:	5g	Date Analyzed:	04/22/24 13:51
Sample Extract:	5mL	Analysis Multiplier:	50
Sample Loaded:	800uL	Dilution Factor:	1
Analysis Batch:	0422242		

Units: mg/kg

Analyte	CAS #	Qualifiers:	Result	RL	MDLs	Calibration Range
Acetone	67-64-1		<0.074	0.25	0.074	0.0250-2.50
Acrylonitrile	107-13-1		<0.022	0.25	0.022	0.0500-2.50
Allyl chloride	107-05-1		<0.015	0.050	0.015	0.0500-2.50
Benzene	71-43-2		<0.011	0.050	0.011	0.0125-2.50
Bromobenzene	108-86-1		<0.018	0.050	0.018	0.0125-2.50
Bromochloromethane	74-97-5		<0.018	0.050	0.018	0.0250-2.50
Bromodichloromethane	75-27-4		<0.017	0.050	0.017	0.0125-2.50
Bromoform	75-25-2		<0.016	0.050	0.016	0.0250-2.50
Bromomethane	74-83-9		<0.014	0.25	0.014	0.0125-5.00
2-Butanone (MEK)	78-93-3		<0.036	0.25	0.036	0.250-2.50
sec-Butylbenzene	135-98-8		<0.011	0.050	0.011	0.0125-2.50
tert-Butylbenzene	98-06-6		<0.013	0.050	0.013	0.0250-2.50
n-Butylbenzene	104-51-8		<0.012	0.050	0.012	0.0250-2.50
Carbon disulfide	75-15-0		<0.017	0.10	0.017	0.0125-2.50
Carbon tetrachloride	56-23-5		<0.022	0.050	0.022	0.0250-2.50
Chlorobenzene	108-90-7		<0.012	0.050	0.012	0.0125-2.50
Chloroethane	75-00-3		<0.020	0.25	0.020	0.0125-5.00
2-Chloroethyl vinyl ether	110-75-8		<0.013	0.25	0.013	0.0250-2.50
Chloroform	67-66-3		<0.017	0.050	0.017	0.0125-2.50
Chloromethane	74-87-3		<0.019	0.25	0.019	0.0125-5.00
4-Chlorotoluene	106-43-4		<0.013	0.050	0.013	0.0125-2.50
2-Chlorotoluene	95-49-8		<0.015	0.050	0.015	0.0125-2.50
1,2-Dibromo-3-chloropropane	96-12-8		<0.019	0.10	0.019	0.0250-2.50
Dibromochloromethane	124-48-1		<0.014	0.050	0.014	0.0250-2.50
1,2-Dibromoethane	106-93-4		<0.016	0.050	0.016	0.0250-2.50
Dibromomethane	74-95-3		<0.019	0.050	0.019	0.0125-2.50
trans-1,4-Dichloro-2-butene	110-57-6		<0.014	0.050	0.014	0.0250-2.50
1,4-Dichlorobenzene	106-46-7		<0.017	0.050	0.017	0.0125-2.50
1,2-Dichlorobenzene	95-50-1		<0.015	0.050	0.015	0.0125-2.50
1,3-Dichlorobenzene	541-73-1		<0.016	0.050	0.016	0.0125-2.50
Dichlorodifluoromethane	75-71-8		<0.028	0.25	0.028	0.0250-2.00
1,1-Dichloroethane	75-34-3		<0.019	0.050	0.019	0.0250-2.50
1,2-Dichloroethane	107-06-2		<0.019	0.050	0.019	0.0125-2.50
cis-1,2-Dichloroethene	156-59-2		<0.015	0.050	0.015	0.0125-2.50
1,1-Dichloroethene	75-35-4		<0.022	0.050	0.022	0.0250-2.50
trans-1,2-Dichloroethene	156-60-5		<0.017	0.050	0.017	0.0125-2.50
1,2-Dichloropropane	78-87-5		<0.017	0.050	0.017	0.0250-2.50
2,2-Dichloropropane	594-20-7		<0.018	0.050	0.018	0.0125-2.50
1,3-Dichloropropane	142-28-9		<0.013	0.050	0.013	0.0125-2.50
cis-1,3-Dichloropropene	10061-01-5		<0.013	0.050	0.013	0.0125-2.50
trans-1,3-Dichloropropene	10061-02-6		<0.015	0.050	0.015	0.0125-2.50
1,1-Dichloropropene	563-58-6		<0.015	0.050	0.015	0.0125-2.50
Diethyl ether	60-29-7		<0.020	0.10	0.020	0.0250-2.50

All values presented with any preparation, dilution, or unit conversions taken into account.

Volatile Organic Analysis Data Summary

Lab Name:	Orange Coast Analytical (Alliance TG) - Phoenix, AZ	Data File Name:	GCMS8-042224008.D
Lab Reference #:	NRE AZ14434	Project Name:	Nasa White Sands Test Facility
Lab Sample ID:	MBTT0418243	Client Sample ID:	Method Blank
Sample Type:	MB	Date Sampled:	NA
Analysis Method:	8260B	Date Received:	NA
Prep. Method:	5035A	Date Extracted:	04/18/24 10:40
Initial Sample:	5g	Date Analyzed:	04/22/24 13:51
Sample Extract:	5mL	Analysis Multiplier:	50
Sample Loaded:	800uL	Dilution Factor:	1
Analysis Batch:	0422242		

Units: mg/kg

Analyte	CAS #	Qualifiers:	Result	RL	MDLs	Calibration Range
Ethyl methacrylate	97-63-2		<0.016	0.10	0.016	0.0250-2.00
Ethylbenzene	100-41-4		<0.013	0.050	0.013	0.0125-2.50
Hexachlorobutadiene	87-68-3		<0.010	0.10	0.010	0.0125-2.00
2-Hexanone	591-78-6		<0.016	0.25	0.016	0.0250-2.50
Iodomethane	74-88-4		<0.019	0.050	0.019	0.0125-2.50
Isopropylbenzene	98-82-8		<0.011	0.050	0.011	0.0125-2.50
4-Isopropyltoluene	99-87-6		<0.010	0.050	0.010	0.0250-2.50
Methacrylonitrile	126-98-7		<0.017	0.25	0.017	0.0500-2.50
Methyl acrylate	96-33-3		<0.019	0.25	0.019	0.0250-2.50
Methyl methacrylate	80-62-6		<0.018	0.25	0.018	0.0500-2.50
Methyl t-butyl ether (MTBE)	1634-04-4		<0.030	0.050	0.030	0.0250-2.50
4-Methyl-2-pentanone	108-10-1		<0.024	0.25	0.024	0.0250-2.50
Naphthalene	91-20-3		<0.016	0.050	0.016	0.0250-2.50
Pentachloroethane	76-01-7		<0.086	0.10	0.086	0.0250-2.50
Propionitrile	107-12-0		<0.050	0.25	0.050	0.100-2.50
n-Propylbenzene	103-65-1		<0.015	0.050	0.015	0.0125-2.50
Styrene	100-42-5		<0.0090	0.050	0.0090	0.0125-2.50
1,1,1,2-Tetrachloroethane	630-20-6		<0.012	0.050	0.012	0.0125-2.50
1,1,2,2-Tetrachloroethane	79-34-5		<0.018	0.050	0.018	0.0125-2.50
Tetrachloroethene	127-18-4		<0.016	0.050	0.016	0.0125-2.50
Tetrahydrofuran	109-99-9		<0.038	0.25	0.038	0.250-2.50
Toluene	108-88-3		<0.019	0.050	0.019	0.0125-2.50
1,2,3-Trichlorobenzene	87-61-6		<0.015	0.050	0.015	0.0125-2.50
1,2,4-Trichlorobenzene	120-82-1		<0.017	0.050	0.017	0.0125-2.50
1,1,2-Trichloroethane	79-00-5		<0.017	0.050	0.017	0.0250-2.50
1,1,1-Trichloroethane	71-55-6		<0.017	0.050	0.017	0.0125-2.50
Trichloroethene	79-01-6		<0.017	0.050	0.017	0.0250-2.50
Trichlorofluoromethane	75-69-4		<0.020	0.25	0.020	0.0125-5.00
1,2,3-Trichloropropane	96-18-4		<0.022	0.050	0.022	0.0125-2.50
1,3,5-Trimethylbenzene	108-67-8		<0.013	0.050	0.013	0.0125-2.50
1,2,4-Trimethylbenzene	95-63-6		<0.011	0.050	0.011	0.0125-2.50
Vinyl acetate	108-05-4		<0.016	0.25	0.016	0.0500-2.50
Vinyl chloride	75-01-4		<0.018	0.050	0.018	0.0125-5.00
o-Xylene	95-47-6		<0.011	0.050	0.011	0.0125-2.50
m- & p-Xylenes	179601-23-1		<0.020	0.10	0.020	0.0250-5.00

Surrogate(s)

Analyte	CAS #	Qualifiers:	% Recovery	QC Limits
4-Bromofluorobenzene	460-00-4		117	50-130
Dibromofluoromethane	1868-53-7		107	65-130
Toluene-d8	2037-26-5		113	59-130

All values presented with any preparation, dilution, or unit conversions taken into account.

8260 Quantitation Review Report

C:\msdchem\1\data\2024\04-APR\VB042224\GCMS8-042224008.D **MB** 04/22/24 008

Sample Name: MBTT0418243 @ 800uL
Data File Name: GCMS8-042224008.D
Date Acquired: 04/22/24 13:51
Vial Number: 3
Sample Multiplier: 50 **Dilution:** 1
Misc Info: PAV 1150, 1149

Operator:
Data File Path: C:\msdchem\1\data\2024\04-APR\VB042
Instrument Method: VOC092623 INSTRUMENT SCAN.M
Quant. Method: VOC022324Final
Last Result Mod: 04/22/24 14:17
Last Cal Update: 02/26/24 12:39
Last Cal Mod: 02/26/24 12:39

#	Internal Standard	Response
1)	Pentafluorobenzene	125,781
42)	1,4-Difluorobenzene	209,358
50)	Chlorobenzene-d5	190,628
74)	1,4-Dichlorobenzene-d4	103,502

#	Surrogate	% Rec	P/F	Soil Range
35)	Dibromofluoromethane	**107**	P	65-130
56)	Toluene-d8	**113**	P	59-130
76)	4-Bromofluorobenzene	**117**	P	50-130

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
1)	Pentafluorobenzene		500	-	-	6.24	0.00	-	100	125,781	168	-		-		-	
2)	Dichlorodifluoromethane		NR	ND	<28	(1.38)	-	-	0		85	87	0.00 | 34.5	-		-	
3)	Chloromethane		NR	ND	<19	(1.54)	-	-	0		50	52	0.00 | 31.3	-		-	
4)	Vinyl chloride		NR	ND	<18	(1.66)	-	-	0		62	64	0.00 | 30.5	-		-	
5)	Bromomethane	x	NR	ND	<14	(1.97)	-	-	**5**		94	96	0.00 | 88.5	-		-	
6)	Chloroethane		NR	ND	<20	(2.06)	-	-	0		64	66	0.00 | 34.3	-		-	
7)	Trichlorofluoromethane		NR	ND	<20	(2.35)	-	-	0		101	103	0.00 | 61.6	66	0.00 | 12.7	-	
8)	Diethyl ether		NR	ND	<20	(2.65)	-	-	0		74	45	0.00 | 103	59	0.00 | 129	-	
9)	1,1-Dichloroethene		NR	ND	<22	(2.90)	-	-	0		96	61	0.00 | 139	63	0.00 | 47.0	-	
10)	Freon 113		No Cal.	-	-	(2.90)	-	-	0		101	151	0.00 | 82.4	103	0.00 | 64.1	153	0.00 | 53.1
11)	Acetone		NR	ND	<74	(2.97)	-	-	0		58	43	0.00 | 266	-		-	
12)	Iodomethane		NR	ND	<19	(3.06)	-	-	0		142	127	0.00 | 40.6	141	0.00 | 12.9	-	
13)	Carbon disulfide		3.1101	ND	<17	3.13	0.01	**Inc**	75	1,076	76	78	**0.00 | 9.20**	-		-	
14)	Allyl chloride		NR	ND	<15	(3.33)	-	-	0		76	78	0.00 | 30.7	41	0.00 | 283	39	0.00 | 175
15)	**Methylene chloride**		**134.87**	QL	**130**	3.49	0.00	P	97	27,198	84	49	122 | 121	86	62.3 | 64.4	51	41.8 | 36.5
16)	t-Butanol (TBA)		No Cal.	-	-	(3.70)	-	-	0		59	57	0.00 | 8.40	-		-	
17)	Acrylonitrile		NR	ND	<22	(3.81)	-	-	0		52	53	0.00 | 120	51	0.00 | 41.7	-	
18)	Methyl t-butyl ether (MTBE)		NR	ND	<30	(3.85)	-	-	0		73	57	0.00 | 23.3	-		-	
19)	trans-1,2-Dichloroethene		NR	ND	<17	(3.83)	-	-	0		96	61	0.00 | 137	98	0.00 | 65.3	-	
20)	n-Hexane	x	No Cal.	-	-	(4.22)	-	-	72		57	43	0.00 | 64.9	41	0.00 | 72.0	56	0.00 | 47.3
21)	1,1-Dichloroethane		NR	ND	<19	(4.41)	-	-	0		63	65	0.00 | 33.7	83	0.00 | 15.0	-	
22)	Vinyl acetate		NR	ND	<16	(4.52)	-	-	0		86	43	0.00 | 949	-		-	
23)	2-chloro-1,3-butadiene		No Cal.	-	-	(4.54)	-	-	0		53	88	0.00 | 58.3	52	0.00 | 23.5	-	
24)	Diisopropyl ether (DIPE)		No Cal.	-	-	(4.57)	-	-	0		45	43	0.00 | 38.9	87	0.00 | 24.3	-	
25)	Ethyl t-butyl ether (ETBE)		No Cal.	-	-	(5.12)	-	-	0		59	57	0.00 | 31.8	87	0.00 | 34.1	-	
26)	2-Butanone (MEK)		NR	ND	<36	(5.35)	-	-	0		72	43	0.00 | 353	57	0.00 | 29.9	-	
27)	cis-1,2-Dichloroethene		NR	ND	<15	(5.29)	-	-	0		96	61	0.00 | 132	98	0.00 | 56.2	-	
28)	2,2-Dichloropropane		NR	ND	<18	(5.28)	-	-	0		77	97	0.00 | 22.0	79	0.00 | 30.5	-	
29)	Propionitrile		NR	ND	<50	(5.46)	-	-	0		54	52	0.00 | 11.3	55	0.00 | 15.7	-	
30)	Methyl acrylate		NR	ND	<19	(5.51)	-	-	0		55	85	0.00 | 17.1	-		-	
31)	Methacrylonitrile		NR	ND	<17	(5.67)	-	-	0		67	41	0.00 | 147	39	0.00 | 83.1	52	0.00 | 37.0
32)	Bromochloromethane		NR	ND	<18	(5.66)	-	-	0		128	49	0.00 | 167	130	0.00 | 134	-	
33)	Chloroform		NR	ND	<17	(5.83)	-	-	0		83	85	0.00 | 66.3	-		-	
34)	Tetrahydrofuran		NR	ND	<38	(5.74)	-	-	0		72	71	0.00 | 96.8	42	0.00 | 241	-	
35)	Dibromofluoromethane (S)		535.78	Sur	-	6.11	0.01	P	92	55,095	113	111	92.0 | 102	192	22.2 | 22.1	81	15.6 | 14.3
36)	1,1,1-Trichloroethane		NR	ND	<17	(6.10)	-	-	0		97	99	0.00 | 60.3	61	0.00 | 38.9	63	0.00 | 14.3
37)	1-Chlorobutane	x	No Cal.	-	-	(6.30)	-	-	90		56	49	0.00 | 3.40	-		-	
38)	1,1-Dichloropropene		NR	ND	<15	(6.39)	-	-	0		75	39	0.00 | 55.5	110	0.00 | 36.4	77	0.00 | 31.4
39)	Carbon tetrachloride		NR	ND	<22	(6.38)	-	-	0		117	119	0.00 | 100	-		-	
40)	Benzene		NR	ND	<11	(6.75)	-	-	0		78	51	0.00 | 15.3	-		-	
41)	1,2-Dichloroethane		NR	ND	<19	(6.81)	-	-	0		62	98	0.00 | 12.3	-		-	
42)	1,4-Difluorobenzene		500	-	-	7.56	0.00	-	100	209,358	114	-		-		-	
43)	t- Amyl methyl ether (TAME)		No Cal.	-	-	(7.05)	-	-	0		73	55	0.00 | 37.9	87	0.00 | 22.4	-	
44)	Trichloroethene		NR	ND	<17	(8.03)	-	-	0		95	132	0.00 | 115	130	0.00 | 113	97	0.00 | 64.2
45)	1,2-Dichloropropane		NR	ND	<17	(8.46)	-	-	0		63	112	0.00 | 5.70	76	0.00 | 47.7	-	

For analyst review assistance only.

8260 Quantitation Review Report

C:\msdchem\1\data\2024\04-APR\VB042224\GCMS8-042224008.D **MB** 04/22/24 008

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
46)	Methyl methacrylate		NR	ND	<18	(8.77)	-	-	0		69	41	0.00 | 133	100	0.00 | 40.0	39	0.00 | 64.9
47)	Dibromomethane		NR	ND	<19	(8.65)	-	-	0		93	174	0.00 | 107	95	0.00 | 82.1	-	
48)	Bromodichloromethane		NR	ND	<17	(8.94)	-	-	0		83	85	0.00 | 64.1	127	0.00 | 8.90	-	
49)	2-nitro-propane	x	NR	ND	<24	(9.26)	-	-	**1**		43	39	0.00 | 28.5	-		-	
50)	Chlorobenzene-d5		500	-	-	11.04	0.00	P	98	190,628	117	82	56.2 | 54.8	119	30.9 | 31.9	54	22.9 | 22.3
51)	Chloromethyl cyanide	x	No Cal.	-	-	(9.38)	-	-	**49**		75	48	0.00 | 39.0	40	0.00 | 44.5	-	
52)	2-Chloroethyl vinyl ether		NR	ND	<13	(9.38)	-	-	0		63	65	0.00 | 30.2	106	0.00 | 31.4	-	
53)	cis-1,3-Dichloropropene		NR	ND	<13	(9.51)	-	-	0		75	77	0.00 | 33.4	39	0.00 | 47.1	110	0.00 | 21.7
54)	4-Methyl-2-pentanone		NR	ND	<24	(9.71)	-	-	0		58	41	0.00 | 52.2	100	0.00 | 44.0	85	0.00 | 42.0
55)	1,1-Dichloro-2-propanone	x	No Cal.	-	-	(9.71)	-	-	**32**		83	63	0.00 | 56.4	91	0.00 | 22.8	-	
56)	Toluene-d8 (S)		565.23	Sur	-	9.79	0.00	P	96	211,149	98	100	68.2 | 71.5	42	13.8 | 12.7	70	11.9 | 11.3
57)	Toluene		2.4127	ND	<19	9.85	0.00	**Inc**	86	731	92	91	157 | 168	65	**0.00 | 18.5**	39	**0.00 | 16.3**
58)	trans-1,3-Dichloropropene	x	NR	ND	<15	(10.10)	-	-	**41**		75	77	0.00 | 30.2	39.1	0.00 | 43.2	110	0.00 | 24.5
59)	Ethyl methacrylate		NR	ND	<16	(10.22)	-	-	0		69	41	0.00 | 69.2	99	0.00 | 18.5	86	0.00 | 16.1
60)	1,1,2-Trichloroethane		NR	ND	<17	(10.26)	-	-	0		83	97	0.00 | 125	61	0.00 | 70.3	85	0.00 | 59.8
61)	1,3-Dichloropropane		NR	ND	<13	(10.40)	-	-	0		76	41	0.00 | 61.7	78	0.00 | 32.5	39	0.00 | 22.8
62)	2-Hexanone		NR	ND	<16	(10.50)	-	-	0		43	58	0.00 | 59.4	57	0.00 | 21.2	100	0.00 | 16.0
63)	Tetrachloroethene		NR	ND	<16	(10.36)	-	-	0		164	166	0.00 | 127	129	0.00 | 88.5	131	0.00 | 84.5
64)	Dibromochloromethane		NR	ND	<14	(10.59)	-	-	0		129	127	0.00 | 79.2	-		-	
65)	1,2-Dibromoethane	x	NR	ND	<16	(10.66)	-	-	**8**		107	109	0.00 | 89.0	188	0.00 | 2.80	-	
66)	Chlorobenzene	x	NR	ND	<12	(11.06)	-	-	**55**		112	77	0.00 | 61.4	114	0.00 | 33.1	-	
67)	1,1,1,2-Tetrachloroethane		NR	ND	<12	(11.13)	-	-	0		131	133	0.00 | 94.0	117	0.00 | 64.0	119	0.00 | 63.7
68)	Ethylbenzene	x	NR	ND	<13	(11.15)	-	-	**49**		91	106	0.00 | 32.6	51	0.00 | 7.80	-	
69)	m- & p-Xylenes		2.3936	ND	<20	11.23	-0.01	**F**	74	517	106	91	168 | 188	105	**0.00 | 41.4**	77	**0.00 | 24.3**
70)	o-Xylene	x	NR	ND	<11	(11.51)	-	-	77		106	91	0.00 | 206	105	0.00 | 48.7	-	
71)	Styrene	x	NR	ND	<9.0	(11.52)	-	-	**36**		104	103	0.00 | 46.8	78	0.00 | 41.6	51	0.00 | 22.7
72)	Bromoform		NR	ND	<16	(11.65)	-	-	0		173	175	0.00 | 46.3	254	0.00 | 12.5	-	
73)	Isopropylbenzene	x	NR	ND	<11	(11.76)	-	-	**2**		105	120	0.00 | 27.0	77	0.00 | 14.5	79	0.00 | 11.8
74)	1,4-Dichlorobenzene-d4		500	-	-	12.56	0.00	P	99	103,502	152	115	53.2 | 55.2	150	157 | 157	-	
75)	cis-1,4-dichloro-2-butene		No Cal.	-	-	(11.81)	-	-	0		75	53	0.00 | 106	89	0.00 | 47.5	-	
76)	4-Bromofluorobenzene (S)		584.74	Sur	-	11.86	0.00	P	95	83,659	95	174	81.5 | 75.6	176	77.6 | 73.8	75	50.7 | 47.6
77)	1,1,2,2-Tetrachloroethane		NR	ND	<18	(11.96)	-	-	0		83	85	0.00 | 70.8	131	0.00 | 11.0	95	0.00 | 18.7
78)	trans-1,4-Dichloro-2-butene		NR	ND	<14	(11.99)	-	-	0		53	88	0.00 | 55.9	124	0.00 | 23.1	-	
79)	1,2,3-Trichloropropane		NR	ND	<22	(11.98)	-	-	0		110	75	0.00 | 269	39	0.00 | 79.2	-	
80)	Bromobenzene	x	NR	ND	<18	(11.96)	-	-	**2**		156	158	0.00 | 94.7	-		-	
81)	n-Propylbenzene		1.8907	ND	<15	12.02	0.00	**Inc**	**58**	1,167	91	120	50.4 | 23.6	92	**0.00 | 11.4**	65	**0.00 | 9.90**
82)	2-Chlorotoluene	x	NR	ND	<15	(12.08)	-	-	77		126	91	0.00 | 289	63	0.00 | 36.0	-	
83)	4-Ethyltoluene	x	No Cal.	-	-	(12.09)	-	-	**52**		105	120	0.00 | 29.9	77	0.00 | 10.6	-	
84)	1,3,5-Trimethylbenzene		0.83253	ND	<13	12.12	0.00	**F**	**40**	356	105	120	**0.00 | 50.6**	119	**0.00 | 11.0**	77	**0.00 | 12.6**
85)	4-Chlorotoluene	M	4.9560	ND	<13	12.14	-0.01	**F**	**48**	2,140	91	126	**0.00 | 34.5**	63	**0.00 | 11.3**	-	
86)	tert-Butylbenzene		NR	ND	<13	(12.33)	-	-	0		134	119	0.00 | 340	91	0.00 | 215	-	
87)	1,2,4-Trimethylbenzene		2.0555	ND	<11	12.35	0.00	P	78	899	105	120	65.2 | 50.1	-		-	
88)	Pentachloroethane		NR	ND	<86	(12.35)	-	-	0		167	165	0.00 | 86.1	132	0.00 | 42.9	-	
89)	sec-Butylbenzene		2.3875	ND	<11	12.45	0.00	P	96	1,291	105	134	22.1 | 20.4	-		-	
90)	4-Isopropyltoluene		2.5390	ND	<10	12.54	0.00	**Inc**	75	1,198	119	134	33.0 | 28.5	91	**0.00 | 22.4**	-	
91)	1,3-Dichlorobenzene		3.6692	ND	<16	12.53	-0.01	P	87	992	146	148	53.2 | 63.8	111	42.9 | 35.3	-	
92)	1,4-Dichlorobenzene		4.1608	ND	<17	12.57	-0.01	P	83	1,147	146	111	43.9 | 37.8	148	77.7 | 61.5	-	
93)	n-Butylbenzene		4.3245	ND	<12	12.77	0.00	P	76	1,023	92	91	148 | 179	134	28.1 | 50.5	-	
94)	1,2-Dichlorobenzene		2.4793	ND	<15	12.80	0.00	**F**	**64**	636	146	148	50.6 | 64.6	111	**0.00 | 40.4**	-	
95)	Hexachloroethane		No Cal.	-	-	(12.95)	-	-	0		201	117	0.00 | 129	199	0.00 | 65.0	203	0.00 | 64.5
96)	1,2-Dibromo-3-chloropropane		NR	ND	<19	(13.24)	-	-	0		75	155	0.00 | 104	157	0.00 | 123	-	
97)	Nitrobenzene		No Cal.	-	-	(13.35)	-	-	0		123	51	0.00 | 62.1	77	0.00 | 146	-	
98)	1,2,4-Trichlorobenzene		7.5135	ND	<17	13.69	0.00	**Inc**	71	1,309	180	182	123 | 97.2	184	**0.00 | 29.6**	145	22.8 | 30.6
99)	Hexachlorobutadiene	x	NR	ND	<10	(13.78)	-	-	**37**		225	227	0.00 | 59.6	260	0.00 | 22.3	223	0.00 | 59.4
100	Naphthalene		6.0318	ND	<16	13.82	-0.01	**Inc**	**69**	3,038	128	127	**0.00 | 12.5**	129	**0.00 | 11.6**	-	
101	1,2,3-Trichlorobenzene		7.6950	ND	<15	13.96	-0.01	**Inc**	85	1,304	180	182	94.6 | 91.8	184	**0.00 | 29.8**	145	36.2 | 29.8

Uses lowest known RLs; project RLs may be higher. Qualitative P/F based only on output ratios at apex and may not reflect full peak or analyst review.

For analyst review assistance only.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224008.D
Acq On : 22 Apr 2024 13:51
Operator :
Sample : MBTT0418243 @ 800uL
Misc : PAV 1150, 1149
ALS Vial : 3 Sample Multiplier: 50

Quant Time: Apr 22 14:10:41 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	6.241	168	125781	10.00	ppb	0.00
42) 1,4-Difluorobenzene	7.563	114	209358	10.00	ppb	0.00
50) Chlorobenzene-d5	11.036	117	190628	10.00	ppb	0.00
74) 1,4-Dichlorobenzene-d4	12.564	152	103502	10.00	ppb	0.00
System Monitoring Compounds						
35) Dibromofluoromethane (S)	6.109	113	55095	10.72	ppb	0.00
Spiked Amount 10.000			Recovery = 107.20%			
56) Toluene-d8 (S)	9.786	98	211149	11.30	ppb	0.00
Spiked Amount 10.000			Recovery = 113.00%			
76) 4-Bromofluorobenzene (S)	11.855	95	83659	11.69	ppb	0.00
Spiked Amount 10.000			Recovery = 116.90%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	0.000		0	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	0.000		0	N.D. d		
6) Chloroethane	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Diethyl ether	0.000		0	N.D.		
9) 1,1-Dichloroethene	0.000		0	N.D.		
10) Freon 113	0.000		0	N.D.		
11) Acetone	0.000		0	N.D.		
12) Iodomethane	0.000		0	N.D.		
13) Carbon disulfide	3.129	76	1076	3.1101	ppb	75
14) Allyl chloride	0.000		0	N.D.		
15) Methylene chloride	3.485	84	27198	134.8714	ppb	97
16) t-Butanol (TBA)	0.000		0	N.D.		
17) Acrylonitrile	0.000		0	N.D.		
18) Methyl t-butyl ether (...	0.000		0	N.D.		
19) trans-1,2-Dichloroethene	0.000		0	N.D.		
20) n-Hexane	0.000		0	N.D. d		
21) 1,1-Dichloroethane	0.000		0	N.D.		
22) Vinyl acetate	0.000		0	N.D.		
23) 2-chloro-1,3-butadiene	0.000		0	N.D.		
24) Diisopropyl ether (DIPE)	0.000		0	N.D.		
25) Ethyl t-butyl ether (E...	0.000		0	N.D.		
26) 2-Butanone (MEK)	0.000		0	N.D.		
27) cis-1,2-Dichloroethene	0.000		0	N.D.		
28) 2,2-Dichloropropane	0.000		0	N.D.		
29) Propionitrile	0.000		0	N.D.		
30) Methyl acrylate	0.000		0	N.D.		
31) Methacrylonitrile	0.000		0	N.D.		
32) Bromochloromethane	0.000		0	N.D.		
33) Chloroform	0.000		0	N.D.		
34) Tetrahydrofuran	0.000		0	N.D.		
36) 1,1,1-Trichloroethane	0.000		0	N.D.		
37) 1-Chlorobutane	0.000		0	N.D. d		
38) 1,1-Dichloropropene	0.000		0	N.D.		
39) Carbon tetrachloride	0.000		0	N.D.		
40) Benzene	0.000		0	N.D.		
41) 1,2-Dichloroethane	0.000		0	N.D.		
43) t- Amyl methyl ether (...	0.000		0	N.D.		
44) Trichloroethene	0.000		0	N.D.		
45) 1,2-Dichloropropane	0.000		0	N.D.		
46) Methyl methacrylate	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224008.D
Acq On : 22 Apr 2024 13:51
Operator :
Sample : MBTT0418243 @ 800uL
Misc : PAV 1150, 1149
ALS Vial : 3 Sample Multiplier: 50

Quant Time: Apr 22 14:10:41 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

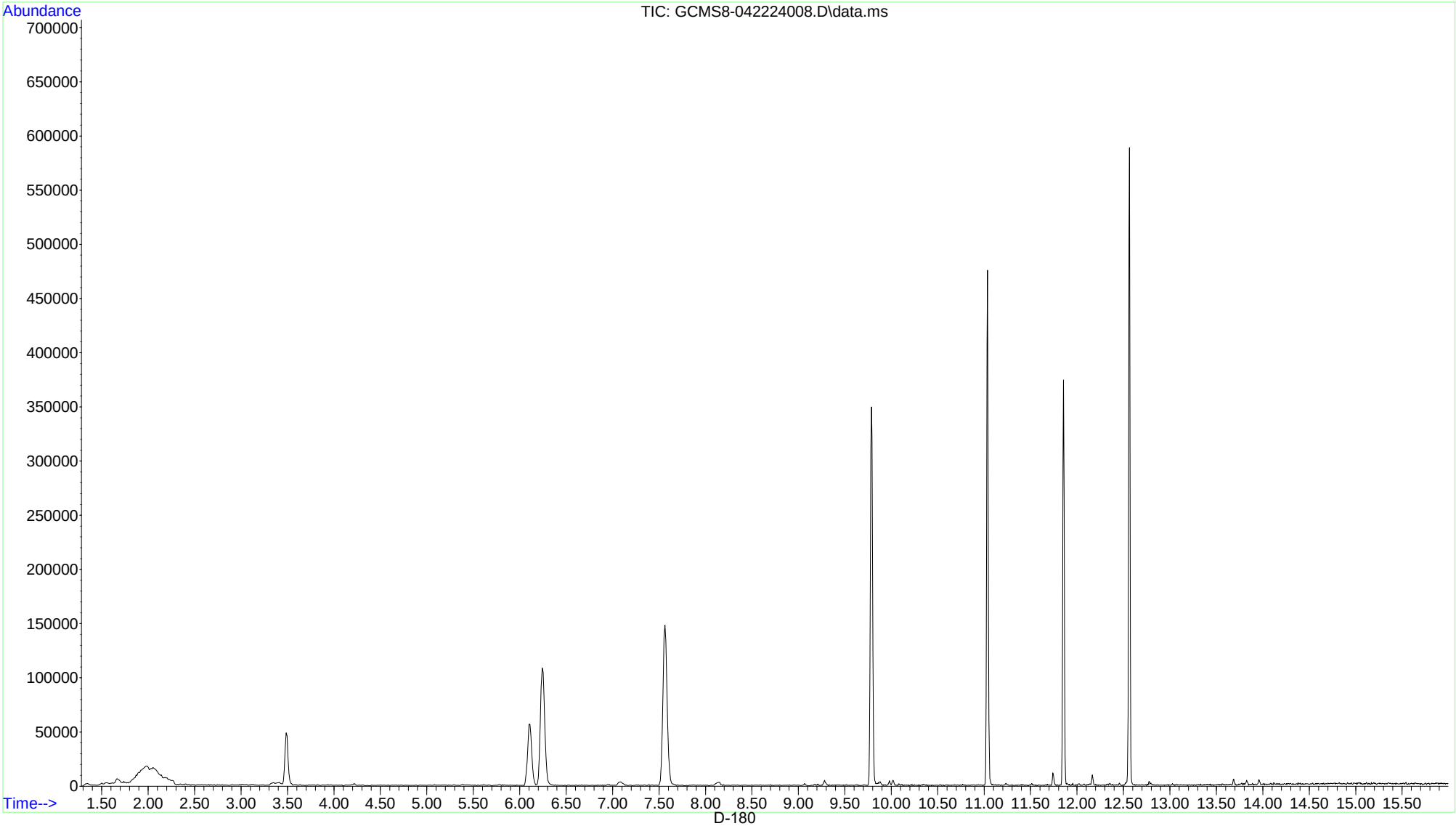
Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
47) Dibromomethane	0.000		0	N.D.		
48) Bromodichloromethane	0.000		0	N.D.		
49) 2-nitro-propane	0.000		0	N.D. d		
51) Chloromethyl cyanide	0.000		0	N.D. d		
52) 2-Chloroethyl vinyl ether	0.000		0	N.D.		
53) cis-1,3-Dichloropropene	0.000		0	N.D.		
54) 4-Methyl-2-pentanone	0.000		0	N.D.		
55) 1,1-Dichloro-2-propanone	0.000		0	N.D. d		
57) Toluene	9.854	92	731	2.4127 ppb		86
58) trans-1,3-Dichloropropene	0.000		0	N.D. d		
59) Ethyl methacrylate	0.000		0	N.D.		
60) 1,1,2-Trichloroethane	0.000		0	N.D.		
61) 1,3-Dichloropropane	0.000		0	N.D.		
62) 2-Hexanone	0.000		0	N.D.		
63) Tetrachloroethene	0.000		0	N.D.		
64) Dibromochloromethane	0.000		0	N.D.		
65) 1,2-Dibromoethane	0.000		0	N.D. d		
66) Chlorobenzene	0.000		0	N.D. d		
67) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.		
68) Ethylbenzene	0.000		0	N.D. d		
69) m- & p-Xylenes	11.230	106	517	2.3936 ppb	#	74
70) o-Xylene	0.000		0	N.D. d		
71) Styrene	0.000		0	N.D. d		
72) Bromoform	0.000		0	N.D.		
73) Isopropylbenzene	0.000		0	N.D. d		
75) cis-1,4-dichloro-2-butene	0.000		0	N.D.		
77) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.		
78) trans-1,4-Dichloro-2-b...	0.000		0	N.D.		
79) 1,2,3-Trichloropropane	0.000		0	N.D.		
80) Bromobenzene	0.000		0	N.D. d		
81) n-Propylbenzene	12.018	91	1167	1.8907 ppb		58
82) 2-Chlorotoluene	0.000		0	N.D. d		
83) 4-Ethyltoluene	0.000		0	N.D. d		
84) 1,3,5-Trimethylbenzene	12.123	105	356	0.8325 ppb	#	40
85) 4-Chlorotoluene	12.139	91	2140m	4.9560 ppb		
86) tert-Butylbenzene	0.000		0	N.D.		
87) 1,2,4-Trimethylbenzene	12.354	105	899	2.0555 ppb		78
88) Pentachloroethane	0.000		0	N.D.		
89) sec-Butylbenzene	12.454	105	1291	2.3875 ppb		96
90) 4-Isopropyltoluene	12.538	119	1198	2.5390 ppb		75
91) 1,3-Dichlorobenzene	12.528	146	992	3.6692 ppb		87
92) 1,4-Dichlorobenzene	12.575	146	1147	4.1608 ppb		83
93) n-Butylbenzene	12.774	92	1023	4.3245 ppb	#	76
94) 1,2-Dichlorobenzene	12.801	146	636	2.4793 ppb	#	64
95) Hexachloroethane	0.000		0	N.D.		
96) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.		
97) Nitrobenzene	0.000		0	N.D.		
98) 1,2,4-Trichlorobenzene	13.688	180	1309	7.5135 ppb		71
99) Hexachlorobutadiene	0.000		0	N.D. d		
100) Naphthalene	13.825	128	3038	6.0318 ppb		69
101) 1,2,3-Trichlorobenzene	13.961	180	1304	7.6950 ppb		85

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224008.D
Acq On : 22 Apr 2024 13:51
Operator :
Sample : MBTT0418243 @ 800uL
Misc : PAV 1150, 1149
ALS Vial : 3 Sample Multiplier: 50

Quant Time: Apr 22 14:10:41 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration



Volatile Organic Analysis Data Summary

Lab Name:	Orange Coast Analytical (Alliance TG) - Phoenix, AZ	Data File Name:	GCMS8-042224009.D
Lab Reference #:	NRE AZ14434	Project Name:	Nasa White Sands Test Facility
Lab Sample ID:	LCSTP0422242	Client Sample ID:	
Sample Type:	LCS	Date Sampled:	NA
Analysis Method:	8260B	Date Received:	NA
Prep. Method:	5035A	Date Extracted:	04/22/24 13:18
Initial Sample:	NA	Date Analyzed:	04/22/24 14:14
Sample Extract:	NA	Analysis Multiplier:	50
Sample Loaded:	800uL	Dilution Factor:	1
Analysis Batch:	0422242		

Units: µg/kg

Analyte	CAS #	Qualifiers:	Result	Spike	% Recovery	QC Limits	RPD	Max RPD
Acetone	67-64-1		447	500	89	65-180	7	35
Acrylonitrile	107-13-1		561	500	112	56-142	0	20
Allyl chloride	107-05-1		544	500	109	70-130	0	20
Benzene	71-43-2		587	500	117	70-131	2	20
Bromobenzene	108-86-1		523	500	105	70-130	0	20
Bromochloromethane	74-97-5		520	500	104	70-130	4	20
Bromodichloromethane	75-27-4		535	500	107	70-130	6	20
Bromoform	75-25-2		429	500	86	70-130	3	20
Bromomethane	74-83-9	L2	278	500	56	70-140	2	20
2-Butanone (MEK)	78-93-3		538	500	108	50-150	3	30
n-Butylbenzene	104-51-8		642	500	128	60-128	3	20
sec-Butylbenzene	135-98-8		626	500	125	60-125	3	20
tert-Butylbenzene	98-06-6		585	500	117	69-129	3	20
Carbon disulfide	75-15-0		534	500	107	50-150	3	30
Carbon tetrachloride	56-23-5		635	500	127	69-129	6	20
Chlorobenzene	108-90-7		547	500	109	70-130	1	20
Chloroethane	75-00-3	L2	263	500	53	70-131	7	20
2-Chloroethyl vinyl ether	110-75-8		505	500	101	48-140	1	20
Chloroform	67-66-3		576	500	115	70-130	2	20
Chloromethane	74-87-3		433	500	87	66-130	1	20
2-Chlorotoluene	95-49-8		568	500	114	64-124	5	20
4-Chlorotoluene	106-43-4		595	500	119	64-124	2	20
1,2-Dibromo-3-chloropropane	96-12-8		546	500	109	66-133	7	20
Dibromochloromethane	124-48-1		470	500	94	70-130	4	20
1,2-Dibromoethane	106-93-4		494	500	99	70-130	1	20
Dibromomethane	74-95-3		506	500	101	70-130	3	20
trans-1,4-Dichloro-2-butene	110-57-6		616	500	123	64-131	1	20
1,4-Dichlorobenzene	106-46-7		528	500	106	69-132	3	20
1,2-Dichlorobenzene	95-50-1		538	500	108	69-130	2	20
1,3-Dichlorobenzene	541-73-1		526	500	105	70-130	2	20
Dichlorodifluoromethane	75-71-8		422	500	84	45-155	4	30
1,2-Dichloroethane	107-06-2		629	500	126	70-130	0	20
1,1-Dichloroethane	75-34-3		563	500	113	60-133	1	20
1,1-Dichloroethene	75-35-4		581	500	116	45-132	2	20
cis-1,2-Dichloroethene	156-59-2		564	500	113	70-130	2	20
trans-1,2-Dichloroethene	156-60-5		573	500	115	68-131	4	20
1,3-Dichloropropane	142-28-9		513	500	103	70-130	1	20
2,2-Dichloropropane	594-20-7		651	500	130	61-136	2	20
1,2-Dichloropropane	78-87-5		514	500	103	70-130	0	20
cis-1,3-Dichloropropene	10061-01-5		527	500	105	70-130	2	20
trans-1,3-Dichloropropene	10061-02-6		517	500	103	70-130	1	20
1,1-Dichloropropene	563-58-6	L1	681	500	136	65-127	4	20
Diethyl ether	60-29-7		518	500	104	63-130	3	20

All values presented with any preparation, dilution, or unit conversions taken into account.

Volatile Organic Analysis Data Summary

Lab Name:	Orange Coast Analytical (Alliance TG) - Phoenix, AZ	Data File Name:	GCMS8-042224009.D
Lab Reference #:	NRE AZ14434	Project Name:	Nasa White Sands Test Facility
Lab Sample ID:	LCSTP0422242	Client Sample ID:	
Sample Type:	LCS	Date Sampled:	NA
Analysis Method:	8260B	Date Received:	NA
Prep. Method:	5035A	Date Extracted:	04/22/24 13:18
Initial Sample:	NA	Date Analyzed:	04/22/24 14:14
Sample Extract:	NA	Analysis Multiplier:	50
Sample Loaded:	800uL	Dilution Factor:	1
Analysis Batch:	0422242		

Units: µg/kg

Analyte	CAS #	Qualifiers:	Result	Spike	% Recovery	QC Limits	RPD	Max RPD
Ethyl methacrylate	97-63-2		531	500	106	42-140	2	20
Ethylbenzene	100-41-4		576	500	115	70-130	2	20
Hexachlorobutadiene	87-68-3		552	500	110	60-142	4	20
2-Hexanone	591-78-6		456	500	91	51-134	4	30
Iodomethane	74-88-4		540	500	108	67-127	4	20
Isopropylbenzene	98-82-8		610	500	122	60-125	3	20
4-Isopropyltoluene	99-87-6		611	500	122	60-130	3	20
Methacrylonitrile	126-98-7		557	500	111	46-130	0	20
Methyl acrylate	96-33-3		540	500	108	48-130	3	20
Methyl methacrylate	80-62-6		480	500	96	55-130	1	20
Methyl t-butyl ether (MTBE)	1634-04-4		566	500	113	60-131	5	20
4-Methyl-2-pentanone	108-10-1		454	500	91	70-130	5	20
Naphthalene	91-20-3		525	500	105	60-141	0	20
Pentachloroethane	76-01-7		472	500	94	70-130	1	20
Propionitrile	107-12-0		543	500	109	38-133	2	20
n-Propylbenzene	103-65-1	L1	621	500	124	62-122	2	20
Styrene	100-42-5		568	500	114	69-129	3	20
1,1,2,2-Tetrachloroethane	79-34-5		519	500	104	67-128	2	20
1,1,1,2-Tetrachloroethane	630-20-6		509	500	102	70-130	1	20
Tetrachloroethene	127-18-4		519	500	104	68-130	1	20
Tetrahydrofuran	109-99-9		528	500	106	43-130	5	20
Toluene	108-88-3		545	500	109	70-130	2	20
1,2,3-Trichlorobenzene	87-61-6		518	500	104	60-134	1	20
1,2,4-Trichlorobenzene	120-82-1		544	500	109	60-138	5	20
1,1,2-Trichloroethane	79-00-5		508	500	102	70-130	3	20
1,1,1-Trichloroethane	71-55-6		642	500	128	70-134	6	20
Trichloroethene	79-01-6		561	500	112	70-133	1	20
Trichlorofluoromethane	75-69-4		535	500	107	70-137	3	20
1,2,3-Trichloropropane	96-18-4		493	500	99	66-126	4	20
1,3,5-Trimethylbenzene	108-67-8		600	500	120	60-127	1	20
1,2,4-Trimethylbenzene	95-63-6		610	500	122	60-126	3	20
Vinyl acetate	108-05-4		507	500	101	56-143	13	30
Vinyl chloride	75-01-4		474	500	95	70-130	3	20
o-Xylene	95-47-6		542	500	108	70-130	3	20
m- & p-Xylenes	179601-23-1		1130	1000	113	70-150	5	20

Surrogate(s)

Analyte	CAS #	Qualifiers:	% Recovery	QC Limits
4-Bromofluorobenzene	460-00-4		120	50-130
Dibromofluoromethane	1868-53-7		116	65-130
Toluene-d8	2037-26-5		114	59-130

All values presented with any preparation, dilution, or unit conversions taken into account.

8260 Quantitation Review Report

C:\msdchem\1\data\2024\04-APR\VB042224\GCMS8-042224009.D **LCS** 04/22/24 009

Sample Name: LCSTP0422242 @ 800uL
Data File Name: GCMS8-042224009.D
Date Acquired: 04/22/24 14:14
Vial Number: 4
Sample Multiplier: 50 **Dilution:** 1
Misc Info: PAV 1150,1149,1135H,1141B,1155A,1016B,1151B,1

Operator:
Data File Path: C:\msdchem\1\data\2024\04-APR\VB042
Instrument Method: VOC092623 INSTRUMENT SCAN.M
Quant. Method: VOC022324Final
Last Result Mod: 04/22/24 15:01
Last Cal Update: 02/26/24 12:39
Last Cal Mod: 02/26/24 12:39

#	Internal Standard	Response
1)	Pentafluorobenzene	119,106
42)	1,4-Difluorobenzene	204,880
50)	Chlorobenzene-d5	186,863
74)	1,4-Dichlorobenzene-d4	102,954

#	Surrogate	% Rec	P/F	Soil Range
35)	Dibromofluoromethane	**116**	P	65-130
56)	Toluene-d8	**114**	P	59-130
76)	4-Bromofluorobenzene	**120**	P	50-130

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
1)	Pentafluorobenzene		500	-	-	6.24	0.00	-	100	119,106	168	-		-		-	
2)	**Dichlorodifluoromethane**		**422.06**	RL	**422**	1.38	0.00	P	99	53,127	85	87	34.0 | 34.5	-		-	
3)	**Chloromethane**		**433.06**	RL	**433**	1.55	0.01	P	98	71,567	50	52	32.3 | 31.3	-		-	
4)	**Vinyl chloride**		**474.09**	RL	**474**	1.65	0.00	P	98	69,395	62	64	31.9 | 30.5	-		-	
5)	**Bromomethane**		**278.41**	RL	**278**	1.96	-0.01	P	98	26,182	94	96	90.2 | 88.5	-		-	
6)	**Chloroethane**		**262.84**	RL	**263**	2.04	-0.02	P	94	24,710	64	66	30.9 | 34.3	-		-	
7)	**Trichlorofluoromethane**		**535.38**	RL	**535**	2.33	-0.02	P	98	87,335	101	103	62.7 | 61.6	66	10.8 | 12.7	-	
8)	**Diethyl ether**		**517.83**	RL	**518**	2.65	0.00	P	96	37,643	74	45	101 | 103	59	134 | 129	-	
9)	**1,1-Dichloroethene**		**581.14**	RL	**581**	2.89	-0.01	P	86	58,659	96	61	162 | 139	63	47.1 | 47.0	-	
10)	Freon 113		No Cal.	-	-	2.92	0.02	P	87	58,587	101	151	66.9 | 82.4	103	57.7 | 64.1	153	45.0 | 53.1
11)	**Acetone**		**446.75**	RL	**447**	3.02	0.05	P	87	6,217	58	43	242 | 266	-		-	
12)	**Iodomethane**		**540.32**	RL	**540**	3.05	-0.01	P	96	103,449	142	127	43.2 | 40.6	141	14.4 | 12.9	-	
13)	**Carbon disulfide**		**534.18**	RL	**534**	3.12	0.00	P	99	175,002	76	78	8.77 | 9.20	-		-	
14)	**Allyl chloride**		**543.79**	RL	**544**	3.32	-0.01	P	83	36,176	76	78	29.7 | 30.7	41	318 | 283	39	200 | 175
15)	**Methylene chloride**		**698.12**	RL	**698**	3.49	0.00	P	97	96,683	84	49	127 | 121	86	65.6 | 64.4	51	37.6 | 36.5
16)	t-Butanol (TBA)		No Cal.	-	-	(3.70)	-	-	0		59	57	0.00 | 8.40	-		-	
17)	**Acrylonitrile**		**560.65**	RL	**561**	3.82	0.01	P	97	21,352	52	53	125 | 120	51	41.8 | 41.7	-	
18)	**Methyl t-butyl ether (MTBE)**		**566.01**	RL	**566**	3.86	0.01	P	95	194,769	73	57	20.7 | 23.3	-		-	
19)	**trans-1,2-Dichloroethene**		**573.28**	RL	**573**	3.83	0.00	P	94	66,936	96	61	132 | 137	98	58.6 | 65.3	-	
20)	n-Hexane		No Cal.	-	-	4.22	0.00	**F**	**55**	830	57	43	75.7 | 64.9	41	**119 | 72.0**	56	**0.00 | 47.3**
21)	**1,1-Dichloroethane**		**563.02**	RL	**563**	4.40	-0.01	P	95	118,187	63	65	30.3 | 33.7	83	13.1 | 15.0	-	
22)	**Vinyl acetate**		**506.58**	RL	**507**	4.52	0.00	P	95	13,016	86	43	972 | 949	-		-	
23)	2-chloro-1,3-butadiene		No Cal.	-	-	4.53	-0.01	P	96	103,395	53	88	54.8 | 58.3	52	25.4 | 23.5	-	
24)	Diisopropyl ether (DIPE)		No Cal.	-	-	4.53	-0.04	**F**	**1**	838	45	43	**8340 | 38.9**	87	**177 | 24.3**	-	
25)	Ethyl t-butyl ether (ETBE)		No Cal.	-	-	(5.12)	-	-	0		59	57	0.00 | 31.8	87	0.00 | 34.1	-	
26)	**2-Butanone (MEK)**		**538.41**	RL	**538**	5.37	0.02	P	93	8,288	72	43	338 | 353	57	27.6 | 29.9	-	
27)	**cis-1,2-Dichloroethene**		**563.87**	RL	**564**	5.29	0.00	P	95	73,106	96	61	138 | 132	98	60.0 | 56.2	-	
28)	**2,2-Dichloropropane**		**650.88**	RL	**651**	5.28	0.00	P	97	108,145	77	97	24.0 | 22.0	79	31.6 | 30.5	-	
29)	**Propionitrile**		**542.97**	RL	**543**	5.46	0.00	P	77	10,743	54	52	24.5 | 11.3	55	22.1 | 15.7	-	
30)	**Methyl acrylate**		**540.32**	RL	**540**	5.51	0.00	P	95	62,833	55	85	15.0 | 17.1	-		-	
31)	**Methacrylonitrile**		**557.42**	RL	**557**	5.67	0.00	P	96	27,794	67	41	146 | 147	39	89.3 | 83.1	52	41.8 | 37.0
32)	**Bromochloromethane**		**520.43**	RL	**520**	5.66	0.00	P	95	33,315	128	49	169 | 167	130	122 | 134	-	
33)	**Chloroform**		**576.35**	RL	**576**	5.83	0.00	P	96	117,357	83	85	63.1 | 66.3	-		-	
34)	**Tetrahydrofuran**		**527.56**	RL	**528**	5.74	0.00	P	94	10,808	72	71	98.1 | 96.8	42	255 | 241	-	
35)	Dibromofluoromethane (S)		580.62	Sur	-	6.10	0.00	P	92	56,538	113	111	112 | 102	192	22.4 | 22.1	81	17.6 | 14.3
36)	**1,1,1-Trichloroethane**		**641.87**	RL	**642**	6.10	0.00	P	94	112,480	97	99	66.6 | 60.3	61	41.8 | 38.9	63	13.7 | 14.3
37)	1-Chlorobutane		No Cal.	-	-	6.24	-0.06	**Inc**	90	2,268	56	49	**0.00 | 3.40**	-		-	
38)	**1,1-Dichloropropene**		**680.63**	RL	**681**	6.38	-0.01	P	96	93,823	75	39	60.6 | 55.5	110	35.2 | 36.4	77	32.0 | 31.4
39)	**Carbon tetrachloride**		**635.17**	RL	**635**	6.38	0.00	P	88	93,665	117	119	88.6 | 100	-		-	
40)	**Benzene**		**586.76**	RL	**587**	6.75	0.00	P	92	267,474	78	51	18.7 | 15.3	-		-	
41)	**1,2-Dichloroethane**		**628.60**	RL	**629**	6.80	-0.01	P	93	88,365	62	98	9.59 | 12.3	-		-	
42)	1,4-Difluorobenzene		500	-	-	7.56	0.00	-	100	204,880	114	-		-		-	
43)	t- Amyl methyl ether (TAME)		No Cal.	-	-	(7.05)	-	-	0		73	55	0.00 | 37.9	87	0.00 | 22.4	-	
44)	**Trichloroethene**		**560.54**	RL	**561**	8.03	0.00	P	89	64,761	95	132	97.6 | 115	130	102 | 113	97	67.6 | 64.2
45)	**1,2-Dichloropropane**		**514.45**	RL	**514**	8.47	0.01	P	92	59,773	63	112	7.69 | 5.70	76	52.9 | 47.7	-	

For analyst review assistance only.

8260 Quantitation Review Report

C:\msdchem\1\data\2024\04-APR\VB042224\GCMS8-042224009.D **LCS** 04/22/24 009

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
46)	**Methyl methacrylate**		**479.80**	RL	**480**	8.77	0.00	P	95	47,325	69	41	127 | 133	100	36.6 | 40.0	39	69.5 | 64.9
47)	**Dibromomethane**		**505.85**	RL	**506**	8.65	0.00	P	99	37,387	93	174	108 | 107	95	82.5 | 82.1	-	
48)	**Bromodichloromethane**		**535.16**	RL	**535**	8.94	0.00	P	98	80,035	83	85	62.7 | 64.1	127	7.52 | 8.90	-	
49)	**2-nitro-propane**		**469.13**	QL	**469**	9.26	0.00	P	93	16,508	43	39	32.4 | 28.5	-		-	
50)	Chlorobenzene-d5		500	-	-	11.04	0.00	P	99	186,863	117	82	54.0 | 54.8	119	31.9 | 31.9	54	20.8 | 22.3
51)	Chloromethyl cyanide		No Cal.	-	-	(9.38)	-	-	0		75	48	0.00 | 39.0	40	0.00 | 44.5	-	
52)	**2-Chloroethyl vinyl ether**		**505.29**	RL	**505**	9.39	0.01	P	93	40,828	63	65	32.8 | 30.2	106	36.9 | 31.4	-	
53)	**cis-1,3-Dichloropropene**		**526.55**	RL	**527**	9.51	-0.01	P	95	95,928	75	77	32.8 | 33.4	39	53.7 | 47.1	110	21.8 | 21.7
54)	**4-Methyl-2-pentanone**		**453.51**	RL	**454**	9.71	0.00	P	90	26,142	58	41	62.7 | 52.2	100	37.5 | 44.0	85	39.1 | 42.0
55)	1,1-Dichloro-2-propanone		No Cal.	-	-	9.73	0.02	**F**	**32**	86	83	63	**0.00 | 56.4**	91	**0.00 | 22.8**	-	
56)	Toluene-d8 (S)		572.42	Sur	-	9.79	0.00	P	96	209,611	98	100	67.7 | 71.5	42	12.5 | 12.7	70	12.5 | 11.3
57)	**Toluene**		**544.76**	RL	**545**	9.85	0.00	P	98	161,792	92	91	166 | 168	65	18.0 | 18.5	39	18.8 | 16.3
58)	**trans-1,3-Dichloropropene**		**517.35**	RL	**517**	10.10	0.00	P	94	85,480	75	77	31.2 | 30.2	39.1	50.2 | 43.2	110	22.4 | 24.5
59)	**Ethyl methacrylate**		**531.19**	RL	**531**	10.22	0.00	P	97	80,554	69	41	72.1 | 69.2	99	18.7 | 18.5	86	14.8 | 16.1
60)	**1,1,2-Trichloroethane**		**508.04**	RL	**508**	10.26	0.00	P	98	45,067	83	97	122 | 125	61	72.0 | 70.3	85	61.6 | 59.8
61)	**1,3-Dichloropropane**		**513.13**	RL	**513**	10.40	-0.01	P	96	99,716	76	41	65.1 | 61.7	78	31.4 | 32.5	39	25.1 | 22.8
62)	**2-Hexanone**		**456.10**	RL	**456**	10.50	0.00	P	94	46,171	43	58	57.2 | 59.4	57	15.3 | 21.2	100	12.0 | 16.0
63)	**Tetrachloroethene**		**519.16**	RL	**519**	10.36	-0.01	P	94	52,543	164	166	131 | 127	129	92.0 | 88.5	131	95.9 | 84.5
64)	**Dibromochloromethane**		**469.93**	RL	**470**	10.58	-0.01	P	96	54,666	129	127	75.7 | 79.2	-		-	
65)	**1,2-Dibromoethane**		**493.86**	RL	**494**	10.66	0.00	P	87	53,994	107	109	101 | 89.0	188	3.89 | 2.80	-	
66)	**Chlorobenzene**		**547.44**	RL	**547**	11.06	0.00	P	97	172,878	112	77	57.9 | 61.4	114	33.5 | 33.1	-	
67)	**1,1,1,2-Tetrachloroethane**		**508.94**	RL	**509**	11.13	0.00	P	97	59,471	131	133	95.7 | 94.0	117	67.0 | 64.0	119	60.5 | 63.7
68)	**Ethylbenzene**		**576.12**	RL	**576**	11.15	0.00	P	97	312,721	91	106	31.4 | 32.6	51	9.64 | 7.80	-	
69)	**m- & p-Xylenes**		**1132.4**	RL	**1130**	11.23	-0.01	P	89	239,754	106	91	208 | 188	105	44.4 | 41.4	77	27.5 | 24.3
70)	**o-Xylene**		**542.42**	RL	**542**	11.51	-0.01	P	98	117,383	106	91	206 | 206	105	43.3 | 48.7	-	
71)	**Styrene**		**567.90**	RL	**568**	11.52	0.00	P	96	186,180	104	103	48.8 | 46.8	78	43.1 | 41.6	51	27.8 | 22.7
72)	**Bromoform**		**429.47**	RL	**429**	11.64	0.00	P	95	34,663	173	175	47.8 | 46.3	254	6.91 | 12.5	-	
73)	**Isopropylbenzene**		**609.71**	RL	**610**	11.76	-0.01	P	98	320,701	105	120	25.5 | 27.0	77	14.7 | 14.5	79	11.2 | 11.8
74)	1,4-Dichlorobenzene-d4		500	-	-	12.56	0.00	P	95	102,954	152	115	53.8 | 55.2	150	149 | 157	-	
75)	cis-1,4-dichloro-2-butene		No Cal.	-	-	11.80	-0.01	P	95	24,149	75	53	114 | 106	89	46.7 | 47.5	-	
76)	4-Bromofluorobenzene (S)		600.95	Sur	-	11.86	0.00	P	96	85,523	95	174	81.2 | 75.6	176	76.8 | 73.8	75	49.3 | 47.6
77)	**1,1,2,2-Tetrachloroethane**		**518.55**	RL	**519**	11.95	-0.01	P	92	80,585	83	85	62.5 | 70.8	131	10.0 | 11.0	95	17.4 | 18.7
78)	**trans-1,4-Dichloro-2-butene**		**615.87**	RL	**616**	11.99	0.00	P	88	25,411	53	88	44.7 | 55.9	124	21.7 | 23.1	-	
79)	**1,2,3-Trichloropropane**		**492.69**	RL	**493**	11.98	0.00	P	94	27,976	110	75	278 | 269	39	86.4 | 79.2	-	
80)	**Bromobenzene**		**522.68**	RL	**523**	11.95	-0.01	P	99	71,234	156	158	94.1 | 94.7	-		-	
81)	**n-Propylbenzene**		**620.81**	RL	**621**	12.02	0.00	P	97	381,165	91	120	21.4 | 23.6	92	11.3 | 11.4	65	11.3 | 9.90
82)	**2-Chlorotoluene**		**568.23**	RL	**568**	12.08	0.00	P	99	73,731	126	91	288 | 289	63	37.9 | 36.0	-	
83)	4-Ethyltoluene		No Cal.	-	-	12.07	-0.02	P	72	1,936	105	120	35.5 | 29.9	77	39.2 | 10.6	-	
84)	**1,3,5-Trimethylbenzene**		**600.43**	RL	**600**	12.12	0.00	P	97	255,394	105	120	48.5 | 50.6	119	11.3 | 11.0	77	13.3 | 12.6
85)	**4-Chlorotoluene**		**595.00**	RL	**595**	12.14	-0.01	P	93	255,560	91	126	29.7 | 34.5	63	12.1 | 11.3	-	
86)	**tert-Butylbenzene**		**584.59**	RL	**585**	12.33	-0.01	P	89	66,137	134	119	362 | 340	91	236 | 215	-	
87)	**1,2,4-Trimethylbenzene**		**609.74**	RL	**610**	12.35	0.00	P	97	265,260	105	120	47.7 | 50.1	-		-	
88)	**Pentachloroethane**		**471.51**	RL	**472**	12.34	-0.01	P	94	37,925	167	165	82.9 | 86.1	132	50.4 | 42.9	-	
89)	**sec-Butylbenzene**		**625.81**	RL	**626**	12.45	0.00	P	96	336,601	105	134	18.6 | 20.4	-		-	
90)	**4-Isopropyltoluene**		**610.56**	RL	**611**	12.54	0.00	P	96	286,559	119	134	26.0 | 28.5	91	23.7 | 22.4	-	
91)	**1,3-Dichlorobenzene**		**525.92**	RL	**526**	12.53	-0.01	P	98	141,435	146	148	64.4 | 63.8	111	38.4 | 35.3	-	
92)	**1,4-Dichlorobenzene**		**528.28**	RL	**528**	12.58	0.00	P	98	144,859	146	111	35.4 | 37.8	148	60.9 | 61.5	-	
93)	**n-Butylbenzene**		**641.60**	RL	**642**	12.77	0.00	P	96	150,973	92	91	174 | 179	134	46.1 | 50.5	-	
94)	**1,2-Dichlorobenzene**		**538.16**	RL	**538**	12.80	0.00	P	97	137,318	146	148	65.8 | 64.6	111	43.1 | 40.4	-	
95)	Hexachloroethane		No Cal.	-	-	12.95	-0.01	**F**	**59**	224	201	117	106 | 129	199	**100 | 65.0**	203	**0.00 | 64.5**
96)	**1,2-Dibromo-3-chloropropane**		**546.24**	RL	**546**	13.23	-0.01	**F**	71	16,553	75	155	**69.6 | 104**	157	94.5 | 123	-	
97)	Nitrobenzene		No Cal.	-	-	13.35	-0.01	**F**	**54**	1,118	123	51	**122 | 62.1**	77	186 | 146	-	
98)	**1,2,4-Trichlorobenzene**		**543.95**	RL	**544**	13.69	0.00	P	97	94,265	180	182	96.4 | 97.2	184	28.2 | 29.6	145	26.0 | 30.6
99)	**Hexachlorobutadiene**		**552.34**	RL	**552**	13.77	0.00	P	92	33,296	225	227	66.0 | 59.6	260	30.9 | 22.3	223	62.5 | 59.4
100	**Naphthalene**		**525.20**	RL	**525**	13.82	-0.01	P	99	263,125	128	127	12.2 | 12.5	129	11.0 | 11.6	-	
101	**1,2,3-Trichlorobenzene**		**517.81**	RL	**518**	13.96	-0.01	P	98	87,284	180	182	90.5 | 91.8	184	28.9 | 29.8	145	31.3 | 29.8

Uses lowest known RLs; project RLs may be higher. Qualitative P/F based only on output ratios at apex and may not reflect full peak or analyst review.

For analyst review assistance only.

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224009.D
Acq On : 22 Apr 2024 14:14
Operator :
Sample : LCSTP0422242 @ 800uL
Misc : PAV 1150,1149,1135H,1141B,1155A,1016B,1151B,1124B
ALS Vial : 4 Sample Multiplier: 50

Quant Time: Apr 22 15:01:46 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	6.241	168	119106	10.00	ppb		0.00
42) 1,4-Difluorobenzene	7.563	114	204880	10.00	ppb		0.00
50) Chlorobenzene-d5	11.036	117	186863	10.00	ppb		0.00
74) 1,4-Dichlorobenzene-d4	12.564	152	102954	10.00	ppb		0.00
System Monitoring Compounds							
35) Dibromofluoromethane (S)	6.099	113	56538	11.61	ppb		0.00
Spiked Amount 10.000			Recovery = 116.10%				
56) Toluene-d8 (S)	9.786	98	209611	11.45	ppb		0.00
Spiked Amount 10.000			Recovery = 114.50%				
76) 4-Bromofluorobenzene (S)	11.855	95	85523	12.02	ppb		0.00
Spiked Amount 10.000			Recovery = 120.20%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.380	85	53127	422.0571	ppb		99
3) Chloromethane	1.553	50	71567	433.0580	ppb		98
4) Vinyl chloride	1.655	62	69395	474.0940	ppb		98
5) Bromomethane	1.960	94	26182	278.4098	ppb		98
6) Chloroethane	2.041	64	24710	262.8403	ppb		94
7) Trichlorofluoromethane	2.326	101	87335	535.3824	ppb		98
8) Diethyl ether	2.652	74	37643	517.8337	ppb		96
9) 1,1-Dichloroethene	2.885	96	58659	581.1357	ppb		86
10) Freon 113	2.916	101	58587	No Calib			
11) Acetone	3.018	58	6217	446.7477	ppb		87
12) Iodomethane	3.048	142	103449	540.3165	ppb		96
13) Carbon disulfide	3.119	76	175002	534.1831	ppb		99
14) Allyl chloride	3.323	76	36176	543.7864	ppb	#	83
15) Methylene chloride	3.485	84	96683	698.1227	ppb		97
16) t-Butanol (TBA)	0.000		0	N.D.			
17) Acrylonitrile	3.821	52	21352	560.6515	ppb		97
18) Methyl t-butyl ether (...	3.862	73	194769	566.0057	ppb		95
19) trans-1,2-Dichloroethene	3.831	96	66936	573.2772	ppb		94
20) n-Hexane	4.218	57	830	No Calib	#		
21) 1,1-Dichloroethane	4.401	63	118187	563.0234	ppb		95
22) Vinyl acetate	4.523	86	13016	506.5806	ppb		95
23) 2-chloro-1,3-butadiene	4.533	53	103395	No Calib			
24) Diisopropyl ether (DIPE)	4.533	45	838	No Calib	#		
25) Ethyl t-butyl ether (E...	0.000		0	N.D.			
26) 2-Butanone (MEK)	5.367	72	8288	538.4076	ppb		93
27) cis-1,2-Dichloroethene	5.285	96	73106	563.8671	ppb		95
28) 2,2-Dichloropropane	5.275	77	108145	650.8753	ppb		97
29) Propionitrile	5.458	54	10743	542.9715	ppb		77
30) Methyl acrylate	5.509	55	62833	540.3208	ppb		95
31) Methacrylonitrile	5.672	67	27794	557.4245	ppb		96
32) Bromochloromethane	5.662	128	33315	520.4303	ppb		95
33) Chloroform	5.834	83	117357	576.3503	ppb		96
34) Tetrahydrofuran	5.743	72	10808	527.5574	ppb		94
36) 1,1,1-Trichloroethane	6.099	97	112480	641.8717	ppb		94
37) 1-Chlorobutane	6.241	56	2268	No Calib			
38) 1,1-Dichloropropene	6.383	75	93823	680.6270	ppb		96
39) Carbon tetrachloride	6.383	117	93665	635.1687	ppb		88
40) Benzene	6.750	78	267474	586.7562	ppb		92
41) 1,2-Dichloroethane	6.800	62	88365	628.6029	ppb		93
43) t- Amyl methyl ether (...	0.000		0	N.D.			
44) Trichloroethene	8.031	95	64761	560.5445	ppb		89
45) 1,2-Dichloropropane	8.468	63	59773	514.4504	ppb		92
46) Methyl methacrylate	8.773	69	47325	479.8013	ppb		95

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224009.D
Acq On : 22 Apr 2024 14:14
Operator :
Sample : LCSTP0422242 @ 800uL
Misc : PAV 1150,1149,1135H,1141B,1155A,1016B,1151B,1124B
ALS Vial : 4 Sample Multiplier: 50

Quant Time: Apr 22 15:01:46 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

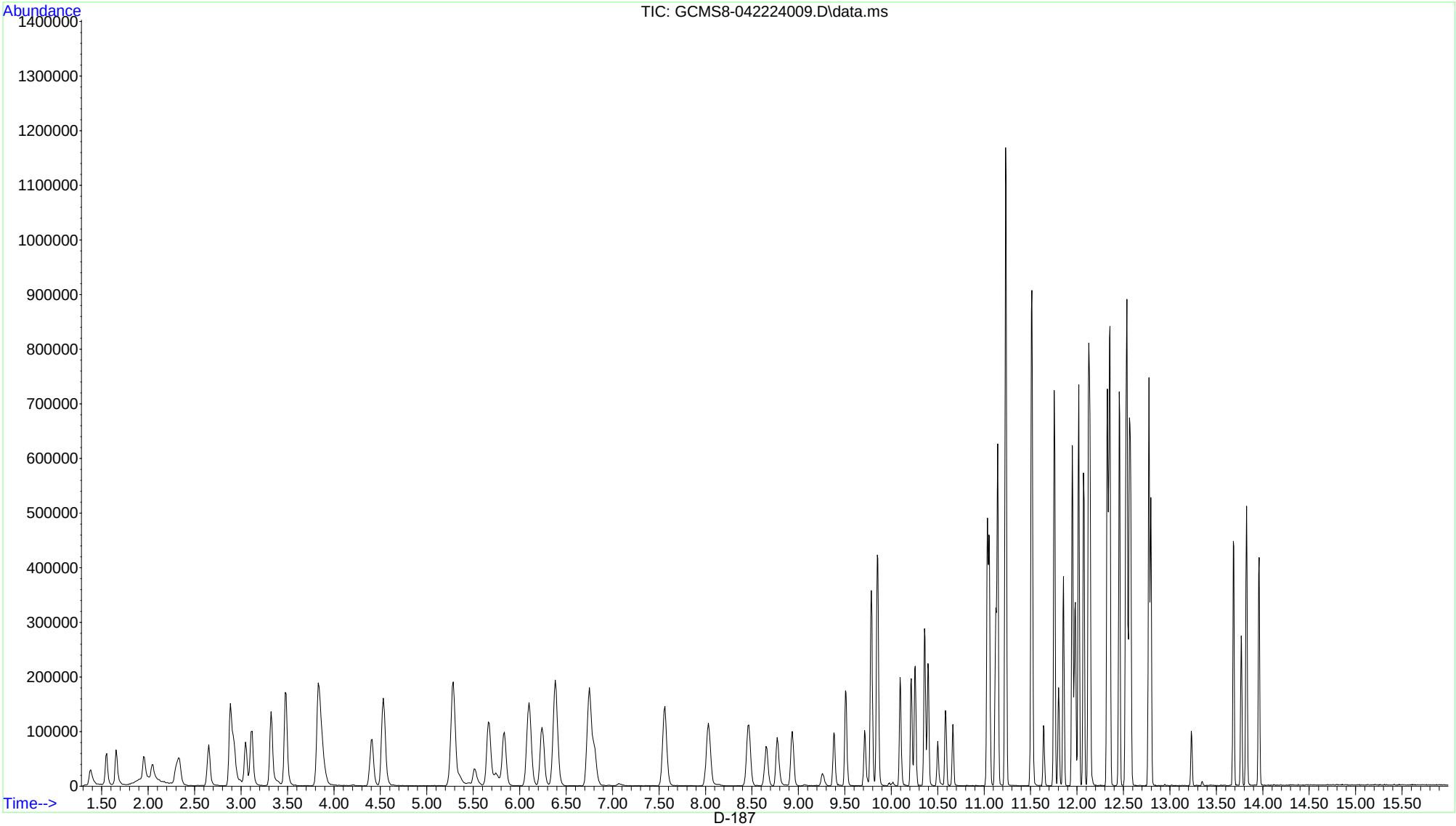
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
47) Dibromomethane	8.651	93	37387	505.8463	ppb		99
48) Bromodichloromethane	8.936	83	80035	535.1619	ppb		98
49) 2-nitro-propane	9.261	43	16508	469.1291	ppb		93
51) Chloromethyl cyanide	0.000		0	N.D.			
52) 2-Chloroethyl vinyl ether	9.387	63	40828	505.2899	ppb		93
53) cis-1,3-Dichloropropene	9.508	75	95928	526.5486	ppb		95
54) 4-Methyl-2-pentanone	9.713	58	26142	453.5063	ppb		90
55) 1,1-Dichloro-2-propanone	9.728	83	86	No Calib	#		
57) Toluene	9.854	92	161792	544.7639	ppb		98
58) trans-1,3-Dichloropropene	10.096	75	85480	517.3546	ppb		94
59) Ethyl methacrylate	10.217	69	80554	531.1874	ppb		97
60) 1,1,2-Trichloroethane	10.259	83	45067	508.0439	ppb		98
61) 1,3-Dichloropropane	10.395	76	99716	513.1304	ppb		96
62) 2-Hexanone	10.500	43	46171	456.0998	ppb		94
63) Tetrachloroethene	10.359	164	52543	519.1633	ppb		94
64) Dibromochloromethane	10.584	129	54666	469.9256	ppb		96
65) 1,2-Dibromoethane	10.663	107	53994	493.8646	ppb		87
66) Chlorobenzene	11.057	112	172878	547.4378	ppb		97
67) 1,1,1,2-Tetrachloroethane	11.125	131	59471	508.9392	ppb		97
68) Ethylbenzene	11.146	91	312721	576.1226	ppb		97
69) m- & p-Xylenes	11.230	106	239754	1132.3894	ppb		89
70) o-Xylene	11.509	106	117383	542.4210	ppb		98
71) Styrene	11.519	104	186180	567.9001	ppb		96
72) Bromoform	11.640	173	34663	429.4665	ppb		95
73) Isopropylbenzene	11.756	105	320701	609.7134	ppb		98
75) cis-1,4-dichloro-2-butene	11.803	75	24149	No Calib			
77) 1,1,2,2-Tetrachloroethane	11.950	83	80585	518.5522	ppb		92
78) trans-1,4-Dichloro-2-b...	11.987	53	25411	615.8698	ppb		88
79) 1,2,3-Trichloropropane	11.976	110	27976	492.6936	ppb		94
80) Bromobenzene	11.950	156	71234	522.6799	ppb		99
81) n-Propylbenzene	12.018	91	381165	620.8146	ppb		97
82) 2-Chlorotoluene	12.076	126	73731	568.2300	ppb		99
83) 4-Ethyltoluene	12.071	105	1936	No Calib			
84) 1,3,5-Trimethylbenzene	12.123	105	255394	600.4331	ppb		97
85) 4-Chlorotoluene	12.139	91	255560	595.0015	ppb		93
86) tert-Butylbenzene	12.328	134	66137	584.5854	ppb		89
87) 1,2,4-Trimethylbenzene	12.354	105	265260	609.7361	ppb		97
88) Pentachloroethane	12.344	167	37925	471.5071	ppb		94
89) sec-Butylbenzene	12.454	105	336601	625.8110	ppb		96
90) 4-Isopropyltoluene	12.538	119	286559	610.5601	ppb		96
91) 1,3-Dichlorobenzene	12.528	146	141435	525.9171	ppb		98
92) 1,4-Dichlorobenzene	12.580	146	144859	528.2766	ppb		98
93) n-Butylbenzene	12.774	92	150973	641.5971	ppb		96
94) 1,2-Dichlorobenzene	12.795	146	137318	538.1603	ppb		97
95) Hexachloroethane	12.948	201	224	No Calib	#		
96) 1,2-Dibromo-3-chloropr...	13.231	75	16553	546.2391	ppb	#	71
97) Nitrobenzene	13.347	123	1118	No Calib	#		
98) 1,2,4-Trichlorobenzene	13.688	180	94265	543.9501	ppb		97
99) Hexachlorobutadiene	13.772	225	33296	552.3357	ppb		92
100) Naphthalene	13.825	128	263125	525.2042	ppb		99
101) 1,2,3-Trichlorobenzene	13.961	180	87284	517.8111	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224009.D
Acq On : 22 Apr 2024 14:14
Operator :
Sample : LCSTP0422242 @ 800uL
Misc : PAV 1150,1149,1135H,1141B,1155A,1016B,1151B,1124B
ALS Vial : 4 Sample Multiplier: 50

Quant Time: Apr 22 15:01:46 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration



D-187

Volatile Organic Analysis Data Summary

Lab Name:	Orange Coast Analytical (Alliance TG) - Phoenix, AZ	Data File Name:	GCMS8-042224010.D
Lab Reference #:	NRE AZ14434	Project Name:	Nasa White Sands Test Facility
Lab Sample ID:	LCSDTP0422242	Client Sample ID:	
Sample Type:	LCSD	Date Sampled:	NA
Analysis Method:	8260B	Date Received:	NA
Prep. Method:	5035A	Date Extracted:	04/22/24 13:18
Initial Sample:	NA	Date Analyzed:	04/22/24 14:38
Sample Extract:	NA	Analysis Multiplier:	50
Sample Loaded:	800uL	Dilution Factor:	1
Analysis Batch:	0422242		

Units: µg/kg

Analyte	CAS #	Qualifiers:	Result	Spike	% Recovery	QC Limits	RPD	Max RPD
Acetone	67-64-1		418	500	84	65-180	7	35
Acrylonitrile	107-13-1		563	500	113	56-142	0	20
Allyl chloride	107-05-1		546	500	109	70-130	0	20
Benzene	71-43-2		575	500	115	70-131	2	20
Bromobenzene	108-86-1		525	500	105	70-130	0	20
Bromochloromethane	74-97-5		502	500	100	70-130	4	20
Bromodichloromethane	75-27-4		503	500	101	70-130	6	20
Bromoform	75-25-2		418	500	84	70-130	3	20
Bromomethane	74-83-9	L2	283	500	57	70-140	2	20
2-Butanone (MEK)	78-93-3		524	500	105	50-150	3	30
sec-Butylbenzene	135-98-8		609	500	122	60-125	3	20
tert-Butylbenzene	98-06-6		566	500	113	69-129	3	20
n-Butylbenzene	104-51-8		626	500	125	60-128	3	20
Carbon disulfide	75-15-0		520	500	104	50-150	3	30
Carbon tetrachloride	56-23-5		600	500	120	69-129	6	20
Chlorobenzene	108-90-7		540	500	108	70-130	1	20
Chloroethane	75-00-3	L2	246	500	49	70-131	7	20
2-Chloroethyl vinyl ether	110-75-8		501	500	100	48-140	1	20
Chloroform	67-66-3		566	500	113	70-130	2	20
Chloromethane	74-87-3		429	500	86	66-130	1	20
4-Chlorotoluene	106-43-4		583	500	117	64-124	2	20
2-Chlorotoluene	95-49-8		539	500	108	64-124	5	20
1,2-Dibromo-3-chloropropane	96-12-8		511	500	102	66-133	7	20
Dibromochloromethane	124-48-1		451	500	90	70-130	4	20
1,2-Dibromoethane	106-93-4		498	500	100	70-130	1	20
Dibromomethane	74-95-3		489	500	98	70-130	3	20
trans-1,4-Dichloro-2-butene	110-57-6		610	500	122	64-131	1	20
1,3-Dichlorobenzene	541-73-1		516	500	103	70-130	2	20
1,4-Dichlorobenzene	106-46-7		510	500	102	69-132	3	20
1,2-Dichlorobenzene	95-50-1		525	500	105	69-130	2	20
Dichlorodifluoromethane	75-71-8		440	500	88	45-155	4	30
1,1-Dichloroethane	75-34-3		556	500	111	60-133	1	20
1,2-Dichloroethane	107-06-2		630	500	126	70-130	0	20
trans-1,2-Dichloroethene	156-60-5		553	500	111	68-131	4	20
cis-1,2-Dichloroethene	156-59-2		553	500	111	70-130	2	20
1,1-Dichloroethene	75-35-4		567	500	113	45-132	2	20
1,3-Dichloropropane	142-28-9		508	500	102	70-130	1	20
2,2-Dichloropropane	594-20-7		639	500	128	61-136	2	20
1,2-Dichloropropane	78-87-5		514	500	103	70-130	0	20
1,1-Dichloropropene	563-58-6	L1	653	500	131	65-127	4	20
trans-1,3-Dichloropropene	10061-02-6		523	500	105	70-130	1	20
cis-1,3-Dichloropropene	10061-01-5		515	500	103	70-130	2	20
Diethyl ether	60-29-7		504	500	101	63-130	3	20

All values presented with any preparation, dilution, or unit conversions taken into account.

Volatile Organic Analysis Data Summary

Lab Name:	Orange Coast Analytical (Alliance TG) - Phoenix, AZ	Data File Name:	GCMS8-042224010.D
Lab Reference #:	NRE AZ14434	Project Name:	Nasa White Sands Test Facility
Lab Sample ID:	LCSDTP0422242	Client Sample ID:	
Sample Type:	LCSD	Date Sampled:	NA
Analysis Method:	8260B	Date Received:	NA
Prep. Method:	5035A	Date Extracted:	04/22/24 13:18
Initial Sample:	NA	Date Analyzed:	04/22/24 14:38
Sample Extract:	NA	Analysis Multiplier:	50
Sample Loaded:	800uL	Dilution Factor:	1
Analysis Batch:	0422242		

Units: µg/kg

Analyte	CAS #	Qualifiers:	Result	Spike	% Recovery	QC Limits	RPD	Max RPD
Ethyl methacrylate	97-63-2		522	500	104	42-140	2	20
Ethylbenzene	100-41-4		564	500	113	70-130	2	20
Hexachlorobutadiene	87-68-3		575	500	115	60-142	4	20
2-Hexanone	591-78-6		473	500	95	51-134	4	30
Iodomethane	74-88-4		520	500	104	67-127	4	20
Isopropylbenzene	98-82-8		594	500	119	60-125	3	20
4-Isopropyltoluene	99-87-6		594	500	119	60-130	3	20
Methacrylonitrile	126-98-7		557	500	111	46-130	0	20
Methyl acrylate	96-33-3		526	500	105	48-130	3	20
Methyl methacrylate	80-62-6		484	500	97	55-130	1	20
Methyl t-butyl ether (MTBE)	1634-04-4		539	500	108	60-131	5	20
4-Methyl-2-pentanone	108-10-1		432	500	86	70-130	5	20
Naphthalene	91-20-3		525	500	105	60-141	0	20
Pentachloroethane	76-01-7		477	500	95	70-130	1	20
Propionitrile	107-12-0		553	500	111	38-133	2	20
n-Propylbenzene	103-65-1		611	500	122	62-122	2	20
Styrene	100-42-5		550	500	110	69-129	3	20
1,1,2,2-Tetrachloroethane	79-34-5		508	500	102	67-128	2	20
1,1,1,2-Tetrachloroethane	630-20-6		502	500	100	70-130	1	20
Tetrachloroethene	127-18-4		523	500	105	68-130	1	20
Tetrahydrofuran	109-99-9		555	500	111	43-130	5	20
Toluene	108-88-3		535	500	107	70-130	2	20
1,2,4-Trichlorobenzene	120-82-1		516	500	103	60-138	5	20
1,2,3-Trichlorobenzene	87-61-6		513	500	103	60-134	1	20
1,1,1-Trichloroethane	71-55-6		603	500	121	70-134	6	20
1,1,2-Trichloroethane	79-00-5		494	500	99	70-130	3	20
Trichloroethene	79-01-6		553	500	111	70-133	1	20
Trichlorofluoromethane	75-69-4		551	500	110	70-137	3	20
1,2,3-Trichloropropane	96-18-4		512	500	102	66-126	4	20
1,3,5-Trimethylbenzene	108-67-8		593	500	119	60-127	1	20
1,2,4-Trimethylbenzene	95-63-6		593	500	119	60-126	3	20
Vinyl acetate	108-05-4		447	500	89	56-143	13	30
Vinyl chloride	75-01-4		487	500	97	70-130	3	20
o-Xylene	95-47-6		528	500	106	70-130	3	20
m- & p-Xylenes	179601-23-1		1080	1000	108	70-150	5	20

Surrogate(s)

Analyte	CAS #	Qualifiers:	% Recovery	QC Limits
4-Bromofluorobenzene	460-00-4		120	50-130
Dibromofluoromethane	1868-53-7		117	65-130
Toluene-d8	2037-26-5		111	59-130

All values presented with any preparation, dilution, or unit conversions taken into account.

8260 Quantitation Review Report

C:\msdchem\1\data\2024\04-APR\VB042224\GCMS8-042224010.D **LCSD** 04/22/24 010

Sample Name: LCSDTP0422242 @ 800uL
Data File Name: GCMS8-042224010.D
Date Acquired: 04/22/24 14:38
Vial Number: 5
Sample Multiplier: 50 **Dilution:** 1
Misc Info: PAV 1150,1149,1135H,1141B,1155A,1016B,1151B,1

Operator:
Data File Path: C:\msdchem\1\data\2024\04-APR\VB042
Instrument Method: VOC092623 INSTRUMENT SCAN.M
Quant. Method: VOC022324Final
Last Result Mod: 04/22/24 15:01
Last Cal Update: 02/26/24 12:39
Last Cal Mod: 02/26/24 12:39

#	Internal Standard	Response
1)	Pentafluorobenzene	124,784
42)	1,4-Difluorobenzene	215,443
50)	Chlorobenzene-d5	195,404
74)	1,4-Dichlorobenzene-d4	105,904

#	Surrogate	% Rec	P/F	Soil Range
35)	Dibromofluoromethane	**117**	P	65-130
56)	Toluene-d8	**111**	P	59-130
76)	4-Bromofluorobenzene	**120**	P	50-130

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
1)	Pentafluorobenzene		500	-	-	6.25	0.01	-	100	124,784	168	-		-		-	
2)	**Dichlorodifluoromethane**		**439.96**	RL	**440**	1.38	0.00	P	95	58,020	85	87	31.8 | 34.5	-		-	
3)	**Chloromethane**		**429.08**	RL	**429**	1.55	0.01	P	98	74,290	50	52	32.3 | 31.3	-		-	
4)	**Vinyl chloride**		**487.14**	RL	**487**	1.65	0.00	P	99	74,704	62	64	31.0 | 30.5	-		-	
5)	**Bromomethane**		**283.27**	RL	**283**	1.96	-0.01	P	98	27,909	94	96	90.0 | 88.5	-		-	
6)	**Chloroethane**		**246.09**	RL	**246**	2.04	-0.02	P	97	24,238	64	66	32.8 | 34.3	-		-	
7)	**Trichlorofluoromethane**		**550.82**	RL	**551**	2.33	-0.02	P	99	94,137	101	103	60.7 | 61.6	66	12.2 | 12.7	-	
8)	**Diethyl ether**		**503.88**	RL	**504**	2.65	0.00	P	87	38,375	74	45	113 | 103	59	147 | 129	-	
9)	**1,1-Dichloroethene**		**566.65**	RL	**567**	2.89	-0.01	P	81	59,923	96	61	167 | 139	63	50.9 | 47.0	-	
10)	Freon 113		No Cal.	-	-	2.93	0.03	P	89	59,536	101	151	70.5 | 82.4	103	59.5 | 64.1	153	44.6 | 53.1
11)	**Acetone**		**418.02**	RL	**418**	3.00	0.03	P	**63**	6,133	58	43	333 | 266	-		-	
12)	**Iodomethane**		**519.66**	RL	**520**	3.05	-0.01	P	97	104,238	142	127	41.8 | 40.6	141	15.8 | 12.9	-	
13)	**Carbon disulfide**		**519.98**	RL	**520**	3.12	0.00	P	98	178,471	76	78	9.75 | 9.20	-		-	
14)	**Allyl chloride**		**546.42**	RL	**546**	3.32	-0.01	P	87	38,084	76	78	29.0 | 30.7	41	297 | 283	39	210 | 175
15)	**Methylene chloride**		**684.32**	RL	**684**	3.49	0.00	P	96	99,471	84	49	129 | 121	86	62.6 | 64.4	51	36.0 | 36.5
16)	t-Butanol (TBA)		No Cal.	-	-	(3.70)	-	-	0		59	57	0.00 | 8.40	-		-	
17)	**Acrylonitrile**		**563.21**	RL	**563**	3.82	0.01	P	96	22,477	52	53	121 | 120	51	49.7 | 41.7	-	
18)	**Methyl t-butyl ether (MTBE)**		**539.29**	RL	**539**	3.87	0.02	P	95	194,424	73	57	20.9 | 23.3	-		-	
19)	**trans-1,2-Dichloroethene**		**553.40**	RL	**553**	3.83	0.00	P	99	67,695	96	61	139 | 137	98	63.8 | 65.3	-	
20)	n-Hexane		No Cal.	-	-	4.21	-0.01	**F**	**48**	902	57	43	**0.00 | 64.9**	41	82.4 | 72.0	56	**0.00 | 47.3**
21)	**1,1-Dichloroethane**		**555.51**	RL	**556**	4.41	0.00	P	98	122,168	63	65	32.3 | 33.7	83	15.1 | 15.0	-	
22)	**Vinyl acetate**		**447.13**	RL	**447**	4.53	0.01	P	71	11,974	86	43	823 | 949	-		-	
23)	2-chloro-1,3-butadiene		No Cal.	-	-	4.53	-0.01	P	91	105,671	53	88	49.2 | 58.3	52	24.4 | 23.5	-	
24)	Diisopropyl ether (DIPE)		No Cal.	-	-	4.54	-0.03	**F**	**1**	945	45	43	**5850 | 38.9**	87	**120 | 24.3**	-	
25)	Ethyl t-butyl ether (ETBE)		No Cal.	-	-	(5.12)	-	-	0		59	57	0.00 | 31.8	87	0.00 | 34.1	-	
26)	**2-Butanone (MEK)**		**523.69**	RL	**524**	5.37	0.02	P	87	8,415	72	43	381 | 353	57	37.7 | 29.9	-	
27)	**cis-1,2-Dichloroethene**		**552.71**	RL	**553**	5.29	0.00	P	85	75,076	96	61	149 | 132	98	67.6 | 56.2	-	
28)	**2,2-Dichloropropane**		**638.57**	RL	**639**	5.28	0.00	P	95	111,159	77	97	22.6 | 22.0	79	34.3 | 30.5	-	
29)	**Propionitrile**		**553.06**	RL	**553**	5.45	-0.01	P	78	11,485	54	52	28.4 | 11.3	55	13.1 | 15.7	-	
30)	**Methyl acrylate**		**526.21**	RL	**526**	5.52	0.01	P	94	64,071	55	85	14.6 | 17.1	-		-	
31)	**Methacrylonitrile**		**557.19**	RL	**557**	5.68	0.01	P	90	29,107	67	41	167 | 147	39	81.7 | 83.1	52	39.3 | 37.0
32)	**Bromochloromethane**		**502.42**	RL	**502**	5.66	0.00	P	93	33,695	128	49	163 | 167	130	121 | 134	-	
33)	**Chloroform**		**565.81**	RL	**566**	5.83	0.00	P	97	120,703	83	85	64.2 | 66.3	-		-	
34)	**Tetrahydrofuran**		**555.08**	RL	**555**	5.75	0.01	P	93	11,914	72	71	81.7 | 96.8	42	247 | 241	-	
35)	Dibromofluoromethane (S)		586.16	Sur	-	6.11	0.01	P	94	59,798	113	111	96.3 | 102	192	19.2 | 22.1	81	16.3 | 14.3
36)	**1,1,1-Trichloroethane**		**602.87**	RL	**603**	6.10	0.00	P	92	110,682	97	99	67.7 | 60.3	61	42.4 | 38.9	63	13.1 | 14.3
37)	1-Chlorobutane		No Cal.	-	-	6.25	-0.05	**Inc**	90	1,997	56	49	**0.00 | 3.40**	-		-	
38)	**1,1-Dichloropropene**		**652.58**	RL	**653**	6.39	0.00	P	97	94,245	75	39	56.2 | 55.5	110	35.6 | 36.4	77	27.6 | 31.4
39)	**Carbon tetrachloride**		**600.40**	RL	**600**	6.38	0.00	P	95	92,759	117	119	95.5 | 100	-		-	
40)	**Benzene**		**574.83**	RL	**575**	6.75	0.00	P	97	274,527	78	51	16.4 | 15.3	-		-	
41)	**1,2-Dichloroethane**		**630.47**	RL	**630**	6.81	0.00	P	89	92,853	62	98	8.18 | 12.3	-		-	
42)	1,4-Difluorobenzene		500	-	-	7.56	0.00	-	100	215,443	114	-		-		-	
43)	t- Amyl methyl ether (TAME)		No Cal.	-	-	(7.05)	-	-	0		73	55	0.00 | 37.9	87	0.00 | 22.4	-	
44)	**Trichloroethene**		**553.06**	RL	**553**	8.03	0.00	P	93	67,191	95	132	102 | 115	130	110 | 113	97	67.8 | 64.2
45)	**1,2-Dichloropropane**		**514.42**	RL	**514**	8.47	0.01	P	96	62,851	63	112	6.48 | 5.70	76	50.3 | 47.7	-	

For analyst review assistance only.

8260 Quantitation Review Report

C:\msdchem\1\data\2024\04-APR\VB042224\GCMS8-042224010.D **LCSD** 04/22/24 010

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
46)	**Methyl methacrylate**		**484.23**	RL	**484**	8.78	0.01	P	95	50,242	69	41	125 | 133	100	42.3 | 40.0	39	62.6 | 64.9
47)	**Dibromomethane**		**488.53**	RL	**489**	8.65	0.00	P	92	37,969	93	174	94.5 | 107	95	85.0 | 82.1	-	
48)	**Bromodichloromethane**		**502.69**	RL	**503**	8.94	0.00	P	97	79,054	83	85	66.9 | 64.1	127	8.33 | 8.90	-	
49)	**2-nitro-propane**		**477.18**	QL	**477**	9.26	0.00	P	100	17,657	43	39	28.6 | 28.5	-		-	
50)	Chlorobenzene-d5		500	-	-	11.04	0.00	P	97	195,404	117	82	52.8 | 54.8	119	30.7 | 31.9	54	21.2 | 22.3
51)	Chloromethyl cyanide		No Cal.	-	-	9.28	-0.10	F	50	2,349	75	48	0.00 | 39.0	40	20.0 | 44.5	-	
52)	**2-Chloroethyl vinyl ether**		**501.32**	RL	**501**	9.39	0.01	P	96	42,359	63	65	33.8 | 30.2	106	30.1 | 31.4	-	
53)	**cis-1,3-Dichloropropene**		**514.99**	RL	**515**	9.51	0.00	P	93	98,110	75	77	30.9 | 33.4	39	54.4 | 47.1	110	22.8 | 21.7
54)	**4-Methyl-2-pentanone**		**432.30**	RL	**432**	9.72	0.00	P	89	26,033	58	41	65.5 | 52.2	100	38.8 | 44.0	85	44.5 | 42.0
55)	1,1-Dichloro-2-propanone		No Cal.	-	-	(9.71)	-	-	0		83	63	0.00 | 56.4	91	0.00 | 22.8	-	
56)	Toluene-d8 (S)		554.36	Sur	-	9.79	0.00	P	99	212,276	98	100	70.2 | 71.5	42	12.6 | 12.7	70	11.8 | 11.3
57)	**Toluene**		**534.61**	RL	**535**	9.85	0.00	P	97	166,033	92	91	171 | 168	65	20.1 | 18.5	39	18.8 | 16.3
58)	**trans-1,3-Dichloropropene**		**523.32**	RL	**523**	10.10	0.00	P	97	90,417	75	77	30.1 | 30.2	39.1	46.5 | 43.2	110	23.6 | 24.5
59)	**Ethyl methacrylate**		**521.74**	RL	**522**	10.22	0.00	P	99	82,738	69	41	69.4 | 69.2	99	18.9 | 18.5	86	15.5 | 16.1
60)	**1,1,2-Trichloroethane**		**493.70**	RL	**494**	10.26	0.00	P	96	45,796	83	97	120 | 125	61	71.6 | 70.3	85	64.2 | 59.8
61)	**1,3-Dichloropropane**		**508.47**	RL	**508**	10.40	0.00	P	97	103,326	76	41	65.4 | 61.7	78	31.4 | 32.5	39	22.1 | 22.8
62)	**2-Hexanone**		**472.66**	RL	**473**	10.50	0.00	P	94	50,093	43	58	54.9 | 59.4	57	23.4 | 21.2	100	13.8 | 16.0
63)	**Tetrachloroethene**		**523.24**	RL	**523**	10.36	0.00	P	97	55,376	164	166	122 | 127	129	84.4 | 88.5	131	83.9 | 84.5
64)	**Dibromochloromethane**		**450.63**	RL	**451**	10.58	-0.01	P	95	54,817	129	127	83.9 | 79.2	-		-	
65)	**1,2-Dibromoethane**		**497.98**	RL	**498**	10.66	0.00	P	96	56,932	107	109	92.9 | 89.0	188	3.54 | 2.80	-	
66)	**Chlorobenzene**		**540.14**	RL	**540**	11.06	0.00	P	96	178,370	112	77	58.7 | 61.4	114	30.2 | 33.1	-	
67)	**1,1,1,2-Tetrachloroethane**		**501.68**	RL	**502**	11.13	0.00	P	97	61,302	131	133	97.6 | 94.0	117	65.1 | 64.0	119	61.4 | 63.7
68)	**Ethylbenzene**		**563.80**	RL	**564**	11.15	0.00	P	96	320,020	91	106	30.6 | 32.6	51	10.2 | 7.80	-	
69)	**m- & p-Xylenes**		**1085.0**	RL	**1080**	11.24	0.00	P	92	240,217	106	91	200 | 188	105	45.7 | 41.4	77	27.5 | 24.3
70)	**o-Xylene**		**528.12**	RL	**528**	11.51	-0.01	P	97	119,512	106	91	209 | 206	105	43.7 | 48.7	-	
71)	**Styrene**		**549.74**	RL	**550**	11.52	0.00	P	93	188,464	104	103	49.9 | 46.8	78	46.4 | 41.6	51	28.5 | 22.7
72)	**Bromoform**		**418.13**	RL	**418**	11.65	0.00	P	91	35,267	173	175	52.4 | 46.3	254	9.90 | 12.5	-	
73)	**Isopropylbenzene**		**594.18**	RL	**594**	11.76	-0.01	P	99	326,817	105	120	26.7 | 27.0	77	15.4 | 14.5	79	12.6 | 11.8
74)	1,4-Dichlorobenzene-d4		500	-	-	12.56	0.00	P	89	105,904	152	115	59.7 | 55.2	150	173 | 157	-	
75)	cis-1,4-dichloro-2-butene		No Cal.	-	-	11.80	-0.01	P	90	23,786	75	53	122 | 106	89	47.4 | 47.5	-	
76)	4-Bromofluorobenzene (S)		599.29	Sur	-	11.86	0.00	P	95	87,730	95	174	72.7 | 75.6	176	68.7 | 73.8	75	44.3 | 47.6
77)	**1,1,2,2-Tetrachloroethane**		**508.49**	RL	**508**	11.96	0.00	P	93	81,286	83	85	63.3 | 70.8	131	10.6 | 11.0	95	16.5 | 18.7
78)	**trans-1,4-Dichloro-2-butene**		**610.14**	RL	**610**	11.99	0.00	P	90	25,892	53	88	46.8 | 55.9	124	25.1 | 23.1	-	
79)	**1,2,3-Trichloropropane**		**511.62**	RL	**512**	11.98	0.00	P	97	29,883	110	75	262 | 269	39	77.7 | 79.2	-	
80)	**Bromobenzene**		**524.59**	RL	**525**	11.95	-0.01	P	98	73,543	156	158	96.6 | 94.7	-		-	
81)	**n-Propylbenzene**		**611.01**	RL	**611**	12.02	0.00	P	97	385,893	91	120	21.4 | 23.6	92	10.4 | 11.4	65	9.34 | 9.90
82)	**2-Chlorotoluene**		**539.19**	RL	**539**	12.07	-0.01	P	91	71,968	126	91	307 | 289	63	42.1 | 36.0	-	
83)	4-Ethyltoluene		No Cal.	-	-	12.08	-0.01	P	79	2,142	105	120	23.5 | 29.9	77	28.3 | 10.6	-	
84)	**1,3,5-Trimethylbenzene**		**592.85**	RL	**593**	12.13	0.00	P	99	259,393	105	120	51.6 | 50.6	119	11.8 | 11.0	77	12.5 | 12.6
85)	**4-Chlorotoluene**		**582.71**	RL	**583**	12.14	-0.01	P	96	257,451	91	126	32.2 | 34.5	63	13.1 | 11.3	-	
86)	**tert-Butylbenzene**		**566.32**	RL	**566**	12.33	-0.01	P	95	65,906	134	119	358 | 340	91	214 | 215	-	
87)	**1,2,4-Trimethylbenzene**		**592.83**	RL	**593**	12.35	0.00	P	94	265,296	105	120	46.0 | 50.1	-		-	
88)	**Pentachloroethane**		**476.88**	RL	**477**	12.34	-0.01	P	93	39,456	167	165	80.5 | 86.1	132	48.0 | 42.9	-	
89)	**sec-Butylbenzene**		**609.39**	RL	**609**	12.45	0.00	P	97	337,163	105	134	18.8 | 20.4	-		-	
90)	**4-Isopropyltoluene**		**594.49**	RL	**594**	12.54	0.00	P	97	287,012	119	134	25.6 | 28.5	91	22.7 | 22.4	-	
91)	**1,3-Dichlorobenzene**		**516.04**	RL	**516**	12.53	-0.01	P	98	142,756	146	148	62.7 | 63.8	111	37.5 | 35.3	-	
92)	**1,4-Dichlorobenzene**		**509.53**	RL	**510**	12.58	0.00	P	98	143,721	146	111	34.6 | 37.8	148	61.8 | 61.5	-	
93)	**n-Butylbenzene**		**626.25**	RL	**626**	12.77	0.00	P	90	151,584	92	91	165 | 179	134	43.7 | 50.5	-	
94)	**1,2-Dichlorobenzene**		**524.96**	RL	**525**	12.80	0.00	P	99	137,787	146	148	64.9 | 64.6	111	42.0 | 40.4	-	
95)	Hexachloroethane		No Cal.	-	-	12.95	-0.01	F	53	180	201	117	114 | 129	199	0.00 | 65.0	203	0.00 | 64.5
96)	**1,2-Dibromo-3-chloropropane**		**511.04**	RL	**511**	13.23	-0.01	F	70	15,930	75	155	69.3 | 104	157	92.7 | 123	-	
97)	Nitrobenzene		No Cal.	-	-	13.35	0.00	F	58	1,179	123	51	97.2 | 62.1	77	197 | 146	-	
98)	**1,2,4-Trichlorobenzene**		**515.79**	RL	**516**	13.69	0.00	P	95	91,946	180	182	104 | 97.2	184	28.3 | 29.6	145	29.4 | 30.6
99)	**Hexachlorobutadiene**		**574.91**	RL	**575**	13.77	0.00	P	95	35,650	225	227	63.9 | 59.6	260	29.0 | 22.3	223	60.0 | 59.4
100	**Naphthalene**		**524.64**	RL	**525**	13.82	-0.01	P	99	270,376	128	127	12.9 | 12.5	129	11.0 | 11.6	-	
101	**1,2,3-Trichlorobenzene**		**512.90**	RL	**513**	13.96	-0.01	P	98	88,933	180	182	94.3 | 91.8	184	28.7 | 29.8	145	28.5 | 29.8

Uses lowest known RLs; project RLs may be higher. Qualitative P/F based only on output ratios at apex and may not reflect full peak or analyst review.

For analyst review assistance only.

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224010.D
Acq On : 22 Apr 2024 14:38
Operator :
Sample : LCSDTP0422242 @ 800uL
Misc : PAV 1150,1149,1135H,1141B,1155A,1016B,1151B,1124B
ALS Vial : 5 Sample Multiplier: 50

Quant Time: Apr 22 15:01:55 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	6.251	168	124784	10.00	ppb		0.01
42) 1,4-Difluorobenzene	7.563	114	215443	10.00	ppb		0.00
50) Chlorobenzene-d5	11.036	117	195404	10.00	ppb		0.00
74) 1,4-Dichlorobenzene-d4	12.564	152	105904	10.00	ppb		0.00
System Monitoring Compounds							
35) Dibromofluoromethane (S)	6.109	113	59798	11.72	ppb		0.00
Spiked Amount 10.000			Recovery = 117.20%				
56) Toluene-d8 (S)	9.786	98	212276	11.09	ppb		0.00
Spiked Amount 10.000			Recovery = 110.90%				
76) 4-Bromofluorobenzene (S)	11.855	95	87730	11.99	ppb		0.00
Spiked Amount 10.000			Recovery = 119.90%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.380	85	58020	439.9552	ppb		95
3) Chloromethane	1.553	50	74290	429.0801	ppb		98
4) Vinyl chloride	1.655	62	74704	487.1412	ppb		99
5) Bromomethane	1.960	94	27909	283.2701	ppb		98
6) Chloroethane	2.041	64	24238	246.0882	ppb		97
7) Trichlorofluoromethane	2.326	101	94137	550.8214	ppb		99
8) Diethyl ether	2.652	74	38375	503.8824	ppb		87
9) 1,1-Dichloroethene	2.885	96	59923	566.6451	ppb		81
10) Freon 113	2.926	101	59536	No Calib			
11) Acetone	2.997	58	6133	418.0236	ppb	#	63
12) Iodomethane	3.048	142	104238	519.6641	ppb		97
13) Carbon disulfide	3.119	76	178471	519.9834	ppb		98
14) Allyl chloride	3.323	76	38084	546.4181	ppb	#	87
15) Methylene chloride	3.485	84	99471	684.3195	ppb		96
16) t-Butanol (TBA)	0.000		0	N.D.			
17) Acrylonitrile	3.821	52	22477	563.2075	ppb		96
18) Methyl t-butyl ether (...	3.872	73	194424	539.2940	ppb		95
19) trans-1,2-Dichloroethene	3.831	96	67695	553.3963	ppb		99
20) n-Hexane	4.207	57	902	No Calib	#		
21) 1,1-Dichloroethane	4.411	63	122168	555.5062	ppb		98
22) Vinyl acetate	4.533	86	11974	447.1336	ppb	#	71
23) 2-chloro-1,3-butadiene	4.533	53	105671	No Calib			
24) Diisopropyl ether (DIPE)	4.543	45	945	No Calib	#		
25) Ethyl t-butyl ether (E...	0.000		0	N.D.			
26) 2-Butanone (MEK)	5.367	72	8415	523.6879	ppb		87
27) cis-1,2-Dichloroethene	5.285	96	75076	552.7129	ppb		85
28) 2,2-Dichloropropane	5.275	77	111159	638.5733	ppb		95
29) Propionitrile	5.448	54	11485	553.0597	ppb		78
30) Methyl acrylate	5.519	55	64071	526.2088	ppb		94
31) Methacrylonitrile	5.682	67	29107	557.1949	ppb		90
32) Bromochloromethane	5.662	128	33695	502.4154	ppb		93
33) Chloroform	5.834	83	120703	565.8096	ppb		97
34) Tetrahydrofuran	5.753	72	11914	555.0815	ppb		93
36) 1,1,1-Trichloroethane	6.099	97	110682	602.8713	ppb		92
37) 1-Chlorobutane	6.251	56	1997	No Calib			
38) 1,1-Dichloropropene	6.394	75	94245	652.5787	ppb		97
39) Carbon tetrachloride	6.383	117	92759	600.4026	ppb		95
40) Benzene	6.750	78	274527	574.8254	ppb		97
41) 1,2-Dichloroethane	6.811	62	92853	630.4734	ppb		89
43) t- Amyl methyl ether (...	0.000		0	N.D.			
44) Trichloroethene	8.031	95	67191	553.0633	ppb		93
45) 1,2-Dichloropropane	8.468	63	62851	514.4200	ppb		96
46) Methyl methacrylate	8.783	69	50242	484.2334	ppb		95

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224010.D
Acq On : 22 Apr 2024 14:38
Operator :
Sample : LCSDTP0422242 @ 800uL
Misc : PAV 1150,1149,1135H,1141B,1155A,1016B,1151B,1124B
ALS Vial : 5 Sample Multiplier: 50

Quant Time: Apr 22 15:01:55 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

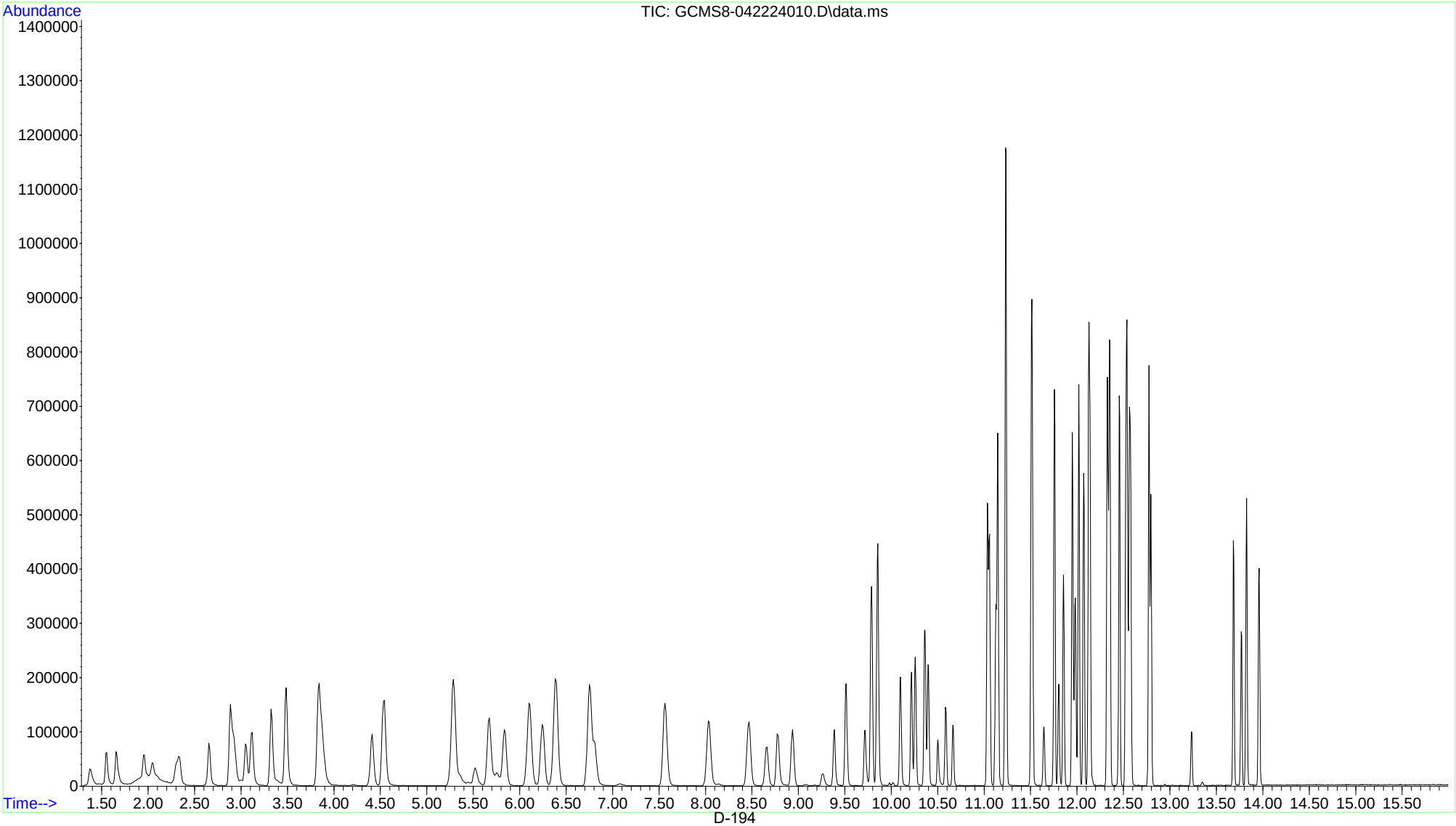
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
47) Dibromomethane	8.651	93	37969	488.5335	ppb		92
48) Bromodichloromethane	8.936	83	79054	502.6854	ppb		97
49) 2-nitro-propane	9.261	43	17657	477.1797	ppb		100
51) Chloromethyl cyanide	9.282	75	2349	No Calib		#	
52) 2-Chloroethyl vinyl ether	9.387	63	42359	501.3235	ppb		96
53) cis-1,3-Dichloropropene	9.513	75	98110	514.9869	ppb		93
54) 4-Methyl-2-pentanone	9.718	58	26033	432.3003	ppb		89
55) 1,1-Dichloro-2-propanone	0.000		0	N.D.			
57) Toluene	9.854	92	166033	534.6081	ppb		97
58) trans-1,3-Dichloropropene	10.096	75	90417	523.3157	ppb		97
59) Ethyl methacrylate	10.217	69	82738	521.7417	ppb		99
60) 1,1,2-Trichloroethane	10.259	83	45796	493.6965	ppb		96
61) 1,3-Dichloropropane	10.401	76	103326	508.4666	ppb		97
62) 2-Hexanone	10.500	43	50093	472.6638	ppb		94
63) Tetrachloroethene	10.364	164	55376	523.2396	ppb		97
64) Dibromochloromethane	10.584	129	54817	450.6267	ppb		95
65) 1,2-Dibromoethane	10.663	107	56932	497.9763	ppb		96
66) Chlorobenzene	11.057	112	178370	540.1405	ppb		96
67) 1,1,1,2-Tetrachloroethane	11.125	131	61302	501.6781	ppb		97
68) Ethylbenzene	11.146	91	320020	563.7997	ppb		96
69) m- & p-Xylenes	11.236	106	240217	1084.9846	ppb		92
70) o-Xylene	11.509	106	119512	528.1200	ppb		97
71) Styrene	11.519	104	188464	549.7399	ppb		93
72) Bromoform	11.645	173	35267	418.1275	ppb		91
73) Isopropylbenzene	11.756	105	326817	594.1826	ppb		99
75) cis-1,4-dichloro-2-butene	11.803	75	23786	No Calib			
77) 1,1,2,2-Tetrachloroethane	11.955	83	81286	508.4929	ppb		93
78) trans-1,4-Dichloro-2-b...	11.987	53	25892	610.1422	ppb		90
79) 1,2,3-Trichloropropane	11.976	110	29883	511.6186	ppb		97
80) Bromobenzene	11.950	156	73543	524.5908	ppb		98
81) n-Propylbenzene	12.018	91	385893	611.0077	ppb		97
82) 2-Chlorotoluene	12.071	126	71968	539.1931	ppb		91
83) 4-Ethyltoluene	12.081	105	2142	No Calib			
84) 1,3,5-Trimethylbenzene	12.128	105	259393	592.8476	ppb		99
85) 4-Chlorotoluene	12.139	91	257451	582.7075	ppb		96
86) tert-Butylbenzene	12.328	134	65906	566.3166	ppb		95
87) 1,2,4-Trimethylbenzene	12.354	105	265296	592.8320	ppb		94
88) Pentachloroethane	12.344	167	39456	476.8772	ppb		93
89) sec-Butylbenzene	12.454	105	337163	609.3945	ppb		97
90) 4-Isopropyltoluene	12.538	119	287012	594.4910	ppb		97
91) 1,3-Dichlorobenzene	12.528	146	142756	516.0427	ppb		98
92) 1,4-Dichlorobenzene	12.580	146	143721	509.5268	ppb		98
93) n-Butylbenzene	12.774	92	151584	626.2494	ppb		90
94) 1,2-Dichlorobenzene	12.795	146	137787	524.9565	ppb		99
95) Hexachloroethane	12.948	201	180	No Calib		#	
96) 1,2-Dibromo-3-chloropr...	13.231	75	15930	511.0374	ppb	#	70
97) Nitrobenzene	13.352	123	1179	No Calib		#	
98) 1,2,4-Trichlorobenzene	13.688	180	91946	515.7892	ppb		95
99) Hexachlorobutadiene	13.772	225	35650	574.9121	ppb		95
100) Naphthalene	13.825	128	270376	524.6444	ppb		99
101) 1,2,3-Trichlorobenzene	13.961	180	88933	512.8974	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224010.D
Acq On : 22 Apr 2024 14:38
Operator :
Sample : LCSDTP0422242 @ 800uL
Misc : PAV 1150,1149,1135H,1141B,1155A,1016B,1151B,1124B
ALS Vial : 5 Sample Multiplier: 50

Quant Time: Apr 22 15:01:55 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration



D-194

Volatile Organic Analysis Data Summary

Lab Name:	Orange Coast Analytical (Alliance TG) - Phoenix, AZ	Data File Name:	GCMS8-042224012.D
Lab Reference #:	NRE AZ14434	Project Name:	Nasa White Sands Test Facility
Lab Sample ID:	MSAZ14434-001	Client Sample ID:	2404091330
Sample Type:	MS	Date Sampled:	04/18/24 13:30
Analysis Method:	8260B	Date Received:	04/18/24 10:00
Prep. Method:	5035A	Date Extracted:	04/22/24 13:18
Initial Sample:	10.1g	Date Analyzed:	04/22/24 15:24
Sample Extract:	10mL	Analysis Multiplier:	50
Sample Loaded:	790uL	Dilution Factor:	1
Analysis Batch:	0422242		

Units: µg/kg

Analyte	CAS #	Qualifiers:	Result	R	Spike	% Recovery	QC Limits	RPD	Max RPD
Acetone	67-64-1		461	0	500	92	65-180	9	35
Acrylonitrile	107-13-1		546	0	500	109	56-142	6	30
Allyl chloride	107-05-1		517	0	500	103	70-130	1	30
Benzene	71-43-2		555	0	500	111	70-132	4	20
Bromobenzene	108-86-1		500	0	500	100	70-130	6	30
Bromochloromethane	74-97-5		504	0	500	101	65-135	7	30
Bromodichloromethane	75-27-4		496	0	500	99	65-135	6	30
Bromoform	75-25-2		402	0	500	80	65-135	8	30
Bromomethane	74-83-9		304	0	500	61	60-145	14	35
2-Butanone (MEK)	78-93-3		483	0	500	97	50-150	1	35
n-Butylbenzene	104-51-8		621	0	500	124	60-135	7	30
sec-Butylbenzene	135-98-8		608	0	500	122	60-130	8	30
tert-Butylbenzene	98-06-6		495	0	500	99	69-130	4	30
Carbon disulfide	75-15-0		512	0	500	102	45-155	7	35
Carbon tetrachloride	56-23-5		605	0	500	121	65-135	8	30
Chlorobenzene	108-90-7		535	0	500	107	70-130	8	20
Chloroethane	75-00-3	M7	288	0	500	58	65-135	16	30
2-Chloroethyl vinyl ether	110-75-8		500	0	500	100	48-140	3	30
Chloroform	67-66-3		554	0	500	111	65-135	6	30
Chloromethane	74-87-3		428	0	500	86	60-135	4	30
4-Chlorotoluene	106-43-4		564	0	500	113	64-130	5	30
2-Chlorotoluene	95-49-8		514	0	500	103	64-130	5	30
1,2-Dibromo-3-chloropropane	96-12-8		475	0	500	95	65-135	5	30
Dibromochloromethane	124-48-1		432	0	500	86	65-135	5	30
1,2-Dibromoethane	106-93-4		475	0	500	95	70-130	4	30
Dibromomethane	74-95-3		464	0	500	93	65-135	4	30
trans-1,4-Dichloro-2-butene	110-57-6		567	0	500	113	64-131	5	20
1,4-Dichlorobenzene	106-46-7		496	0	500	99	69-132	7	25
1,3-Dichlorobenzene	541-73-1		502	0	500	100	70-130	7	30
1,2-Dichlorobenzene	95-50-1		499	0	500	100	65-130	9	25
Dichlorodifluoromethane	75-71-8		450	0	500	90	45-155	6	35
1,2-Dichloroethane	107-06-2		607	0	500	121	65-135	7	30
1,1-Dichloroethane	75-34-3		527	0	500	105	58-135	3	20
cis-1,2-Dichloroethene	156-59-2		533	0	500	107	70-130	4	30
1,1-Dichloroethene	75-35-4		543	0	500	109	41-131	4	20
trans-1,2-Dichloroethene	156-60-5		553	0	500	111	65-135	7	30
1,2-Dichloropropane	78-87-5		494	0	500	99	70-130	5	30
2,2-Dichloropropane	594-20-7		605	0	500	121	60-140	4	30
1,3-Dichloropropane	142-28-9		493	0	500	99	70-130	7	30
cis-1,3-Dichloropropene	10061-01-5		484	0	500	97	65-135	1	30
1,1-Dichloropropene	563-58-6		655	0	500	131	65-135	7	30
trans-1,3-Dichloropropene	10061-02-6		488	0	500	98	65-135	4	30
Diethyl ether	60-29-7		501	0	500	100	63-130	2	30

All values presented with any preparation, dilution, or unit conversions taken into account.

Volatile Organic Analysis Data Summary

Lab Name:	Orange Coast Analytical (Alliance TG) - Phoenix, AZ	Data File Name:	GCMS8-042224012.D
Lab Reference #:	NRE AZ14434	Project Name:	Nasa White Sands Test Facility
Lab Sample ID:	MSAZ14434-001	Client Sample ID:	2404091330
Sample Type:	MS	Date Sampled:	04/18/24 13:30
Analysis Method:	8260B	Date Received:	04/18/24 10:00
Prep. Method:	5035A	Date Extracted:	04/22/24 13:18
Initial Sample:	10.1g	Date Analyzed:	04/22/24 15:24
Sample Extract:	10mL	Analysis Multiplier:	50
Sample Loaded:	790uL	Dilution Factor:	1
Analysis Batch:	0422242		

Units: µg/kg

Analyte	CAS #	Qualifiers:	Result	R	Spike	% Recovery	QC Limits	RPD	Max RPD
Ethyl methacrylate	97-63-2		504	0	500	101	42-140	7	30
Ethylbenzene	100-41-4		560	0	500	112	70-130	7	30
Hexachlorobutadiene	87-68-3		602	0	500	120	60-145	5	30
2-Hexanone	591-78-6		469	0	500	94	50-135	11	35
Iodomethane	74-88-4		510	0	500	102	60-140	5	30
Isopropylbenzene	98-82-8		583	0	500	117	60-130	5	30
4-Isopropyltoluene	99-87-6		591	0	500	118	60-130	9	30
Methacrylonitrile	126-98-7		527	0	500	105	46-130	1	30
Methyl acrylate	96-33-3		509	0	500	102	48-130	6	30
Methyl methacrylate	80-62-6		455	0	500	91	55-130	6	30
Methyl t-butyl ether (MTBE)	1634-04-4		519	0	500	104	60-135	1	30
4-Methyl-2-pentanone	108-10-1		424	0	500	85	65-135	5	30
Naphthalene	91-20-3		513	0	500	103	60-141	3	30
Pentachloroethane	76-01-7	M2	0	0	500	0	70-130		20
Propionitrile	107-12-0		522	0	500	104	38-133	1	20
n-Propylbenzene	103-65-1		600	0	500	120	62-130	7	30
Styrene	100-42-5		550	0	500	110	65-135	9	30
1,1,2,2-Tetrachloroethane	79-34-5		431	0	500	86	65-135	7	30
1,1,1,2-Tetrachloroethane	630-20-6		495	0	500	99	70-130	10	30
Tetrachloroethene	127-18-4	M1	912	0	500	182	65-135	6	30
Tetrahydrofuran	109-99-9		476	0	500	95	43-130	7	20
Toluene	108-88-3		526	0	500	105	70-130	8	20
1,2,4-Trichlorobenzene	120-82-1		506	0	500	101	60-140	6	30
1,2,3-Trichlorobenzene	87-61-6		486	0	500	97	60-135	5	30
1,1,1-Trichloroethane	71-55-6		613	0	500	123	65-135	8	30
1,1,2-Trichloroethane	79-00-5		473	0	500	95	65-135	4	30
Trichloroethene	79-01-6		568	0	500	114	70-131	1	20
Trichlorofluoromethane	75-69-4		582	0	500	116	65-140	5	30
1,2,3-Trichloropropane	96-18-4		470	0	500	94	65-130	4	30
1,3,5-Trimethylbenzene	108-67-8		580	0	500	116	60-130	6	30
1,2,4-Trimethylbenzene	95-63-6		583	0	500	117	60-130	5	30
Vinyl acetate	108-05-4	M2	187	0	500	37	55-145	3	35
Vinyl chloride	75-01-4		516	0	500	103	60-140	11	30
o-Xylene	95-47-6		524	0	500	105	70-130	8	30
m- & p-Xylenes	179601-23-1		1090	0	1000	109	70-150	7	30

Surrogate(s)

Analyte	CAS #	Qualifiers:	% Recovery	QC Limits
4-Bromofluorobenzene	460-00-4		118	50-130
Dibromofluoromethane	1868-53-7		116	65-130
Toluene-d8	2037-26-5		116	59-130

All values presented with any preparation, dilution, or unit conversions taken into account.

8260 Quantitation Review Report

C:\msdchem\1\data\2024\04-APR\VB042224\GCMS8-042224012.D **MS** 04/22/24 012

Sample Name: MSAZ14434-001 @ 790uL (1:1 of 10.1g in 10
Data File Name: GCMS8-042224012.D
Date Acquired: 04/22/24 15:24
Vial Number: 7
Sample Multiplier: 50 **Dilution:** 1
Misc Info: PAV 1150,1149,1135H,1141B,1155A,1016B,1151B,1

Operator:
Data File Path: C:\msdchem\1\data\2024\04-APR\VB042
Instrument Method: VOC092623 INSTRUMENT SCAN.M
Quant. Method: VOC022324Final
Last Result Mod: 04/22/24 15:57
Last Cal Update: 02/26/24 12:39
Last Cal Mod: 02/26/24 12:39

#	Internal Standard	Response
1)	Pentafluorobenzene	123,388
42)	1,4-Difluorobenzene	215,259
50)	Chlorobenzene-d5	194,703
74)	1,4-Dichlorobenzene-d4	108,062

#	Surrogate	% Rec	P/F	Soil Range
35)	Dibromofluoromethane	**116**	P	65-130
56)	Toluene-d8	**116**	P	59-130
76)	4-Bromofluorobenzene	**118***	P	50-130

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
1)	Pentafluorobenzene		500	-	-	6.24	0.00	-	100	123,388	168	-		-		-	
2)	**Dichlorodifluoromethane**		**449.57**	RL	**450**	1.38	0.00	P	89	58,625	85	87	28.0 | 34.5	-		-	
3)	**Chloromethane**		**427.67**	RL	**428**	1.55	0.01	P	95	73,217	50	52	34.2 | 31.3	-		-	
4)	**Vinyl chloride**		**515.81**	RL	**516**	1.65	0.00	P	100	78,215	62	64	30.3 | 30.5	-		-	
5)	**Bromomethane**		**303.85**	RL	**304**	1.96	-0.01	P	93	29,602	94	96	95.2 | 88.5	-		-	
6)	**Chloroethane**		**288.44**	RL	**288**	2.05	-0.01	P	97	28,092	64	66	36.0 | 34.3	-		-	
7)	**Trichlorofluoromethane**		**582.09**	RL	**582**	2.34	-0.01	P	100	98,368	101	103	61.8 | 61.6	66	12.9 | 12.7	-	
8)	**Diethyl ether**		**500.94**	RL	**501**	2.65	0.00	P	97	37,724	74	45	107 | 103	59	132 | 129	-	
9)	**1,1-Dichloroethene**		**542.98**	RL	**543**	2.90	0.00	P	89	56,778	96	61	157 | 139	63	48.7 | 47.0	-	
10)	Freon 113	x	No Cal.	-	-	(2.90)	-	-	94		101	151	0.00 | 82.4	103	0.00 | 64.1	153	0.00 | 53.1
11)	**Acetone**		**460.68**	RL	**461**	3.01	0.04	P	97	6,623	58	43	260 | 266	-		-	
12)	**Iodomethane**		**510.11**	RL	**510**	3.06	0.00	P	99	101,177	142	127	41.2 | 40.6	141	12.5 | 12.9	-	
13)	**Carbon disulfide**		**512.37**	RL	**512**	3.12	0.00	P	100	173,891	76	78	9.03 | 9.20	-		-	
14)	**Allyl chloride**		**517.02**	RL	**517**	3.33	0.00	P	84	35,632	76	78	32.4 | 30.7	41	311 | 283	39	202 | 175
15)	**Methylene chloride**		**563.85**	RL	**564**	3.49	0.00	P	97	82,643	84	49	125 | 121	86	65.9 | 64.4	51	37.1 | 36.5
16)	t-Butanol (TBA)		No Cal.	-	-	(3.70)	-	-	0		59	57	0.00 | 8.40	-		-	
17)	**Acrylonitrile**		**546.33**	RL	**546**	3.82	0.01	P	98	21,526	52	53	120 | 120	51	37.9 | 41.7	-	
18)	**Methyl t-butyl ether (MTBE)**		**518.71**	RL	**519**	3.87	0.02	P	99	184,912	73	57	23.0 | 23.3	-		-	
19)	**trans-1,2-Dichloroethene**		**552.57**	RL	**553**	3.83	0.00	P	93	66,838	96	61	131 | 137	98	57.8 | 65.3	-	
20)	n-Hexane	x	No Cal.	-	-	(4.22)	-	-	**38**		57	43	0.00 | 64.9	41	0.00 | 72.0	56	0.00 | 47.3
21)	**1,1-Dichloroethane**		**526.51**	RL	**527**	4.41	0.00	P	99	114,495	63	65	33.3 | 33.7	83	15.4 | 15.0	-	
22)	**Vinyl acetate**		**186.73**	RL	**187**	4.53	0.01	P	**65**	4,639	86	43	800 | 949	-		-	
23)	2-chloro-1,3-butadiene	x	No Cal.	-	-	(4.54)	-	-	93		53	88	0.00 | 58.3	52	0.00 | 23.5	-	
24)	Diisopropyl ether (DIPE)		No Cal.	-	-	(4.57)	-	-	0		45	43	0.00 | 38.9	87	0.00 | 24.3	-	
25)	Ethyl t-butyl ether (ETBE)		No Cal.	-	-	(5.12)	-	-	0		59	57	0.00 | 31.8	87	0.00 | 34.1	-	
26)	**2-Butanone (MEK)**		**482.55**	RL	**483**	5.36	0.01	P	70	7,580	72	43	419 | 353	57	43.0 | 29.9	-	
27)	**cis-1,2-Dichloroethene**		**533.17**	RL	**533**	5.29	0.00	P	92	71,611	96	61	141 | 132	98	61.8 | 56.2	-	
28)	**2,2-Dichloropropane**		**604.60**	RL	**605**	5.28	0.00	P	95	104,067	77	97	22.5 | 22.0	79	34.4 | 30.5	-	
29)	**Propionitrile**		**521.97**	RL	**522**	5.44	-0.02	**Inc**	81	10,656	54	52	**0.00 | 11.3**	55	20.3 | 15.7	-	
30)	**Methyl acrylate**		**508.61**	RL	**509**	5.52	0.01	P	96	61,187	55	85	15.3 | 17.1	-		-	
31)	**Methacrylonitrile**		**526.58**	RL	**527**	5.67	0.00	P	90	27,200	67	41	168 | 147	39	82.6 | 83.1	52	40.7 | 37.0
32)	**Bromochloromethane**		**504.36**	RL	**504**	5.67	0.01	P	89	33,447	128	49	157 | 167	130	115 | 134	-	
33)	**Chloroform**		**553.51**	RL	**554**	5.83	0.00	P	94	116,759	83	85	61.2 | 66.3	-		-	
34)	**Tetrahydrofuran**		**476.31**	RL	**476**	5.75	0.01	P	98	10,109	72	71	96.1 | 96.8	42	246 | 241	-	
35)	Dibromofluoromethane (S)		580.44	Sur	-	6.10	0.00	P	97	58,552	113	111	105 | 102	192	21.9 | 22.1	81	17.6 | 14.3
36)	**1,1,1-Trichloroethane**		**612.88**	RL	**613**	6.10	0.00	P	97	111,261	97	99	56.8 | 60.3	61	40.1 | 38.9	63	14.4 | 14.3
37)	1-Chlorobutane	x	No Cal.	-	-	(6.30)	-	-	90		56	49	0.00 | 3.40	-		-	
38)	**1,1-Dichloropropene**		**654.51**	RL	**655**	6.38	-0.01	P	94	93,466	75	39	61.8 | 55.5	110	31.4 | 36.4	77	31.3 | 31.4
39)	**Carbon tetrachloride**		**604.75**	RL	**605**	6.38	0.00	P	94	92,386	117	119	94.8 | 100	-		-	
40)	**Benzene**		**554.99**	RL	**555**	6.75	0.00	P	95	262,089	78	51	17.2 | 15.3	-		-	
41)	**1,2-Dichloroethane**		**607.06**	RL	**607**	6.80	-0.01	P	95	88,405	62	98	10.4 | 12.3	-		-	
42)	1,4-Difluorobenzene		500	-	-	7.56	0.00	-	100	215,259	114	-		-		-	
43)	t- Amyl methyl ether (TAME)		No Cal.	-	-	(7.05)	-	-	0		73	55	0.00 | 37.9	87	0.00 | 22.4	-	
44)	**Trichloroethene**		**567.84**	RL	**568**	8.03	0.00	P	91	68,927	95	132	101 | 115	130	103 | 113	97	65.3 | 64.2
45)	**1,2-Dichloropropane**		**494.17**	RL	**494**	8.47	0.01	P	94	60,325	63	112	5.74 | 5.70	76	52.0 | 47.7	-	

For analyst review assistance only.

8260 Quantitation Review Report

C:\msdchem\1\data\2024\04-APR\VB042224\GCMS8-042224012.D **MS** 04/22/24 012

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
46)	**Methyl methacrylate**		**454.74**	RL	**455**	8.77	0.00	P	95	47,027	69	41	134 | 133	100	45.1 | 40.0	39	75.6 | 64.9
47)	**Dibromomethane**		**463.85**	RL	**464**	8.65	0.00	P	97	36,020	93	174	103 | 107	95	83.5 | 82.1	-	
48)	**Bromodichloromethane**		**495.82**	RL	**496**	8.94	0.00	P	99	77,907	83	85	63.8 | 64.1	127	8.08 | 8.90	-	
49)	**2-nitro-propane**		**433.53**	QL	**434**	9.26	0.00	P	98	16,028	43	39	27.5 | 28.5	-		-	
50)	Chlorobenzene-d5		500	-	-	11.04	0.00	P	99	194,703	117	82	55.9 | 54.8	119	31.1 | 31.9	54	22.3 | 22.3
51)	Chloromethyl cyanide		No Cal.	-	-	(9.38)	-	-	0		75	48	0.00 | 39.0	40	0.00 | 44.5	-	
52)	**2-Chloroethyl vinyl ether**		**499.61**	RL	**500**	9.38	0.00	P	91	42,063	63	65	33.7 | 30.2	106	25.2 | 31.4	-	
53)	**cis-1,3-Dichloropropene**		**484.03**	RL	**484**	9.51	0.00	P	96	91,881	75	77	31.8 | 33.4	39	51.5 | 47.1	110	22.5 | 21.7
54)	**4-Methyl-2-pentanone**		**424.24**	RL	**424**	9.71	0.00	P	96	25,446	58	41	49.4 | 52.2	100	41.7 | 44.0	85	38.5 | 42.0
55)	1,1-Dichloro-2-propanone	X	No Cal.	-	-	(9.71)	-	-	**32**		83	63	0.00 | 56.4	91	0.00 | 22.8	-	
56)	Toluene-d8 (S)		581.74	Sur	-	9.79	0.00	P	95	221,962	98	100	66.4 | 71.5	42	11.7 | 12.7	70	11.7 | 11.3
57)	**Toluene**		**526.09**	RL	**526**	9.85	0.00	P	96	162,801	92	91	174 | 168	65	18.5 | 18.5	39	19.0 | 16.3
58)	**trans-1,3-Dichloropropene**		**487.69**	RL	**488**	10.10	0.00	P	93	83,960	75	77	27.8 | 30.2	39.1	49.8 | 43.2	110	23.2 | 24.5
59)	**Ethyl methacrylate**		**504.35**	RL	**504**	10.22	0.00	P	96	79,693	69	41	72.9 | 69.2	99	19.7 | 18.5	86	15.6 | 16.1
60)	**1,1,2-Trichloroethane**		**473.28**	RL	**473**	10.25	-0.01	P	93	43,745	83	97	112 | 125	61	69.7 | 70.3	85	56.2 | 59.8
61)	**1,3-Dichloropropane**		**493.45**	RL	**493**	10.40	-0.01	P	97	99,914	76	41	64.3 | 61.7	78	30.6 | 32.5	39	22.9 | 22.8
62)	**2-Hexanone**		**469.42**	RL	**469**	10.50	0.00	P	96	49,560	43	58	61.6 | 59.4	57	22.3 | 21.2	100	12.6 | 16.0
63)	**Tetrachloroethene**		**912.45**	RL	**912**	10.36	-0.01	P	98	96,221	164	166	129 | 127	129	91.2 | 88.5	131	82.7 | 84.5
64)	**Dibromochloromethane**		**432.44**	RL	**432**	10.58	-0.01	P	94	52,416	129	127	74.2 | 79.2	-		-	
65)	**1,2-Dibromoethane**		**475.22**	RL	**475**	10.66	0.00	P	90	54,135	107	109	98.5 | 89.0	188	3.68 | 2.80	-	
66)	**Chlorobenzene**		**534.67**	RL	**535**	11.06	0.00	P	97	175,931	112	77	58.3 | 61.4	114	32.2 | 33.1	-	
67)	**1,1,1,2-Tetrachloroethane**		**495.16**	RL	**495**	11.13	0.00	P	95	60,288	131	133	91.2 | 94.0	117	59.9 | 64.0	119	58.3 | 63.7
68)	**Ethylbenzene**		**559.54**	RL	**560**	11.15	0.00	P	97	316,462	91	106	31.4 | 32.6	51	9.55 | 7.80	-	
69)	**m- & p-Xylenes**		**1090.0**	RL	**1090**	11.23	-0.01	P	92	240,451	106	91	202 | 188	105	44.7 | 41.4	77	26.4 | 24.3
70)	**o-Xylene**		**523.55**	RL	**524**	11.51	-0.01	P	96	118,052	106	91	209 | 206	105	40.8 | 48.7	-	
71)	**Styrene**		**550.27**	RL	**550**	11.52	0.00	P	91	187,969	104	103	50.8 | 46.8	78	47.4 | 41.6	51	29.9 | 22.7
72)	**Bromoform**		**402.04**	RL	**402**	11.65	0.00	P	99	33,755	173	175	46.8 | 46.3	254	11.8 | 12.5	-	
73)	**Isopropylbenzene**		**582.77**	RL	**583**	11.76	-0.01	P	98	319,390	105	120	25.7 | 27.0	77	15.5 | 14.5	79	12.5 | 11.8
74)	1,4-Dichlorobenzene-d4		500	-	-	12.56	0.00	P	97	108,062	152	115	53.5 | 55.2	150	161 | 157	-	
75)	cis-1,4-dichloro-2-butene	X	No Cal.	-	-	(11.81)	-	-	95		75	53	0.00 | 106	89	0.00 | 47.5	-	
76)	4-Bromofluorobenzene (S)		587.29	Sur	-	11.86	0.00	P	95	87,725	95	174	80.1 | 75.6	176	77.0 | 73.8	75	50.7 | 47.6
77)	**1,1,2,2-Tetrachloroethane**		**431.39**	RL	**431**	11.95	-0.01	P	91	70,366	83	85	61.6 | 70.8	131	10.7 | 11.0	95	17.1 | 18.7
78)	**trans-1,4-Dichloro-2-butene**		**566.72**	RL	**567**	11.99	0.00	P	94	24,508	53	88	53.5 | 55.9	124	29.7 | 23.1	-	
79)	**1,2,3-Trichloropropane**		**470.23**	RL	**470**	11.98	0.00	P	99	28,025	110	75	267 | 269	39	79.9 | 79.2	-	
80)	**Bromobenzene**		**499.90**	RL	**500**	11.95	-0.01	P	94	71,510	156	158	100 | 94.7	-		-	
81)	**n-Propylbenzene**		**599.93**	RL	**600**	12.02	0.00	P	97	386,617	91	120	22.0 | 23.6	92	10.3 | 11.4	65	11.1 | 9.90
82)	**2-Chlorotoluene**		**513.87**	RL	**514**	12.07	-0.01	P	85	69,985	126	91	318 | 289	63	42.5 | 36.0	-	
83)	4-Ethyltoluene	X	No Cal.	-	-	(12.09)	-	-	85		105	120	0.00 | 29.9	77	0.00 | 10.6	-	
84)	**1,3,5-Trimethylbenzene**		**579.56**	RL	**580**	12.13	0.00	P	98	258,748	105	120	49.3 | 50.6	119	10.7 | 11.0	77	11.9 | 12.6
85)	**4-Chlorotoluene**		**563.80**	RL	**564**	12.14	-0.01	P	95	254,174	91	126	31.9 | 34.5	63	14.2 | 11.3	-	
86)	**tert-Butylbenzene**		**495.12**	RL	**495**	12.33	-0.01	P	83	58,795	134	119	377 | 340	91	241 | 215	-	
87)	**1,2,4-Trimethylbenzene**		**582.94**	RL	**583**	12.35	0.00	P	97	266,187	105	120	48.3 | 50.1	-		-	
88)	Pentachloroethane		15.837	ND	<86	12.34	-0.01	**F**	**57**	1,337	167	165	56.5 | 86.1	132	**84.0 | 42.9**	-	
89)	**sec-Butylbenzene**		**608.23**	RL	**608**	12.45	0.00	P	96	343,374	105	134	18.6 | 20.4	-		-	
90)	**4-Isopropyltoluene**		**590.85**	RL	**591**	12.54	0.00	P	97	291,065	119	134	25.3 | 28.5	91	22.4 | 22.4	-	
91)	**1,3-Dichlorobenzene**		**501.65**	RL	**502**	12.53	-0.01	P	97	141,603	146	148	62.2 | 63.8	111	37.5 | 35.3	-	
92)	**1,4-Dichlorobenzene**		**496.04**	RL	**496**	12.58	0.00	P	97	142,767	146	111	36.9 | 37.8	148	64.9 | 61.5	-	
93)	**n-Butylbenzene**		**620.52**	RL	**621**	12.77	0.00	P	95	153,258	92	91	174 | 179	134	45.0 | 50.5	-	
94)	**1,2-Dichlorobenzene**		**499.33**	RL	**499**	12.80	0.00	P	98	133,731	146	148	64.9 | 64.6	111	43.3 | 40.4	-	
95)	Hexachloroethane	X	No Cal.	-	-	(12.95)	-	-	**3**		201	117	0.00 | 129	199	0.00 | 65.0	203	0.00 | 64.5
96)	**1,2-Dibromo-3-chloropropane**		**475.08**	RL	**475**	13.23	-0.01	P	81	15,111	75	155	84.5 | 104	157	103 | 123	-	
97)	Nitrobenzene	X	No Cal.	-	-	(13.35)	-	-	78		123	51	0.00 | 62.1	77	0.00 | 146	-	
98)	**1,2,4-Trichlorobenzene**		**505.87**	RL	**506**	13.69	0.00	P	94	92,016	180	182	89.2 | 97.2	184	27.5 | 29.6	145	31.2 | 30.6
99)	**Hexachlorobutadiene**		**601.77**	RL	**602**	13.77	-0.01	P	96	38,076	225	227	56.4 | 59.6	260	24.9 | 22.3	223	62.0 | 59.4
100	**Naphthalene**		**512.93**	RL	**513**	13.82	-0.01	P	99	269,728	128	127	12.9 | 12.5	129	11.4 | 11.6	-	
101	**1,2,3-Trichlorobenzene**		**485.96**	RL	**486**	13.96	-0.01	P	92	85,979	180	182	101 | 91.8	184	32.8 | 29.8	145	32.2 | 29.8

Uses lowest known RLs; project RLs may be higher. Qualitative P/F based only on output ratios at apex and may not reflect full peak or analyst review.

For analyst review assistance only.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224012.D
Acq On : 22 Apr 2024 15:24
Operator :
Sample : MSAZ14434-001 @ 790uL (1:1 of 10.1g in 10mL)
Misc : PAV 1150,1149,1135H,1141B,1155A,1016B,1151B,1124B
ALS Vial : 7 Sample Multiplier: 50

Quant Time: Apr 22 15:56:05 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	6.241	168	123388	10.00	ppb		0.00
42) 1,4-Difluorobenzene	7.563	114	215259	10.00	ppb		0.00
50) Chlorobenzene-d5	11.036	117	194703	10.00	ppb		0.00
74) 1,4-Dichlorobenzene-d4	12.564	152	108062	10.00	ppb		0.00
System Monitoring Compounds							
35) Dibromofluoromethane (S)	6.099	113	58552	11.61	ppb		0.00
Spiked Amount 10.000			Recovery = 116.10%				
56) Toluene-d8 (S)	9.786	98	221962	11.63	ppb		0.00
Spiked Amount 10.000			Recovery = 116.30%				
76) 4-Bromofluorobenzene (S)	11.855	95	87725	11.75	ppb		0.00
Spiked Amount 10.000			Recovery = 117.50%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.380	85	58625	449.5723	ppb		89
3) Chloromethane	1.553	50	73217	427.6671	ppb		95
4) Vinyl chloride	1.655	62	78215	515.8068	ppb		100
5) Bromomethane	1.960	94	29602	303.8530	ppb		93
6) Chloroethane	2.052	64	28092	288.4447	ppb		97
7) Trichlorofluoromethane	2.336	101	98368	582.0902	ppb		100
8) Diethyl ether	2.652	74	37724	500.9386	ppb		97
9) 1,1-Dichloroethene	2.896	96	56778	542.9798	ppb		89
10) Freon 113	0.000		0	N.D. d			
11) Acetone	3.007	58	6623	460.6845	ppb		97
12) Iodomethane	3.058	142	101177	510.1107	ppb		99
13) Carbon disulfide	3.119	76	173891	512.3715	ppb		100
14) Allyl chloride	3.333	76	35632	517.0216	ppb		84
15) Methylene chloride	3.485	84	82643	563.8541	ppb		97
16) t-Butanol (TBA)	0.000		0	N.D.			
17) Acrylonitrile	3.821	52	21526	546.3250	ppb		98
18) Methyl t-butyl ether (...	3.872	73	184912	518.7126	ppb		99
19) trans-1,2-Dichloroethene	3.831	96	66838	552.5722	ppb		93
20) n-Hexane	0.000		0	N.D. d			
21) 1,1-Dichloroethane	4.411	63	114495	526.5068	ppb		99
22) Vinyl acetate	4.533	86	4639	186.7281	ppb	#	65
23) 2-chloro-1,3-butadiene	0.000		0	N.D. d			
24) Diisopropyl ether (DIPE)	0.000		0	N.D.			
25) Ethyl t-butyl ether (E...	0.000		0	N.D.			
26) 2-Butanone (MEK)	5.356	72	7580	482.5524	ppb	#	70
27) cis-1,2-Dichloroethene	5.285	96	71611	533.1682	ppb		92
28) 2,2-Dichloropropane	5.275	77	104067	604.5958	ppb		95
29) Propionitrile	5.438	54	10656	521.9678	ppb		81
30) Methyl acrylate	5.519	55	61187	508.6088	ppb		96
31) Methacrylonitrile	5.672	67	27200	526.5803	ppb		90
32) Bromochloromethane	5.672	128	33447	504.3600	ppb		89
33) Chloroform	5.834	83	116759	553.5140	ppb		94
34) Tetrahydrofuran	5.753	72	10109	476.3140	ppb		98
36) 1,1,1-Trichloroethane	6.099	97	111261	612.8816	ppb		97
37) 1-Chlorobutane	0.000		0	N.D. d			
38) 1,1-Dichloropropene	6.384	75	93466	654.5069	ppb		94
39) Carbon tetrachloride	6.384	117	92386	604.7538	ppb		94
40) Benzene	6.750	78	262089	554.9906	ppb		95
41) 1,2-Dichloroethane	6.800	62	88405	607.0628	ppb		95
43) t- Amyl methyl ether (...	0.000		0	N.D.			
44) Trichloroethene	8.031	95	68927	567.8376	ppb		91
45) 1,2-Dichloropropane	8.468	63	60325	494.1674	ppb		94
46) Methyl methacrylate	8.773	69	47027	454.7385	ppb		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224012.D
Acq On : 22 Apr 2024 15:24
Operator :
Sample : MSAZ14434-001 @ 790uL (1:1 of 10.1g in 10mL)
Misc : PAV 1150,1149,1135H,1141B,1155A,1016B,1151B,1124B
ALS Vial : 7 Sample Multiplier: 50

Quant Time: Apr 22 15:56:05 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

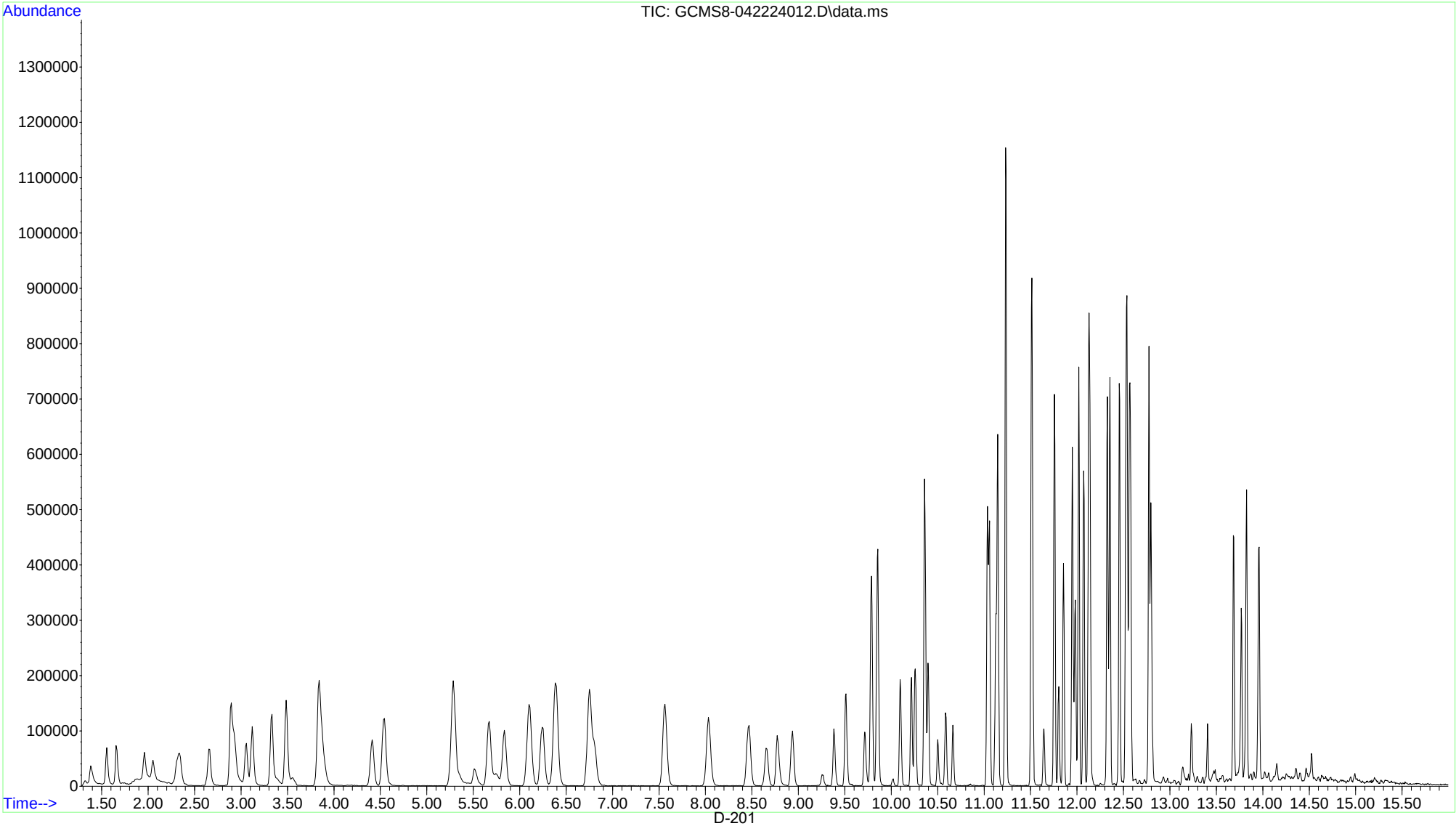
Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
47) Dibromomethane	8.651	93	36020	463.8525 ppb		97
48) Bromodichloromethane	8.936	83	77907	495.8153 ppb		99
49) 2-nitro-propane	9.261	43	16028	433.5263 ppb		98
51) Chloromethyl cyanide	0.000		0	N.D.		
52) 2-Chloroethyl vinyl ether	9.382	63	42063	499.6126 ppb		91
53) cis-1,3-Dichloropropene	9.513	75	91881	484.0268 ppb		96
54) 4-Methyl-2-pentanone	9.713	58	25446	424.2435 ppb		96
55) 1,1-Dichloro-2-propanone	0.000		0	N.D. d		
57) Toluene	9.855	92	162801	526.0888 ppb		96
58) trans-1,3-Dichloropropene	10.096	75	83960	487.6934 ppb		93
59) Ethyl methacrylate	10.217	69	79693	504.3494 ppb		96
60) 1,1,2-Trichloroethane	10.254	83	43745	473.2839 ppb		93
61) 1,3-Dichloropropane	10.395	76	99914	493.4463 ppb		97
62) 2-Hexanone	10.500	43	49560	469.4219 ppb		96
63) Tetrachloroethene	10.359	164	96221	912.4513 ppb		98
64) Dibromochloromethane	10.584	129	52416	432.4405 ppb		94
65) 1,2-Dibromoethane	10.663	107	54135	475.2162 ppb		90
66) Chlorobenzene	11.057	112	175931	534.6728 ppb		97
67) 1,1,1,2-Tetrachloroethane	11.125	131	60288	495.1562 ppb		95
68) Ethylbenzene	11.146	91	316462	559.5386 ppb		97
69) m- & p-Xylenes	11.230	106	240451	1089.9516 ppb		92
70) o-Xylene	11.509	106	118052	523.5465 ppb		96
71) Styrene	11.519	104	187969	550.2700 ppb		91
72) Bromoform	11.645	173	33755	402.0449 ppb		99
73) Isopropylbenzene	11.756	105	319390	582.7703 ppb		98
75) cis-1,4-dichloro-2-butene	0.000		0	N.D. d		
77) 1,1,2,2-Tetrachloroethane	11.950	83	70366	431.3913 ppb		91
78) trans-1,4-Dichloro-2-b...	11.987	53	24508	566.7209 ppb		94
79) 1,2,3-Trichloropropane	11.976	110	28025	470.2265 ppb		99
80) Bromobenzene	11.950	156	71510	499.9027 ppb		94
81) n-Propylbenzene	12.018	91	386617	599.9293 ppb		97
82) 2-Chlorotoluene	12.071	126	69985	513.8652 ppb		85
83) 4-Ethyltoluene	0.000		0	N.D. d		
84) 1,3,5-Trimethylbenzene	12.128	105	258748	579.5637 ppb		98
85) 4-Chlorotoluene	12.139	91	254174	563.8019 ppb		95
86) tert-Butylbenzene	12.328	134	58795	495.1241 ppb	#	83
87) 1,2,4-Trimethylbenzene	12.354	105	266187	582.9445 ppb		97
88) Pentachloroethane	12.344	167	1337	15.8367 ppb	#	57
89) sec-Butylbenzene	12.454	105	343374	608.2266 ppb		96
90) 4-Isopropyltoluene	12.538	119	291065	590.8463 ppb		97
91) 1,3-Dichlorobenzene	12.528	146	141603	501.6526 ppb		97
92) 1,4-Dichlorobenzene	12.580	146	142767	496.0369 ppb		97
93) n-Butylbenzene	12.774	92	153258	620.5210 ppb		95
94) 1,2-Dichlorobenzene	12.795	146	133731	499.3287 ppb		98
95) Hexachloroethane	0.000		0	N.D. d		
96) 1,2-Dibromo-3-chloropr...	13.231	75	15111	475.0830 ppb		81
97) Nitrobenzene	0.000		0	N.D. d		
98) 1,2,4-Trichlorobenzene	13.688	180	92016	505.8738 ppb		94
99) Hexachlorobutadiene	13.767	225	38076	601.7728 ppb		96
100) Naphthalene	13.825	128	269728	512.9350 ppb		99
101) 1,2,3-Trichlorobenzene	13.961	180	85979	485.9587 ppb		92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224012.D
Acq On : 22 Apr 2024 15:24
Operator :
Sample : MSAZ14434-001 @ 790uL (1:1 of 10.1g in 10mL)
Misc : PAV 1150,1149,1135H,1141B,1155A,1016B,1151B,1124B
ALS Vial : 7 Sample Multiplier: 50

Quant Time: Apr 22 15:56:05 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration



Volatile Organic Analysis Data Summary

Lab Name:	Orange Coast Analytical (Alliance TG) - Phoenix, AZ	Data File Name:	GCMS8-042224013.D
Lab Reference #:	NRE AZ14434	Project Name:	Nasa White Sands Test Facility
Lab Sample ID:	MSDAZ14434-001	Client Sample ID:	2404091330
Sample Type:	MSD	Date Sampled:	04/18/24 13:30
Analysis Method:	8260B	Date Received:	04/18/24 10:00
Prep. Method:	5035A	Date Extracted:	04/22/24 13:18
Initial Sample:	10.1g	Date Analyzed:	04/22/24 15:47
Sample Extract:	10mL	Analysis Multiplier:	50
Sample Loaded:	790uL	Dilution Factor:	1
Analysis Batch:	0422242		

Units: µg/kg

Analyte	CAS #	Qualifiers:	Result	R	Spike	% Recovery	QC Limits	RPD	Max RPD
Acetone	67-64-1		421	0	500	84	65-180	9	35
Acrylonitrile	107-13-1		516	0	500	103	56-142	6	30
Allyl chloride	107-05-1		514	0	500	103	70-130	1	30
Benzene	71-43-2		531	0	500	106	70-132	4	20
Bromobenzene	108-86-1		469	0	500	94	70-130	6	30
Bromochloromethane	74-97-5		469	0	500	94	65-135	7	30
Bromodichloromethane	75-27-4		468	0	500	94	65-135	6	30
Bromoform	75-25-2		370	0	500	74	65-135	8	30
Bromomethane	74-83-9	M7	263	0	500	53	60-145	14	35
2-Butanone (MEK)	78-93-3		478	0	500	96	50-150	1	35
tert-Butylbenzene	98-06-6		477	0	500	95	69-130	4	30
sec-Butylbenzene	135-98-8		564	0	500	113	60-130	8	30
n-Butylbenzene	104-51-8		578	0	500	116	60-135	7	30
Carbon disulfide	75-15-0		479	0	500	96	45-155	7	35
Carbon tetrachloride	56-23-5		558	0	500	112	65-135	8	30
Chlorobenzene	108-90-7		496	0	500	99	70-130	8	20
Chloroethane	75-00-3	M7	246	0	500	49	65-135	16	30
2-Chloroethyl vinyl ether	110-75-8		484	0	500	97	48-140	3	30
Chloroform	67-66-3		523	0	500	105	65-135	6	30
Chloromethane	74-87-3		412	0	500	82	60-135	4	30
2-Chlorotoluene	95-49-8		490	0	500	98	64-130	5	30
4-Chlorotoluene	106-43-4		538	0	500	108	64-130	5	30
1,2-Dibromo-3-chloropropane	96-12-8		454	0	500	91	65-135	5	30
Dibromochloromethane	124-48-1		410	0	500	82	65-135	5	30
1,2-Dibromoethane	106-93-4		458	0	500	92	70-130	4	30
Dibromomethane	74-95-3		445	0	500	89	65-135	4	30
trans-1,4-Dichloro-2-butene	110-57-6		542	0	500	108	64-131	5	20
1,2-Dichlorobenzene	95-50-1		458	0	500	92	65-130	9	25
1,4-Dichlorobenzene	106-46-7		462	0	500	92	69-132	7	25
1,3-Dichlorobenzene	541-73-1		466	0	500	93	70-130	7	30
Dichlorodifluoromethane	75-71-8		423	0	500	85	45-155	6	35
1,1-Dichloroethane	75-34-3		512	0	500	102	58-135	3	20
1,2-Dichloroethane	107-06-2		568	0	500	114	65-135	7	30
cis-1,2-Dichloroethene	156-59-2		510	0	500	102	70-130	4	30
trans-1,2-Dichloroethene	156-60-5		516	0	500	103	65-135	7	30
1,1-Dichloroethene	75-35-4		522	0	500	104	41-131	4	20
2,2-Dichloropropane	594-20-7		583	0	500	117	60-140	4	30
1,2-Dichloropropane	78-87-5		470	0	500	94	70-130	5	30
1,3-Dichloropropane	142-28-9		460	0	500	92	70-130	7	30
1,1-Dichloropropene	563-58-6		612	0	500	122	65-135	7	30
trans-1,3-Dichloropropene	10061-02-6		469	0	500	94	65-135	4	30
cis-1,3-Dichloropropene	10061-01-5		477	0	500	95	65-135	1	30
Diethyl ether	60-29-7		489	0	500	98	63-130	2	30

All values presented with any preparation, dilution, or unit conversions taken into account.

Volatile Organic Analysis Data Summary

Lab Name:	Orange Coast Analytical (Alliance TG) - Phoenix, AZ	Data File Name:	GCMS8-042224013.D
Lab Reference #:	NRE AZ14434	Project Name:	Nasa White Sands Test Facility
Lab Sample ID:	MSDAZ14434-001	Client Sample ID:	2404091330
Sample Type:	MSD	Date Sampled:	04/18/24 13:30
Analysis Method:	8260B	Date Received:	04/18/24 10:00
Prep. Method:	5035A	Date Extracted:	04/22/24 13:18
Initial Sample:	10.1g	Date Analyzed:	04/22/24 15:47
Sample Extract:	10mL	Analysis Multiplier:	50
Sample Loaded:	790uL	Dilution Factor:	1
Analysis Batch:	0422242		

Units: µg/kg

Analyte	CAS #	Qualifiers:	Result	R	Spike	% Recovery	QC Limits	RPD	Max RPD
Ethyl methacrylate	97-63-2		471	0	500	94	42-140	7	30
Ethylbenzene	100-41-4		523	0	500	105	70-130	7	30
Hexachlorobutadiene	87-68-3		575	0	500	115	60-145	5	30
2-Hexanone	591-78-6		422	0	500	84	50-135	11	35
Iodomethane	74-88-4		484	0	500	97	60-140	5	30
Isopropylbenzene	98-82-8		553	0	500	111	60-130	5	30
4-Isopropyltoluene	99-87-6		541	0	500	108	60-130	9	30
Methacrylonitrile	126-98-7		522	0	500	104	46-130	1	30
Methyl acrylate	96-33-3		478	0	500	96	48-130	6	30
Methyl methacrylate	80-62-6		430	0	500	86	55-130	6	30
Methyl t-butyl ether (MTBE)	1634-04-4		512	0	500	102	60-135	1	30
4-Methyl-2-pentanone	108-10-1		402	0	500	80	65-135	5	30
Naphthalene	91-20-3		500	0	500	100	60-141	3	30
Pentachloroethane	76-01-7	M2	0	0	500	0	70-130		20
Propionitrile	107-12-0		519	0	500	104	38-133	1	20
n-Propylbenzene	103-65-1		562	0	500	112	62-130	7	30
Styrene	100-42-5		505	0	500	101	65-135	9	30
1,1,1,2-Tetrachloroethane	630-20-6		449	0	500	90	70-130	10	30
1,1,2,2-Tetrachloroethane	79-34-5		401	0	500	80	65-135	7	30
Tetrachloroethene	127-18-4	M1	857	0	500	171	65-135	6	30
Tetrahydrofuran	109-99-9		443	0	500	89	43-130	7	20
Toluene	108-88-3		485	0	500	97	70-130	8	20
1,2,4-Trichlorobenzene	120-82-1		478	0	500	96	60-140	6	30
1,2,3-Trichlorobenzene	87-61-6		464	0	500	93	60-135	5	30
1,1,2-Trichloroethane	79-00-5		455	0	500	91	65-135	4	30
1,1,1-Trichloroethane	71-55-6		564	0	500	113	65-135	8	30
Trichloroethene	79-01-6		563	0	500	113	70-131	1	20
Trichlorofluoromethane	75-69-4		555	0	500	111	65-140	5	30
1,2,3-Trichloropropane	96-18-4		450	0	500	90	65-130	4	30
1,2,4-Trimethylbenzene	95-63-6		554	0	500	111	60-130	5	30
1,3,5-Trimethylbenzene	108-67-8		546	0	500	109	60-130	6	30
Vinyl acetate	108-05-4	M2	181	0	500	36	55-145	3	35
Vinyl chloride	75-01-4		461	0	500	92	60-140	11	30
o-Xylene	95-47-6		482	0	500	96	70-130	8	30
m- & p-Xylenes	179601-23-1		1020	0	1000	102	70-150	7	30

Surrogate(s)

Analyte	CAS #	Qualifiers:	% Recovery	QC Limits
4-Bromofluorobenzene	460-00-4		120	50-130
Dibromofluoromethane	1868-53-7		115	65-130
Toluene-d8	2037-26-5		116	59-130

All values presented with any preparation, dilution, or unit conversions taken into account.

8260 Quantitation Review Report

C:\msdchem\1\data\2024\04-APR\VB042224\GCMS8-042224013.D **MSD** 04/22/24 013

Sample Name: MSDAZ14434-001 @ 790uL (1:1 of 10.1g in 1
Data File Name: GCMS8-042224013.D
Date Acquired: 04/22/24 15:47
Vial Number: 8
Sample Multiplier: 50 **Dilution:** 1
Misc Info: PAV 1150,1149,1135H,1141B,1155A,1016B,1151B,1

Operator:
Data File Path: C:\msdchem\1\data\2024\04-APR\VB042
Instrument Method: VOC092623 INSTRUMENT SCAN.M
Quant. Method: VOC022324Final
Last Result Mod: 04/22/24 16:19
Last Cal Update: 02/26/24 12:39
Last Cal Mod: 02/26/24 12:39

#	Internal Standard	Response
1)	Pentafluorobenzene	124,545
42)	1,4-Difluorobenzene	216,490
50)	Chlorobenzene-d5	195,473
74)	1,4-Dichlorobenzene-d4	107,454

#	Surrogate	% Rec	P/F	Soil Range
35)	Dibromofluoromethane	**115**	P	65-130
56)	Toluene-d8	**116**	P	59-130
76)	4-Bromofluorobenzene	**120**	P	50-130

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
1)	Pentafluorobenzene		500	-	-	6.25	0.01	-	100	124,545	168	-		-		-	
2)	**Dichlorodifluoromethane**		**423.09**	RL	**423**	1.39	0.01	P	95	55,689	85	87	31.5 | 34.5	-		-	
3)	**Chloromethane**		**411.65**	RL	**412**	1.55	0.01	P	96	71,136	50	52	29.3 | 31.3	-		-	
4)	**Vinyl chloride**		**460.74**	RL	**461**	1.67	0.01	P	95	70,520	62	64	33.2 | 30.5	-		-	
5)	**Bromomethane**		**262.59**	RL	**263**	1.97	0.00	P	91	25,822	94	96	96.8 | 88.5	-		-	
6)	**Chloroethane**		**246.32**	RL	**246**	2.06	0.00	P	94	24,214	64	66	30.9 | 34.3	-		-	
7)	**Trichlorofluoromethane**		**555.18**	RL	**555**	2.34	-0.01	P	93	94,701	101	103	67.4 | 61.6	66	13.2 | 12.7	-	
8)	**Diethyl ether**		**488.63**	RL	**489**	2.66	0.01	P	97	37,142	74	45	100 | 103	59	126 | 129	-	
9)	**1,1-Dichloroethene**		**522.43**	RL	**522**	2.90	0.00	P	85	55,141	96	61	159 | 139	63	53.5 | 47.0	-	
10)	Freon 113	x	No Cal.	-	-	(2.90)	-	-	91		101	151	0.00 | 82.4	103	0.00 | 64.1	153	0.00 | 53.1
11)	**Acetone**		**421.48**	RL	**421**	3.02	0.05	P	79	6,167	58	43	303 | 266	-		-	
12)	**Iodomethane**		**483.69**	RL	**484**	3.06	0.00	P	97	96,836	142	127	42.3 | 40.6	141	13.9 | 12.9	-	
13)	**Carbon disulfide**		**479.50**	RL	**479**	3.13	0.01	P	100	164,260	76	78	9.28 | 9.20	-		-	
14)	**Allyl chloride**		**514.12**	RL	**514**	3.33	0.00	P	85	35,764	76	78	27.7 | 30.7	41	303 | 283	39	208 | 175
15)	**Methylene chloride**		**546.18**	RL	**546**	3.50	0.01	P	97	81,091	84	49	124 | 121	86	59.5 | 64.4	51	38.1 | 36.5
16)	t-Butanol (TBA)		No Cal.	-	-	(3.70)	-	-	0		59	57	0.00 | 8.40	-		-	
17)	**Acrylonitrile**		**515.87**	RL	**516**	3.83	0.02	P	98	20,454	52	53	122 | 120	51	37.7 | 41.7	-	
18)	**Methyl t-butyl ether (MTBE)**		**512.13**	RL	**512**	3.87	0.02	P	99	184,276	73	57	22.9 | 23.3	-		-	
19)	**trans-1,2-Dichloroethene**		**516.48**	RL	**516**	3.84	0.01	P	99	63,058	96	61	137 | 137	98	63.8 | 65.3	-	
20)	n-Hexane	x	No Cal.	-	-	(4.22)	-	-	**19**		57	43	0.00 | 64.9	41	0.00 | 72.0	56	0.00 | 47.3
21)	**1,1-Dichloroethane**		**512.04**	RL	**512**	4.42	0.01	P	94	112,393	63	65	30.1 | 33.7	83	12.2 | 15.0	-	
22)	**Vinyl acetate**		**180.73**	RL	**181**	4.54	0.02	P	**62**	4,515	86	43	787 | 949	-		-	
23)	2-chloro-1,3-butadiene	x	No Cal.	-	-	(4.54)	-	-	93		53	88	0.00 | 58.3	52	0.00 | 23.5	-	
24)	Diisopropyl ether (DIPE)		No Cal.	-	-	(4.57)	-	-	0		45	43	0.00 | 38.9	87	0.00 | 24.3	-	
25)	Ethyl t-butyl ether (ETBE)		No Cal.	-	-	(5.12)	-	-	0		59	57	0.00 | 31.8	87	0.00 | 34.1	-	
26)	**2-Butanone (MEK)**		**478.42**	RL	**478**	5.37	0.02	P	**66**	7,576	72	43	430 | 353	57	38.2 | 29.9	-	
27)	**cis-1,2-Dichloroethene**		**510.26**	RL	**510**	5.30	0.01	P	96	69,177	96	61	134 | 132	98	63.7 | 56.2	-	
28)	**2,2-Dichloropropane**		**582.65**	RL	**583**	5.29	0.01	P	98	101,230	77	97	20.6 | 22.0	79	29.9 | 30.5	-	
29)	**Propionitrile**		**518.54**	RL	**519**	5.47	0.01	P	98	10,678	54	52	12.0 | 11.3	55	14.5 | 15.7	-	
30)	**Methyl acrylate**		**477.68**	RL	**478**	5.53	0.02	P	99	57,916	55	85	17.3 | 17.1	-		-	
31)	**Methacrylonitrile**		**522.24**	RL	**522**	5.68	0.01	P	95	27,229	67	41	157 | 147	39	81.0 | 83.1	52	37.3 | 37.0
32)	**Bromochloromethane**		**468.91**	RL	**469**	5.67	0.01	P	97	31,388	128	49	166 | 167	130	129 | 134	-	
33)	**Chloroform**		**523.39**	RL	**523**	5.84	0.01	P	96	111,440	83	85	63.1 | 66.3	-		-	
34)	**Tetrahydrofuran**		**442.62**	RL	**443**	5.77	0.03	P	84	9,482	72	71	74.5 | 96.8	42	218 | 241	-	
35)	Dibromofluoromethane (S)		576.35	Sur	-	6.11	0.01	P	97	58,685	113	111	105 | 102	192	21.9 | 22.1	81	17.2 | 14.3
36)	**1,1,1-Trichloroethane**		**563.69**	RL	**564**	6.11	0.01	P	94	103,291	97	99	64.3 | 60.3	61	43.5 | 38.9	63	15.0 | 14.3
37)	1-Chlorobutane	x	No Cal.	-	-	(6.30)	-	-	**19**		56	49	0.00 | 3.40	-		-	
38)	**1,1-Dichloropropene**		**611.94**	RL	**612**	6.39	0.00	P	95	88,206	75	39	62.4 | 55.5	110	36.2 | 36.4	77	32.3 | 31.4
39)	**Carbon tetrachloride**		**557.71**	RL	**558**	6.39	0.01	P	91	85,998	117	119	91.2 | 100	-		-	
40)	**Benzene**		**530.84**	RL	**531**	6.76	0.01	P	95	253,034	78	51	17.2 | 15.3	-		-	
41)	**1,2-Dichloroethane**		**568.07**	RL	**568**	6.81	0.00	P	96	83,503	62	98	10.7 | 12.3	-		-	
42)	1,4-Difluorobenzene		500	-	-	7.56	0.00	-	100	216,490	114	-		-		-	
43)	t- Amyl methyl ether (TAME)		No Cal.	-	-	(7.05)	-	-	0		73	55	0.00 | 37.9	87	0.00 | 22.4	-	
44)	**Trichloroethene**		**562.59**	RL	**563**	8.04	0.01	P	89	68,681	95	132	94.0 | 115	130	103 | 113	97	64.6 | 64.2
45)	**1,2-Dichloropropane**		**470.36**	RL	**470**	8.48	0.02	P	96	57,747	63	112	4.28 | 5.70	76	45.1 | 47.7	-	

For analyst review assistance only.

8260 Quantitation Review Report

C:\msdchem\1\data\2024\04-APR\VB042224\GCMS8-042224013.D **MSD** 04/22/24 013

#	Name	MI	Conc. (ppb)	Det	Report Value	RT	RT Cal Diff	Ion P/F	Q Val	Response	Prim Ion	Q1 Ion	Q1 Act. | Exp.	Q2 Ion	Q2 Act. | Exp.	Q3 Ion	Q3 Act. | Exp.
46)	**Methyl methacrylate**		**430.20**	RL	**430**	8.78	0.01	P	96	44,642	69	41	126 | 133	100	38.8 | 40.0	39	64.2 | 64.9
47)	**Dibromomethane**		**445.00**	RL	**445**	8.66	0.01	P	91	34,754	93	174	121 | 107	95	85.7 | 82.1	-	
48)	**Bromodichloromethane**		**468.11**	RL	**468**	8.94	0.00	P	94	73,974	83	85	69.6 | 64.1	127	9.80 | 8.90	-	
49)	**2-nitro-propane**		**392.93**	QL	**393**	9.26	0.00	P	98	14,610	43	39	29.6 | 28.5	-		-	
50)	Chlorobenzene-d5		500	-	-	11.04	0.00	P	98	195,473	117	82	56.4 | 54.8	119	33.0 | 31.9	54	22.7 | 22.3
51)	Chloromethyl cyanide	x	No Cal.	-	-	(9.38)	-	-	1		75	48	0.00 | 39.0	40	0.00 | 44.5	-	
52)	**2-Chloroethyl vinyl ether**		**483.59**	RL	**484**	9.39	0.01	P	96	40,875	63	65	34.1 | 30.2	106	31.8 | 31.4	-	
53)	**cis-1,3-Dichloropropene**		**476.87**	RL	**477**	9.51	0.00	P	93	90,881	75	77	31.2 | 33.4	39	55.5 | 47.1	110	22.7 | 21.7
54)	**4-Methyl-2-pentanone**		**402.19**	RL	**402**	9.72	0.00	P	91	24,190	58	41	61.5 | 52.2	100	43.4 | 44.0	85	49.4 | 42.0
55)	1,1-Dichloro-2-propanone		No Cal.	-	-	(9.71)	-	-	0		83	63	0.00 | 56.4	91	0.00 | 22.8	-	
56)	Toluene-d8 (S)		580.15	Sur	-	9.79	0.00	P	93	222,230	98	100	63.9 | 71.5	42	12.8 | 12.7	70	10.1 | 11.3
57)	**Toluene**		**484.99**	RL	**485**	9.85	0.00	P	97	150,676	92	91	165 | 168	65	20.8 | 18.5	39	18.5 | 16.3
58)	**trans-1,3-Dichloropropene**		**469.26**	RL	**469**	10.10	0.00	P	93	81,106	75	77	30.7 | 30.2	39.1	52.7 | 43.2	110	23.5 | 24.5
59)	**Ethyl methacrylate**		**471.39**	RL	**471**	10.22	0.00	P	96	74,779	69	41	72.4 | 69.2	99	16.9 | 18.5	86	13.9 | 16.1
60)	**1,1,2-Trichloroethane**		**454.73**	RL	**455**	10.26	0.00	P	94	42,196	83	97	118 | 125	61	76.0 | 70.3	85	58.8 | 59.8
61)	**1,3-Dichloropropane**		**460.40**	RL	**460**	10.40	0.00	P	97	93,592	76	41	65.1 | 61.7	78	32.8 | 32.5	39	22.0 | 22.8
62)	**2-Hexanone**		**422.43**	RL	**422**	10.51	0.01	P	92	44,615	43	58	54.7 | 59.4	57	15.4 | 21.2	100	12.1 | 16.0
63)	**Tetrachloroethene**		**856.69**	RL	**857**	10.36	0.00	P	95	90,698	164	166	129 | 127	129	94.3 | 88.5	131	93.0 | 84.5
64)	**Dibromochloromethane**		**410.41**	RL	**410**	10.59	0.00	P	95	49,942	129	127	74.9 | 79.2	-		-	
65)	**1,2-Dibromoethane**		**458.17**	RL	**458**	10.67	0.01	P	95	52,399	107	109	93.7 | 89.0	188	4.50 | 2.80	-	
66)	**Chlorobenzene**		**495.88**	RL	**496**	11.06	0.00	P	96	163,812	112	77	64.8 | 61.4	114	31.0 | 33.1	-	
67)	**1,1,1,2-Tetrachloroethane**		**448.58**	RL	**449**	11.13	0.00	P	97	54,833	131	133	94.2 | 94.0	117	70.9 | 64.0	119	64.6 | 63.7
68)	**Ethylbenzene**		**522.81**	RL	**523**	11.15	0.00	P	96	296,860	91	106	30.7 | 32.6	51	10.1 | 7.80	-	
69)	**m- & p-Xylenes**		**1020.1**	RL	**1020**	11.24	0.00	P	95	225,936	106	91	196 | 188	105	44.8 | 41.4	77	26.2 | 24.3
70)	**o-Xylene**		**481.54**	RL	**482**	11.51	-0.01	P	96	109,009	106	91	211 | 206	105	43.0 | 48.7	-	
71)	**Styrene**		**504.71**	RL	**505**	11.52	0.00	P	93	173,089	104	103	49.5 | 46.8	78	45.3 | 41.6	51	29.4 | 22.7
72)	**Bromoform**		**370.21**	RL	**370**	11.65	0.00	P	96	31,135	173	175	49.3 | 46.3	254	12.6 | 12.5	-	
73)	**Isopropylbenzene**		**553.06**	RL	**553**	11.76	-0.01	P	99	304,304	105	120	27.2 | 27.0	77	14.7 | 14.5	79	11.5 | 11.8
74)	1,4-Dichlorobenzene-d4		500	-	-	12.56	0.00	P	90	107,454	152	115	63.1 | 55.2	150	169 | 157	-	
75)	cis-1,4-dichloro-2-butene	x	No Cal.	-	-	(11.81)	-	-	99		75	53	0.00 | 106	89	0.00 | 47.5	-	
76)	4-Bromofluorobenzene (S)		598.71	Sur	-	11.86	0.00	P	98	88,928	95	174	74.6 | 75.6	176	73.7 | 73.8	75	50.7 | 47.6
77)	**1,1,2,2-Tetrachloroethane**		**401.10**	RL	**401**	11.96	0.00	P	95	65,057	83	85	65.7 | 70.8	131	10.7 | 11.0	95	17.3 | 18.7
78)	**trans-1,4-Dichloro-2-butene**		**541.73**	RL	**542**	11.99	0.00	P	88	23,276	53	88	44.2 | 55.9	124	22.7 | 23.1	-	
79)	**1,2,3-Trichloropropane**		**449.74**	RL	**450**	11.98	0.00	P	98	26,653	110	75	270 | 269	39	73.8 | 79.2	-	
80)	**Bromobenzene**		**469.01**	RL	**469**	11.95	-0.01	P	99	66,713	156	158	95.9 | 94.7	-		-	
81)	**n-Propylbenzene**		**561.98**	RL	**562**	12.02	0.00	P	96	360,121	91	120	21.6 | 23.6	92	9.92 | 11.4	65	10.6 | 9.90
82)	**2-Chlorotoluene**		**489.75**	RL	**490**	12.08	0.00	P	95	66,326	126	91	300 | 289	63	36.9 | 36.0	-	
83)	4-Ethyltoluene	x	No Cal.	-	-	(12.09)	-	-	86		105	120	0.00 | 29.9	77	0.00 | 10.6	-	
84)	**1,3,5-Trimethylbenzene**		**545.87**	RL	**546**	12.13	0.00	P	97	242,335	105	120	48.0 | 50.6	119	10.7 | 11.0	77	12.3 | 12.6
85)	**4-Chlorotoluene**		**537.56**	RL	**538**	12.14	-0.01	P	93	240,980	91	126	29.8 | 34.5	63	12.4 | 11.3	-	
86)	**tert-Butylbenzene**		**477.02**	RL	**477**	12.33	-0.01	P	86	56,326	134	119	366 | 340	91	241 | 215	-	
87)	**1,2,4-Trimethylbenzene**		**553.74**	RL	**554**	12.35	0.00	P	98	251,431	105	120	48.7 | 50.1	-		-	
88)	Pentachloroethane		11.042	ND	<86	12.34	-0.01	**F**	**48**	927	167	165	106 | 86.1	132	**115 | 42.9**	-	
89)	**sec-Butylbenzene**		**564.28**	RL	**564**	12.46	0.00	P	97	316,771	105	134	21.9 | 20.4	-		-	
90)	**4-Isopropyltoluene**		**540.65**	RL	**541**	12.54	0.00	P	97	264,838	119	134	26.0 | 28.5	91	22.4 | 22.4	-	
91)	**1,3-Dichlorobenzene**		**466.04**	RL	**466**	12.53	-0.01	P	98	130,809	146	148	63.2 | 63.8	111	38.5 | 35.3	-	
92)	**1,4-Dichlorobenzene**		**461.75**	RL	**462**	12.58	0.00	P	94	132,150	146	111	37.3 | 37.8	148	68.8 | 61.5	-	
93)	**n-Butylbenzene**		**577.59**	RL	**578**	12.77	0.00	P	96	141,852	92	91	175 | 179	134	44.9 | 50.5	-	
94)	**1,2-Dichlorobenzene**		**458.06**	RL	**458**	12.80	0.00	P	95	121,989	146	148	63.4 | 64.6	111	46.5 | 40.4	-	
95)	Hexachloroethane		No Cal.	-	-	(12.95)	-	-	0		201	117	0.00 | 129	199	0.00 | 65.0	203	0.00 | 64.5
96)	**1,2-Dibromo-3-chloropropane**		**453.99**	RL	**454**	13.23	-0.01	P	76	14,359	75	155	76.5 | 104	157	99.3 | 123	-	
97)	Nitrobenzene	x	No Cal.	-	-	(13.35)	-	-	79		123	51	0.00 | 62.1	77	0.00 | 146	-	
98)	**1,2,4-Trichlorobenzene**		**478.03**	RL	**478**	13.69	0.00	P	97	86,463	180	182	93.7 | 97.2	184	30.1 | 29.6	145	31.5 | 30.6
99)	**Hexachlorobutadiene**		**575.38**	RL	**575**	13.77	0.00	P	96	36,201	225	227	56.7 | 59.6	260	26.7 | 22.3	223	57.2 | 59.4
100	**Naphthalene**		**500.50**	RL	**500**	13.82	-0.01	P	100	261,707	128	127	12.6 | 12.5	129	11.5 | 11.6	-	
101	**1,2,3-Trichlorobenzene**		**464.20**	RL	**464**	13.96	-0.01	P	94	81,668	180	182	98.1 | 91.8	184	32.8 | 29.8	145	32.2 | 29.8

Uses lowest known RLs; project RLs may be higher. Qualitative P/F based only on output ratios at apex and may not reflect full peak or analyst review.

For analyst review assistance only.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224013.D
Acq On : 22 Apr 2024 15:47
Operator :
Sample : MSDAZ14434-001 @ 790uL (1:1 of 10.1g in 10mL)
Misc : PAV 1150,1149,1135H,1141B,1155A,1016B,1151B,1124B
ALS Vial : 8 Sample Multiplier: 50

Quant Time: Apr 22 16:17:28 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	6.251	168	124545	10.00	ppb		0.01
42) 1,4-Difluorobenzene	7.563	114	216490	10.00	ppb		0.00
50) Chlorobenzene-d5	11.036	117	195473	10.00	ppb		0.00
74) 1,4-Dichlorobenzene-d4	12.564	152	107454	10.00	ppb		0.00
System Monitoring Compounds							
35) Dibromofluoromethane (S)	6.109	113	58685	11.53	ppb		0.00
Spiked Amount 10.000			Recovery = 115.30%				
56) Toluene-d8 (S)	9.786	98	222230	11.60	ppb		0.00
Spiked Amount 10.000			Recovery = 116.00%				
76) 4-Bromofluorobenzene (S)	11.855	95	88928	11.97	ppb		0.00
Spiked Amount 10.000			Recovery = 119.70%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.391	85	55689	423.0900	ppb		95
3) Chloromethane	1.553	50	71136	411.6518	ppb		96
4) Vinyl chloride	1.665	62	70520	460.7400	ppb		95
5) Bromomethane	1.970	94	25822	262.5904	ppb		91
6) Chloroethane	2.062	64	24214	246.3163	ppb		94
7) Trichlorofluoromethane	2.336	101	94701	555.1849	ppb		93
8) Diethyl ether	2.662	74	37142	488.6284	ppb		97
9) 1,1-Dichloroethene	2.896	96	55141	522.4261	ppb		85
10) Freon 113	0.000		0	N.D. d			
11) Acetone	3.018	58	6167	421.4848	ppb	#	79
12) Iodomethane	3.058	142	96836	483.6889	ppb		97
13) Carbon disulfide	3.129	76	164260	479.4974	ppb		100
14) Allyl chloride	3.333	76	35764	514.1161	ppb	#	85
15) Methylene chloride	3.495	84	81091	546.1825	ppb		97
16) t-Butanol (TBA)	0.000		0	N.D.			
17) Acrylonitrile	3.831	52	20454	515.8680	ppb		98
18) Methyl t-butyl ether (...	3.872	73	184276	512.1263	ppb		99
19) trans-1,2-Dichloroethene	3.841	96	63058	516.4787	ppb		99
20) n-Hexane	0.000		0	N.D. d			
21) 1,1-Dichloroethane	4.421	63	112393	512.0393	ppb		94
22) Vinyl acetate	4.543	86	4515	180.7272	ppb	#	62
23) 2-chloro-1,3-butadiene	0.000		0	N.D. d			
24) Diisopropyl ether (DIPE)	0.000		0	N.D.			
25) Ethyl t-butyl ether (E...	0.000		0	N.D.			
26) 2-Butanone (MEK)	5.367	72	7576	478.4225	ppb	#	66
27) cis-1,2-Dichloroethene	5.295	96	69177	510.2615	ppb		96
28) 2,2-Dichloropropane	5.285	77	101230	582.6503	ppb		98
29) Propionitrile	5.468	54	10678	518.5414	ppb		98
30) Methyl acrylate	5.529	55	57916	477.6754	ppb		99
31) Methacrylonitrile	5.682	67	27229	522.2447	ppb		95
32) Bromochloromethane	5.672	128	31388	468.9146	ppb		97
33) Chloroform	5.845	83	111440	523.3907	ppb		96
34) Tetrahydrofuran	5.773	72	9482	442.6207	ppb		84
36) 1,1,1-Trichloroethane	6.109	97	103291	563.6931	ppb		94
37) 1-Chlorobutane	0.000		0	N.D. d			
38) 1,1-Dichloropropene	6.394	75	88206	611.9351	ppb		95
39) Carbon tetrachloride	6.394	117	85998	557.7087	ppb		91
40) Benzene	6.760	78	253034	530.8384	ppb		95
41) 1,2-Dichloroethane	6.811	62	83503	568.0748	ppb		96
43) t- Amyl methyl ether (...	0.000		0	N.D.			
44) Trichloroethene	8.041	95	68681	562.5937	ppb		89
45) 1,2-Dichloropropane	8.478	63	57747	470.3592	ppb		96
46) Methyl methacrylate	8.783	69	44642	430.2019	ppb		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224013.D
Acq On : 22 Apr 2024 15:47
Operator :
Sample : MSDAZ14434-001 @ 790uL (1:1 of 10.1g in 10mL)
Misc : PAV 1150,1149,1135H,1141B,1155A,1016B,1151B,1124B
ALS Vial : 8 Sample Multiplier: 50

Quant Time: Apr 22 16:17:28 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration

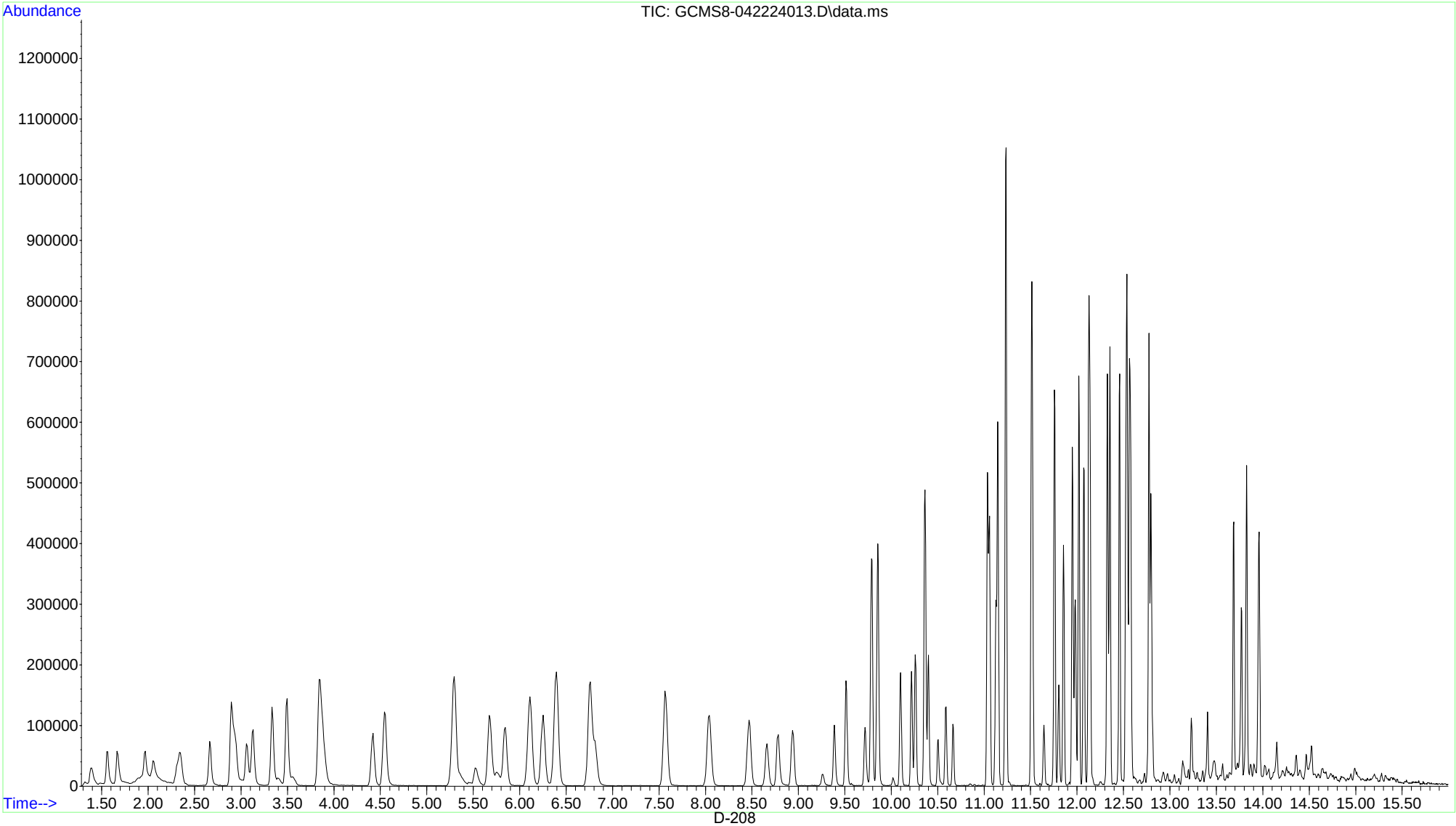
Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
47) Dibromomethane	8.661	93	34754	445.0046 ppb		91
48) Bromodichloromethane	8.936	83	73974	468.1080 ppb		94
49) 2-nitro-propane	9.261	43	14610	392.9251 ppb		98
51) Chloromethyl cyanide	0.000		0	N.D. d		
52) 2-Chloroethyl vinyl ether	9.387	63	40875	483.5894 ppb		96
53) cis-1,3-Dichloropropene	9.513	75	90881	476.8730 ppb		93
54) 4-Methyl-2-pentanone	9.718	58	24190	402.1873 ppb		91
55) 1,1-Dichloro-2-propanone	0.000		0	N.D.		
57) Toluene	9.854	92	150676	484.9890 ppb		97
58) trans-1,3-Dichloropropene	10.101	75	81106	469.2597 ppb		93
59) Ethyl methacrylate	10.217	69	74779	471.3862 ppb		96
60) 1,1,2-Trichloroethane	10.259	83	42196	454.7267 ppb		94
61) 1,3-Dichloropropane	10.401	76	93592	460.4030 ppb		97
62) 2-Hexanone	10.506	43	44615	422.4342 ppb		92
63) Tetrachloroethene	10.364	164	90698	856.6894 ppb		95
64) Dibromochloromethane	10.590	129	49942	410.4066 ppb		95
65) 1,2-Dibromoethane	10.668	107	52399	458.1650 ppb		95
66) Chlorobenzene	11.057	112	163812	495.8809 ppb		96
67) 1,1,1,2-Tetrachloroethane	11.125	131	54833	448.5793 ppb		97
68) Ethylbenzene	11.146	91	296860	522.8126 ppb		96
69) m- & p-Xylenes	11.236	106	225936	1020.1216 ppb		95
70) o-Xylene	11.509	106	109009	481.5376 ppb		96
71) Styrene	11.519	104	173089	504.7135 ppb		93
72) Bromoform	11.645	173	31135	370.2085 ppb		96
73) Isopropylbenzene	11.756	105	304304	553.0567 ppb		99
75) cis-1,4-dichloro-2-butene	0.000		0	N.D. d		
77) 1,1,2,2-Tetrachloroethane	11.955	83	65057	401.1003 ppb		95
78) trans-1,4-Dichloro-2-b...	11.987	53	23276	541.7280 ppb		88
79) 1,2,3-Trichloropropane	11.976	110	26653	449.7364 ppb		98
80) Bromobenzene	11.950	156	66713	469.0073 ppb		99
81) n-Propylbenzene	12.018	91	360121	561.9763 ppb		96
82) 2-Chlorotoluene	12.076	126	66326	489.7545 ppb		95
83) 4-Ethyltoluene	0.000		0	N.D. d		
84) 1,3,5-Trimethylbenzene	12.128	105	242335	545.8719 ppb		97
85) 4-Chlorotoluene	12.139	91	240980	537.5598 ppb		93
86) tert-Butylbenzene	12.328	134	56326	477.0161 ppb		86
87) 1,2,4-Trimethylbenzene	12.354	105	251431	553.7447 ppb		98
88) Pentachloroethane	12.344	167	927	11.0424 ppb	#	48
89) sec-Butylbenzene	12.459	105	316771	564.2789 ppb		97
90) 4-Isopropyltoluene	12.538	119	264838	540.6488 ppb		97
91) 1,3-Dichlorobenzene	12.528	146	130809	466.0351 ppb		98
92) 1,4-Dichlorobenzene	12.580	146	132150	461.7466 ppb		94
93) n-Butylbenzene	12.774	92	141852	577.5894 ppb		96
94) 1,2-Dichlorobenzene	12.795	146	121989	458.0633 ppb		95
95) Hexachloroethane	0.000		0	N.D.		
96) 1,2-Dibromo-3-chloropr...	13.231	75	14359	453.9948 ppb		76
97) Nitrobenzene	0.000		0	N.D. d		
98) 1,2,4-Trichlorobenzene	13.688	180	86463	478.0348 ppb		97
99) Hexachlorobutadiene	13.772	225	36201	575.3767 ppb		96
100) Naphthalene	13.825	128	261707	500.4977 ppb		100
101) 1,2,3-Trichlorobenzene	13.961	180	81668	464.2044 ppb		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2024\04-APR\VB042224\
Data File : GCMS8-042224013.D
Acq On : 22 Apr 2024 15:47
Operator :
Sample : MSDAZ14434-001 @ 790uL (1:1 of 10.1g in 10mL)
Misc : PAV 1150,1149,1135H,1141B,1155A,1016B,1151B,1124B
ALS Vial : 8 Sample Multiplier: 50

Quant Time: Apr 22 16:17:28 2024
Quant Method : C:\msdchem\1\methods\2023\VOC022324Final.M
Quant Title : 8260 Calibration
QLast Update : Mon Feb 26 12:39:51 2024
Response via : Initial Calibration



D-208

Extraction Log Sheet

Extraction Method: 5035 **Extraction Batch ID:** TT0418243

Solvent: Methanol **Solvent Lot:** AZR1082

Surrogate: -- **Surrogate Lot:** --

Spike: -- **Spike Lot:** -- **Analyst:** TT Initials

#	Lab Sample ID	Extraction Date	Initial Volume	Final Volume	Extraction Time	Analysis Method	Matrix	Extraction Comments
MB	MBTT0418243	04/18/24	5.0	5.0	10:40	8260B	Soil	
1	AZ14434-001	04/09/24	10.1	10	13:30	8260B	Soil	Non-OCA VOA
2	AZ14434-002	04/10/24	6.7	10	9:10	8260B	Soil	Non-OCA VOA
3	AZ14434-003	04/10/24	11.8	10	13:20	8260B	Soil	Non-OCA VOA
4	AZ14434-004	04/10/24	10.7	10	13:30	8260B	Soil	Non-OCA VOA

5030C-8260B VOCs (GCMS) Analysis Prep Log

Prep Method	**5030C**
Ana. Method	**8260B**
Analyst (init)	**TP**

Analytical Batch ID[1]	**TP0422242**
Load Date	**04/22/24**

	Lab Sample #	Prep. Solvent	5035 Extract	Identify Dilution Factors (Post Preparation/Extraction Here)[2] Dilution 1	Tray Loc.	Time	Run #	Dilution 2	Tray Loc.	Time	Run #	Dilution 3	Tray Loc.	Time	Run #	Chlorine?	pH ≤2?	Comments/Notes additional dilutions?, special CC range?, etc.,
MB	MBTT0418243	**MeOH**	**X**	**1**	3	11:54	8									NA	NA	
LCS	LCSTP0422242	**MeOH**		**1**	4	13:18	9									NA	NA	
LCSD	LCSDTP0422242	**MeOH**		**1**	5	13:18	10									NA	NA	
1	AZ14431-001	**MeOH**	**X**	**40**	16	14:02	21									NA	NA	20.0uL (1:40 of 5g in 5mL)
2	AZ14432-001	**MeOH**	**X**	**10**	17	14:03	22									NA	NA	80uL (1:10 of 5g in 5mL)
3	AZ14432-002	**MeOH**	**X**	**10**	18	14:04	23									NA	NA	80uL (1:10 of 5g in 5mL)
4	AZ14434-001	**MeOH**	**X**	**1**	6	13:14	11									NA	NA	790uL (1:1 of 10.1g in 10mL)
5	AZ14434-002	**MeOH**	**X**	**1**	9	13:37	14									NA	NA	1190uL (1:1 of 6.7g in 10mL)
6	AZ14434-003	**MeOH**	**X**	**1**	10	13:38	15									NA	NA	680uL (1:1 of 11.8g in 10mL)
7	AZ14434-004	**MeOH**	**X**	**1**	11	13:39	16									NA	NA	750uL (1:1 of 10.7g in 10mL)
8	AZ14438-001	**MeOH**	**X**	**1**	14	13:41	19									NA	NA	630uL (1:1 of 6.4g in 5mL)
9	AZ14439-001	**MeOH**	**X**	**1**	15	13:41	20									NA	NA	680uL (1:1 of 5.9g in 5mL)
10	MBTT0417241	**MeOH**	**X**	**1**	12	13:20	17									NA	NA	
11	MBTT0419241	**MeOH**	**X**	**1**	13	13:20	18									NA	NA	
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
MS	AZ1443MS-001	**MeOH**		**1**	7	13:18	12									NA	NA	790uL (1:1 of 10.1g in 10mL)
MSD	AZ1443MS-001	**MeOH**		**1**	8	13:18	13									NA	NA	790uL (1:1 of 10.1g in 10mL)

Surr/Spike Std	Std Lot#	Std Conc. µg/mL	Std Amt mL	Spiked Amount mL	[Spike][3] µg/L ppb
ISTD Mix	PAV 1150	10	0.005	5	10
Surrogate Mix	PAV 1149	10	0.005	5	10
QC Spike Mix	PAV 1135H,1141B,1155A, 1124B,1016B,1159A	100	0.004	40	10 x DF x EDF[4]
MeOH / MeOH Extract	AZR 1082 / NA	--	0.800	39.2	EDF=50
Water 5035 Extract	NA	--	VOA[4]	40	EDF=1

[1] = Complete new form for each batch of samples. Multiple dilutions may be included in the same batch as long as they run during same shift.

[2] = Use this section to indicate dilutions made on extracts. Use comment section if more space is needed.

[3] = EDF => dilution factor (extraction based). DF = Dilution factor (post extraction)

[4] = Waters at full are the arbitrary VOA volume (~42mL). Water spikes and dilutions are performed on 40mL final volume.

[4] = As reported. Post spike means it's 10 µg/mL at the instrument.

Sequence Name: C:\msdchem\1\sequence\2024\04-Apr\042224.s
Comment:
Operator:
Data Path: C:\MSDCHEM\1\DATA\2024\04-APR\VB042224\
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

Sequence Barcode Options
( ) On Mismatch, Inject Anyway
( ) On Mismatch, Don't Inject
(X) Barcode Disabled

Line		Sample Name/Misc Info
1) Blank	1	BFBTP0422241
Datafile		GCMS8-042224001
Method		VOC092623 INSTRUMENT SCAN
2) Spike	2	CCVTP0422241
Datafile		GCMS8-042224002
Method		VOC092623 INSTRUMENT SCAN
3) Blank	3	MBTT0418243 @ 800uL
Datafile		GCMS8-042224003
Method		VOC092623 INSTRUMENT SCAN
4) Spike	4	LCSTP0422241 @ 800uL
Datafile		GCMS8-042224004
Method		VOC092623 INSTRUMENT SCAN
5) Spike	5	LCSDTP0422241 @ 800uL
Datafile		GCMS8-042224005
Method		VOC092623 INSTRUMENT SCAN
6) Blank	1	BFBTP0422242 - Oven Inserts R
Datafile		GCMS8-042224006
Method		VOC092623 INSTRUMENT SCAN
7) Spike	2	CCVTP0422242
Datafile		GCMS8-042224007
Method		VOC092623 INSTRUMENT SCAN
8) Blank	3	MBTT0418243 @ 800uL
Datafile		GCMS8-042224008
Method		VOC092623 INSTRUMENT SCAN
9) Spike	4	LCSTP0422242 @ 800uL
Datafile		GCMS8-042224009
Method		VOC092623 INSTRUMENT SCAN
10) Spike	5	LCSDTP0422242 @ 800uL
Datafile		GCMS8-042224010
Method		VOC092623 INSTRUMENT SCAN
11) Sample	6	AZ14434-001 @ 790uL (1:1 of 1
Datafile		GCMS8-042224011
Method		VOC092623 INSTRUMENT SCAN
12) Spike	7	MSAZ14434-001 @ 790uL (1:1 of
Datafile		GCMS8-042224012
Method		VOC092623 INSTRUMENT SCAN
13) Spike	8	MSDAZ14434-001 @ 790uL (1:1 o
Datafile		GCMS8-042224013
Method		VOC092623 INSTRUMENT SCAN
14) Sample	9	AZ14434-002 @ 1190uL (1:1 of
Datafile		GCMS8-042224014
Method		VOC092623 INSTRUMENT SCAN
15) Sample	10	AZ14434-003 @ 680uL (1:1 of 1
Datafile		GCMS8-042224015
Method		VOC092623 INSTRUMENT SCAN
16) Sample	11	AZ14434-004 @ 750uL (1:1 of 1
Datafile		GCMS8-042224016
Method		VOC092623 INSTRUMENT SCAN
17) Blank	12	MBTT0417241 @ 800uL
Datafile		GCMS8-042224017
Method		VOC092623 INSTRUMENT SCAN
18) Blank	13	MBTT0419241 @ 800uL
Datafile		GCMS8-042224018
Method		VOC092623 INSTRUMENT SCAN
19) Sample	14	AZ14438-001 @ 630uL (1:1 of 6
Datafile		GCMS8-042224019
Method		VOC092623 INSTRUMENT SCAN
20) Sample	15	AZ14439-001 @ 680uL (1:1 of 5
Datafile		GCMS8-042224020
Method		VOC092623 INSTRUMENT SCAN

```
21) Sample        16  AZ14431-001 @ 20.0uL (1:40 of
     Datafile         GCMS8-042224021
     Method           VOC092623 INSTRUMENT SCAN
22) Sample        17  AZ14432-001 @ 80uL (1:10 of 5
     Datafile         GCMS8-042224022
     Method           VOC092623 INSTRUMENT SCAN
23) Sample        18  AZ14432-002 @ 80uL (1:10 of 5
     Datafile         GCMS8-042224023
     Method           VOC092623 INSTRUMENT SCAN
24) Blank          1  Blank
     Datafile         GCMS8-042224024
     Method           VOC092623 INSTRUMENT SCAN
```

Summit Environmental Technologies, Inc.
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May 03, 2024

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

RE: 23EC043B

Dear Jerry Williams:

Order No.: 24041390

Summit Environmental Technologies, Inc. received 4 sample(s) on 4/18/2024 for the analyses presented in the following report.

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

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

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

Sincerely,

Salwa A. Najjar

Project Manager

3310 Win St.
Cuyahoga Falls, Ohio 44223

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

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Case Narrative

WO#: **24041390**
Date: **5/3/2024**

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

WorkOrder Narrative:
24041390: This report in its entirety consists of the following documents: Cover Letter, Case Narrative, Analytical Results, QC Summary Report, Applicable Accreditation Information, Chain-of-Custody, Cooler Receipt Form, and other applicable forms as necessary. All documents contain the Summit Environmental Technologies, Inc., Work Order Number assigned to this report.

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

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

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

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

Analytical Sequence Sample Notes:
24041390-001A Anions_S(9056): Sample and Sample Duplicate exhibited high RPD for Nitrogen, Nitrate due to detections < PQL.

24041390-001A Mtl-ICP_S(6010D): Corresponding MS/MSD exhibited low recoveries and high RPD possibly due to spiking error. LCS-74731 demonstrates control.

24041390-001A through 004A SVOC-MSTR_S(8270E): CCV demonstrated high recoveries for several analytes, indicating possible high bias. Sample was ND for these analytes.

24041390-001A through 004A DX-Full_S(8290): LCS-74842 exhibited high recoveries for several

analytes. Sample is ND for these analytes.;
TEQ was calculated based on the compounds detected plus the 1/2 of PQL of non-detected compounds.

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Workorder Sample Summary

WO#: **24041390**

03-May-24

CLIENT: Navarro Research & Engineering Inc.

Project: 23EC043B

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
24041390-001	300-002-GSV (1331-1333)		4/9/2024 1:31:00 PM	4/18/2024 9:20:00 AM	Solid
24041390-002	300-002-GSV (0911-0913)		4/10/2024 9:11:00 AM	4/18/2024 9:20:00 AM	Solid
24041390-003	300-002-GSV (1321-1323)		4/10/2024 1:21:00 PM	4/18/2024 9:20:00 AM	Solid
24041390-004	300-002-GSV (1331-1333)		4/10/2024 1:31:00 PM	4/18/2024 9:20:00 AM	Solid

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Analytical Laboratories

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Analytical Report

(consolidated)

WO#: **24041390**

Date Reported: **5/3/2024**

CLIENT: Navarro Research & Engineering Inc. **Collection Date:** 4/9/2024 1:31:00 PM

Project: 23EC043B

Lab ID: 24041390-001 **Matrix:** SOLID

Client Sample ID: 300-002-GSV (1331-1333)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
MERCURY ANALYSIS (7471)				**SW7471**	**SW7471A**	Analyst: **JJF**
Mercury	ND	42		µg/Kg	1	4/19/2024 11:26:00 AM
HRMS DIOXIN ANALYSIS BY SW8290				**SW8290**	**SW8290**	Analyst: **RIS**
HRMS DIOXIN ANALYSIS - FULL LIST (8290A)						
2378-TCDF	ND	1.07		ng/Kg	1	5/1/2024 9:35:30 PM
12378-PeCDF	ND	3.39	QL+	ng/Kg	1	5/1/2024 9:35:30 PM
23478-PeCDF	ND	2.03	QL+	ng/Kg	1	5/1/2024 9:35:30 PM
123478-HxCDF	ND	5.33		ng/Kg	1	5/1/2024 9:35:30 PM
123678-HxCDF	ND	3.39		ng/Kg	1	5/1/2024 9:35:30 PM
234678-HxCDF	ND	3.10		ng/Kg	1	5/1/2024 9:35:30 PM
123789-HxCDF	ND	3.20		ng/Kg	1	5/1/2024 9:35:30 PM
1234678-HpCDF	ND	4.07		ng/Kg	1	5/1/2024 9:35:30 PM
1234789-HpCDF	ND	4.55		ng/Kg	1	5/1/2024 9:35:30 PM
OCDF	ND	48.4		ng/Kg	1	5/1/2024 9:35:30 PM
2378-TCDD	ND	1.45		ng/Kg	1	5/1/2024 9:35:30 PM
12378-PeCDD	ND	5.23		ng/Kg	1	5/1/2024 9:35:30 PM
123478-HxCDD	ND	4.94		ng/Kg	1	5/1/2024 9:35:30 PM
123678-HxCDD	ND	4.65		ng/Kg	1	5/1/2024 9:35:30 PM
123789-HxCDD	ND	3.78		ng/Kg	1	5/1/2024 9:35:30 PM
1234678-HpCDD	ND	4.84		ng/Kg	1	5/1/2024 9:35:30 PM
OCDD	ND	48.4		ng/Kg	1	5/1/2024 9:35:30 PM
Totals-Tetrafurans	ND	3.88		ng/Kg	1	5/1/2024 9:35:30 PM
Totals-Tetradioxins	ND	3.88		ng/Kg	1	5/1/2024 9:35:30 PM
Totals-Pentafurans	ND	3.88		ng/Kg	1	5/1/2024 9:35:30 PM
Totals-Pentadioxins	ND	3.88		ng/Kg	1	5/1/2024 9:35:30 PM
Totals-Hexafurans	ND	3.88		ng/Kg	1	5/1/2024 9:35:30 PM
Totals-Hexadioxins	ND	3.88		ng/Kg	1	5/1/2024 9:35:30 PM
Totals-Heptafurans	ND	3.88		ng/Kg	1	5/1/2024 9:35:30 PM
Totals-Heptadioxins	ND	3.88		ng/Kg	1	5/1/2024 9:35:30 PM
TEQ	5.25			ng/Kg	1	5/1/2024 9:35:30 PM
Surr: 13C-2378-TCDF	46.3	10 - 110		%Rec	1	5/1/2024 9:35:30 PM
Surr: 13C-12378-PeCDF	52.4	10 - 104		%Rec	1	5/1/2024 9:35:30 PM
Surr: 13C-123478-HxCDF	52.7	10 - 134		%Rec	1	5/1/2024 9:35:30 PM
Surr: 13C-1234789-HpCDF	55.3	10 - 125		%Rec	1	5/1/2024 9:35:30 PM

Qualifiers:

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

Original

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC. Analytical Laboratories

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Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **24041390**

Date Reported: **5/3/2024**

CLIENT: Navarro Research & Engineering Inc. **Collection Date:** 4/9/2024 1:31:00 PM

Project: 23EC043B

Lab ID: 24041390-001 **Matrix:** SOLID

Client Sample ID: 300-002-GSV (1331-1333)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HRMS DIOXIN ANALYSIS BY SW8290				**SW8290**	**SW8290**	Analyst: **RIS**
HRMS DIOXIN ANALYSIS - FULL LIST (8290A)						
Surr: 13C-1234-TCDD	100	99 - 101		%Rec	1	5/1/2024 9:35:30 PM
Surr: 13C-2378-TCDD	52.7	10 - 106		%Rec	1	5/1/2024 9:35:30 PM
Surr: 13C-12378-PeCDD	53.4	10 - 109		%Rec	1	5/1/2024 9:35:30 PM
Surr: 13C-123678-HxCDD	73.6	10 - 126		%Rec	1	5/1/2024 9:35:30 PM
Surr: 13C-1234678-HpCDD	43.5	10 - 104		%Rec	1	5/1/2024 9:35:30 PM
Surr: 13C-OCDD	52.5	10 - 117		%Rec	1	5/1/2024 9:35:30 PM
Surr: 13C-123789-HxCDD	100	99 - 101		%Rec	1	5/1/2024 9:35:30 PM
Surr: 37Cl-2378-TCDD	40.6	10 - 116		%Rec	1	5/1/2024 9:35:30 PM
METALS ANALYSIS (6010D)				**SW6010**	**SW3050B**	Analyst: **RJE**
Antimony	ND	2.25	QM-	mg/Kg	1	4/21/2024 6:29:00 PM
Boron	ND	9.01	QM-	mg/Kg	1	4/21/2024 6:29:00 PM
Chromium	ND	2.25	QM-	mg/Kg	1	4/21/2024 6:29:00 PM
Cobalt	ND	2.25	QM-	mg/Kg	1	4/21/2024 6:29:00 PM
Copper	ND	7.21	QM-	mg/Kg	1	4/21/2024 6:29:00 PM
Lead	5.67	2.25	QM-	mg/Kg	1	4/21/2024 6:29:00 PM
Magnesium	47700	9010		mg/Kg	1000	4/23/2024 9:53:00 AM
Silver	ND	1.35	QM-	mg/Kg	1	4/21/2024 6:29:00 PM
Thallium	ND	0.901	QM-QMR	mg/Kg	1	4/21/2024 6:29:00 PM
Zinc	55.7	2.25	QM-	mg/Kg	1	4/21/2024 6:29:00 PM
SVOC BY SW8270E				**SW8270**	**SW3546**	Analyst: **SAM**
SVOC BY 8270E						
1,2,4-Trichlorobenzene	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
1,2-Dichlorobenzene	ND	0.149		mg/Kg	1	4/24/2024 5:21:00 PM
1,2-Diphenylhydrazine	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
1,3-Dichlorobenzene	ND	0.149		mg/Kg	1	4/24/2024 5:21:00 PM
1,4-Dichlorobenzene	ND	0.149		mg/Kg	1	4/24/2024 5:21:00 PM
1-Methylnaphthalene	ND	0.149		mg/Kg	1	4/24/2024 5:21:00 PM
2,4,5-Trichlorophenol	ND	0.149		mg/Kg	1	4/24/2024 5:21:00 PM
2,4,6-Trichlorophenol	ND	0.149		mg/Kg	1	4/24/2024 5:21:00 PM
2,4-Dichlorophenol	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
2,4-Dimethylphenol	ND	0.149		mg/Kg	1	4/24/2024 5:21:00 PM

Qualifiers:

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

Original

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Analytical Report

(consolidated)

WO#: **24041390**

Date Reported: **5/3/2024**

CLIENT: Navarro Research & Engineering Inc. **Collection Date:** 4/9/2024 1:31:00 PM

Project: 23EC043B

Lab ID: 24041390-001 **Matrix:** SOLID

Client Sample ID: 300-002-GSV (1331-1333)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
SVOC BY SW8270E				**SW8270**	**SW3546**	Analyst: **SAM**
SVOC BY 8270E						
2,4-Dinitrophenol	ND	0.249	QC+	mg/Kg	1	4/24/2024 5:21:00 PM
2,4-Dinitrotoluene	ND	0.149		mg/Kg	1	4/24/2024 5:21:00 PM
2,6-Dinitrotoluene	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
2-Chloronaphthalene	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
2-Chlorophenol	ND	0.149		mg/Kg	1	4/24/2024 5:21:00 PM
2-Methylnaphthalene	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
o-Cresol	ND	0.149		mg/Kg	1	4/24/2024 5:21:00 PM
2-Nitroaniline	ND	0.149		mg/Kg	1	4/24/2024 5:21:00 PM
2-Nitrophenol	ND	0.149	QC+	mg/Kg	1	4/24/2024 5:21:00 PM
3,3´-Dichlorobenzidine	ND	0.498		mg/Kg	1	4/24/2024 5:21:00 PM
m&p-Cresol	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
3-Nitroaniline	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
4,6-Dinitro-o-cresol	ND	0.498	QC+	mg/Kg	1	4/24/2024 5:21:00 PM
4-Bromophenyl phenyl ether	ND	0.149		mg/Kg	1	4/24/2024 5:21:00 PM
p-Chloro-m-cresol	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
4-Chloroaniline	ND	0.149		mg/Kg	1	4/24/2024 5:21:00 PM
4-Chlorophenyl phenyl ether	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
4-Nitroaniline	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
4-Nitrophenol	ND	0.249	QC+	mg/Kg	1	4/24/2024 5:21:00 PM
Acenaphthene	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
Acenaphthylene	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
Aniline	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
Anthracene	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
Benzidine	ND	0.498	QC+	mg/Kg	1	4/24/2024 5:21:00 PM
Benzo(a)anthracene	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
Benzo(a)pyrene	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
Benzo(g,h,i)perylene	ND	0.149		mg/Kg	1	4/24/2024 5:21:00 PM
Benzo(k)fluoranthene	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
Benzo(b)fluoranthene	ND	0.149		mg/Kg	1	4/24/2024 5:21:00 PM
Benzyl alcohol	ND	0.249	QC+	mg/Kg	1	4/24/2024 5:21:00 PM
Bis(2-chloroethoxy)methane	ND	0.149		mg/Kg	1	4/24/2024 5:21:00 PM
Bis(2-chloroethyl) ether	ND	0.149		mg/Kg	1	4/24/2024 5:21:00 PM
Bis(2-chloroisopropyl) ether	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
Bis(2-ethylhexyl) phthalate	ND	1.49		mg/Kg	1	4/24/2024 5:21:00 PM

Qualifiers:

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

Original

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC. Analytical Laboratories

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

Analytical Report

(consolidated)

WO#: **24041390**

Date Reported: **5/3/2024**

CLIENT: Navarro Research & Engineering Inc. **Collection Date:** 4/9/2024 1:31:00 PM

Project: 23EC043B

Lab ID: 24041390-001 **Matrix:** SOLID

Client Sample ID: 300-002-GSV (1331-1333)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
SVOC BY SW8270E				**SW8270**	**SW3546**	Analyst: **SAM**
SVOC BY 8270E						
Butyl benzyl phthalate	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
Chrysene	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
Di-n-butyl phthalate	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
Di-n-octyl phthalate	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
Dibenzo (a,h) anthracene	ND	0.149		mg/Kg	1	4/24/2024 5:21:00 PM
Dibenzofuran	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
Diethyl phthalate	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
Dimethyl phthalate	ND	0.498		mg/Kg	1	4/24/2024 5:21:00 PM
Fluoranthene	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
Fluorene	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
Hexachlorobenzene	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
Hexachlorobutadiene	ND	0.149		mg/Kg	1	4/24/2024 5:21:00 PM
Hexachloroethane	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
Isophorone	ND	0.149	QC+	mg/Kg	1	4/24/2024 5:21:00 PM
N-Nitrosodi-n-propylamine	ND	0.149		mg/Kg	1	4/24/2024 5:21:00 PM
N-Nitrosodimethylamine	ND	0.149		mg/Kg	1	4/24/2024 5:21:00 PM
N-Nitrosodiphenylamine	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
Naphthalene	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
Nitrobenzene	ND	0.249	QC+	mg/Kg	1	4/24/2024 5:21:00 PM
Pentachlorophenol	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
Phenanthrene	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
Phenol	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
Pyrene	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
Pyridine	ND	0.249		mg/Kg	1	4/24/2024 5:21:00 PM
Surr: 2,4,6-Tribromophenol	71.2	10 - 154		%Rec	1	4/24/2024 5:21:00 PM
Surr: 2-Fluorobiphenyl	70.7	16 - 150		%Rec	1	4/24/2024 5:21:00 PM
Surr: 2-Fluorophenol	77.9	14 - 135		%Rec	1	4/24/2024 5:21:00 PM
Surr: Nitrobenzene-d5	84.2	10 - 139		%Rec	1	4/24/2024 5:21:00 PM
Surr: p-Terphenyl-d14	88.4	10 - 196		%Rec	1	4/24/2024 5:21:00 PM
Surr: Phenol-d6	84.2	20 - 142		%Rec	1	4/24/2024 5:21:00 PM
ANIONS ANALYSIS BY IC (SW-846: 9056)				**SW9056A**		Analyst: **TAL**

Qualifiers:

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

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Analytical Report

(consolidated)

WO#: **24041390**

Date Reported: **5/3/2024**

CLIENT: Navarro Research & Engineering Inc. **Collection Date:** 4/9/2024 1:31:00 PM

Project: 23EC043B

Lab ID: 24041390-001 **Matrix:** SOLID

Client Sample ID: 300-002-GSV (1331-1333)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANIONS ANALYSIS BY IC (SW-846: 9056)				**SW9056A**		Analyst: **TAL**
Nitrate	ND	1.00	QDR	mg/Kg	10	4/19/2024 12:25:00 PM
Nitrite	ND	1.00		mg/Kg	10	4/19/2024 12:25:00 PM

Qualifiers:

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

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Analytical Report

(consolidated)

WO#: **24041390**

Date Reported: **5/3/2024**

CLIENT: Navarro Research & Engineering Inc. **Collection Date:** 4/10/2024 9:11:00 AM

Project: 23EC043B

Lab ID: 24041390-002 **Matrix:** SOLID

Client Sample ID: 300-002-GSV (0911-0913)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
MERCURY ANALYSIS (7471)				**SW7471**	**SW7471A**	Analyst: **JJF**
Mercury	ND	41		µg/Kg	1	4/19/2024 11:28:00 AM
HRMS DIOXIN ANALYSIS BY SW8290				**SW8290**	**SW8290**	Analyst: **RIS**
HRMS DIOXIN ANALYSIS - FULL LIST (8290A)						
2378-TCDF	ND	1.07		ng/Kg	1	5/1/2024 10:39:30 PM
12378-PeCDF	ND	3.42	QL+	ng/Kg	1	5/1/2024 10:39:30 PM
23478-PeCDF	ND	2.05	QL+	ng/Kg	1	5/1/2024 10:39:30 PM
123478-HxCDF	ND	5.37		ng/Kg	1	5/1/2024 10:39:30 PM
123678-HxCDF	ND	3.42		ng/Kg	1	5/1/2024 10:39:30 PM
234678-HxCDF	ND	3.12		ng/Kg	1	5/1/2024 10:39:30 PM
123789-HxCDF	ND	3.22		ng/Kg	1	5/1/2024 10:39:30 PM
1234678-HpCDF	ND	4.10		ng/Kg	1	5/1/2024 10:39:30 PM
1234789-HpCDF	ND	4.59		ng/Kg	1	5/1/2024 10:39:30 PM
OCDF	ND	48.8		ng/Kg	1	5/1/2024 10:39:30 PM
2378-TCDD	ND	1.46		ng/Kg	1	5/1/2024 10:39:30 PM
12378-PeCDD	ND	5.27		ng/Kg	1	5/1/2024 10:39:30 PM
123478-HxCDD	ND	4.98		ng/Kg	1	5/1/2024 10:39:30 PM
123678-HxCDD	ND	4.69		ng/Kg	1	5/1/2024 10:39:30 PM
123789-HxCDD	ND	3.81		ng/Kg	1	5/1/2024 10:39:30 PM
1234678-HpCDD	ND	4.88		ng/Kg	1	5/1/2024 10:39:30 PM
OCDD	ND	48.8		ng/Kg	1	5/1/2024 10:39:30 PM
Totals-Tetrafurans	ND	3.91		ng/Kg	1	5/1/2024 10:39:30 PM
Totals-Tetradioxins	ND	3.91		ng/Kg	1	5/1/2024 10:39:30 PM
Totals-Pentafurans	ND	3.91		ng/Kg	1	5/1/2024 10:39:30 PM
Totals-Pentadioxins	ND	3.91		ng/Kg	1	5/1/2024 10:39:30 PM
Totals-Hexafurans	ND	3.91		ng/Kg	1	5/1/2024 10:39:30 PM
Totals-Hexadioxins	ND	3.91		ng/Kg	1	5/1/2024 10:39:30 PM
Totals-Heptafurans	ND	3.91		ng/Kg	1	5/1/2024 10:39:30 PM
Totals-Heptadioxins	ND	3.91		ng/Kg	1	5/1/2024 10:39:30 PM
TEQ	5.29			ng/Kg	1	5/1/2024 10:39:30 PM
Surr: 13C-2378-TCDF	55.3	10 - 110		%Rec	1	5/1/2024 10:39:30 PM
Surr: 13C-12378-PeCDF	65.5	10 - 104		%Rec	1	5/1/2024 10:39:30 PM
Surr: 13C-123478-HxCDF	60.7	10 - 134		%Rec	1	5/1/2024 10:39:30 PM
Surr: 13C-1234789-HpCDF	76.3	10 - 125		%Rec	1	5/1/2024 10:39:30 PM

Qualifiers:

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

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Analytical Report

(consolidated)

WO#: **24041390**

Date Reported: **5/3/2024**

CLIENT: Navarro Research & Engineering Inc. **Collection Date:** 4/10/2024 9:11:00 AM

Project: 23EC043B

Lab ID: 24041390-002 **Matrix:** SOLID

Client Sample ID: 300-002-GSV (0911-0913)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HRMS DIOXIN ANALYSIS BY SW8290				**SW8290**	**SW8290**	Analyst: **RIS**
HRMS DIOXIN ANALYSIS - FULL LIST (8290A)						
Surr: 13C-1234-TCDD	100	99 - 101		%Rec	1	5/1/2024 10:39:30 PM
Surr: 13C-2378-TCDD	61.7	10 - 106		%Rec	1	5/1/2024 10:39:30 PM
Surr: 13C-12378-PeCDD	66.4	10 - 109		%Rec	1	5/1/2024 10:39:30 PM
Surr: 13C-123678-HxCDD	85.1	10 - 126		%Rec	1	5/1/2024 10:39:30 PM
Surr: 13C-1234678-HpCDD	66.7	10 - 104		%Rec	1	5/1/2024 10:39:30 PM
Surr: 13C-OCDD	90.9	10 - 117		%Rec	1	5/1/2024 10:39:30 PM
Surr: 13C-123789-HxCDD	100	99 - 101		%Rec	1	5/1/2024 10:39:30 PM
Surr: 37Cl-2378-TCDD	60.4	10 - 116		%Rec	1	5/1/2024 10:39:30 PM
METALS ANALYSIS (6010D)				**SW6010**	**SW3050B**	Analyst: **RJE**
Antimony	ND	2.40		mg/Kg	1	4/21/2024 6:40:00 PM
Boron	9.75	9.62		mg/Kg	1	4/21/2024 6:40:00 PM
Chromium	5.57	2.40		mg/Kg	1	4/21/2024 6:40:00 PM
Cobalt	ND	2.40		mg/Kg	1	4/21/2024 6:40:00 PM
Copper	ND	7.69		mg/Kg	1	4/21/2024 6:40:00 PM
Lead	3.63	2.40		mg/Kg	1	4/21/2024 6:40:00 PM
Magnesium	36700	9620		mg/Kg	1000	4/23/2024 9:57:00 AM
Silver	ND	1.44		mg/Kg	1	4/21/2024 6:40:00 PM
Thallium	ND	0.962		mg/Kg	1	4/21/2024 6:40:00 PM
Zinc	28.7	2.40		mg/Kg	1	4/21/2024 6:40:00 PM
SVOC BY SW8270E				**SW8270**	**SW3546**	Analyst: **SAM**
SVOC BY 8270E						
1,2,4-Trichlorobenzene	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
1,2-Dichlorobenzene	ND	0.147		mg/Kg	1	4/24/2024 5:59:00 PM
1,2-Diphenylhydrazine	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
1,3-Dichlorobenzene	ND	0.147		mg/Kg	1	4/24/2024 5:59:00 PM
1,4-Dichlorobenzene	ND	0.147		mg/Kg	1	4/24/2024 5:59:00 PM
1-Methylnaphthalene	ND	0.147		mg/Kg	1	4/24/2024 5:59:00 PM
2,4,5-Trichlorophenol	ND	0.147		mg/Kg	1	4/24/2024 5:59:00 PM
2,4,6-Trichlorophenol	ND	0.147		mg/Kg	1	4/24/2024 5:59:00 PM
2,4-Dichlorophenol	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
2,4-Dimethylphenol	ND	0.147		mg/Kg	1	4/24/2024 5:59:00 PM

Qualifiers:

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

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Analytical Report

(consolidated)

WO#: **24041390**

Date Reported: **5/3/2024**

CLIENT: Navarro Research & Engineering Inc. **Collection Date:** 4/10/2024 9:11:00 AM

Project: 23EC043B

Lab ID: 24041390-002 **Matrix:** SOLID

Client Sample ID: 300-002-GSV (0911-0913)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
SVOC BY SW8270E				**SW8270**	**SW3546**	Analyst: **SAM**
SVOC BY 8270E						
2,4-Dinitrophenol	ND	0.246	QC+	mg/Kg	1	4/24/2024 5:59:00 PM
2,4-Dinitrotoluene	ND	0.147		mg/Kg	1	4/24/2024 5:59:00 PM
2,6-Dinitrotoluene	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
2-Chloronaphthalene	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
2-Chlorophenol	ND	0.147		mg/Kg	1	4/24/2024 5:59:00 PM
2-Methylnaphthalene	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
o-Cresol	ND	0.147		mg/Kg	1	4/24/2024 5:59:00 PM
2-Nitroaniline	ND	0.147		mg/Kg	1	4/24/2024 5:59:00 PM
2-Nitrophenol	ND	0.147	QC+	mg/Kg	1	4/24/2024 5:59:00 PM
3,3´-Dichlorobenzidine	ND	0.491		mg/Kg	1	4/24/2024 5:59:00 PM
m&p-Cresol	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
3-Nitroaniline	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
4,6-Dinitro-o-cresol	ND	0.491	QC+	mg/Kg	1	4/24/2024 5:59:00 PM
4-Bromophenyl phenyl ether	ND	0.147		mg/Kg	1	4/24/2024 5:59:00 PM
p-Chloro-m-cresol	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
4-Chloroaniline	ND	0.147		mg/Kg	1	4/24/2024 5:59:00 PM
4-Chlorophenyl phenyl ether	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
4-Nitroaniline	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
4-Nitrophenol	ND	0.246	QC+	mg/Kg	1	4/24/2024 5:59:00 PM
Acenaphthene	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
Acenaphthylene	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
Aniline	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
Anthracene	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
Benzidine	ND	0.491	QC+	mg/Kg	1	4/24/2024 5:59:00 PM
Benzo(a)anthracene	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
Benzo(a)pyrene	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
Benzo(g,h,i)perylene	ND	0.147		mg/Kg	1	4/24/2024 5:59:00 PM
Benzo(k)fluoranthene	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
Benzo(b)fluoranthene	ND	0.147		mg/Kg	1	4/24/2024 5:59:00 PM
Benzyl alcohol	ND	0.246	QC+	mg/Kg	1	4/24/2024 5:59:00 PM
Bis(2-chloroethoxy)methane	ND	0.147		mg/Kg	1	4/24/2024 5:59:00 PM
Bis(2-chloroethyl) ether	ND	0.147		mg/Kg	1	4/24/2024 5:59:00 PM
Bis(2-chloroisopropyl) ether	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
Bis(2-ethylhexyl) phthalate	ND	1.47		mg/Kg	1	4/24/2024 5:59:00 PM

Qualifiers:

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

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Analytical Report

(consolidated)

WO#: **24041390**

Date Reported: **5/3/2024**

CLIENT: Navarro Research & Engineering Inc. **Collection Date:** 4/10/2024 9:11:00 AM

Project: 23EC043B

Lab ID: 24041390-002 **Matrix:** SOLID

Client Sample ID: 300-002-GSV (0911-0913)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
SVOC BY SW8270E				**SW8270**	**SW3546**	Analyst: **SAM**
SVOC BY 8270E						
Butyl benzyl phthalate	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
Chrysene	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
Di-n-butyl phthalate	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
Di-n-octyl phthalate	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
Dibenzo (a,h) anthracene	ND	0.147		mg/Kg	1	4/24/2024 5:59:00 PM
Dibenzofuran	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
Diethyl phthalate	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
Dimethyl phthalate	ND	0.491		mg/Kg	1	4/24/2024 5:59:00 PM
Fluoranthene	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
Fluorene	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
Hexachlorobenzene	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
Hexachlorobutadiene	ND	0.147		mg/Kg	1	4/24/2024 5:59:00 PM
Hexachloroethane	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
Isophorone	ND	0.147	QC+	mg/Kg	1	4/24/2024 5:59:00 PM
N-Nitrosodi-n-propylamine	ND	0.147		mg/Kg	1	4/24/2024 5:59:00 PM
N-Nitrosodimethylamine	ND	0.147		mg/Kg	1	4/24/2024 5:59:00 PM
N-Nitrosodiphenylamine	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
Naphthalene	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
Nitrobenzene	ND	0.246	QC+	mg/Kg	1	4/24/2024 5:59:00 PM
Pentachlorophenol	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
Phenanthrene	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
Phenol	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
Pyrene	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
Pyridine	ND	0.246		mg/Kg	1	4/24/2024 5:59:00 PM
Surr: 2,4,6-Tribromophenol	79.3	10 - 154		%Rec	1	4/24/2024 5:59:00 PM
Surr: 2-Fluorobiphenyl	79.5	16 - 150		%Rec	1	4/24/2024 5:59:00 PM
Surr: 2-Fluorophenol	83.4	14 - 135		%Rec	1	4/24/2024 5:59:00 PM
Surr: Nitrobenzene-d5	92.5	10 - 139		%Rec	1	4/24/2024 5:59:00 PM
Surr: p-Terphenyl-d14	90.1	10 - 196		%Rec	1	4/24/2024 5:59:00 PM
Surr: Phenol-d6	90.5	20 - 142		%Rec	1	4/24/2024 5:59:00 PM
ANIONS ANALYSIS BY IC (SW-846: 9056)				**SW9056A**		Analyst: **TAL**

Qualifiers:

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

Original

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Analytical Laboratories

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Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **24041390**

Date Reported: **5/3/2024**

CLIENT: Navarro Research & Engineering Inc. **Collection Date:** 4/10/2024 9:11:00 AM

Project: 23EC043B

Lab ID: 24041390-002 **Matrix:** SOLID

Client Sample ID: 300-002-GSV (0911-0913)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANIONS ANALYSIS BY IC (SW-846: 9056)				**SW9056A**		Analyst: **TAL**
Nitrate	ND	1.00		mg/Kg	10	4/19/2024 1:45:00 PM
Nitrite	ND	1.00		mg/Kg	10	4/19/2024 1:45:00 PM

Qualifiers:

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

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Analytical Report

(consolidated)

WO#: **24041390**

Date Reported: **5/3/2024**

CLIENT: Navarro Research & Engineering Inc. **Collection Date:** 4/10/2024 1:21:00 PM

Project: 23EC043B

Lab ID: 24041390-003 **Matrix:** SOLID

Client Sample ID: 300-002-GSV (1321-1323)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
MERCURY ANALYSIS (7471)				**SW7471**	**SW7471A**	Analyst: **JJF**
Mercury	ND	48		µg/Kg	1	4/19/2024 11:37:00 AM
HRMS DIOXIN ANALYSIS BY SW8290				**SW8290**	**SW8290**	Analyst: **RIS**
HRMS DIOXIN ANALYSIS - FULL LIST (8290A)						
2378-TCDF	ND	1.07		ng/Kg	1	5/1/2024 11:43:30 PM
12378-PeCDF	ND	3.39	QL+	ng/Kg	1	5/1/2024 11:43:30 PM
23478-PeCDF	ND	2.03	QL+	ng/Kg	1	5/1/2024 11:43:30 PM
123478-HxCDF	ND	5.33		ng/Kg	1	5/1/2024 11:43:30 PM
123678-HxCDF	ND	3.39		ng/Kg	1	5/1/2024 11:43:30 PM
234678-HxCDF	ND	3.10		ng/Kg	1	5/1/2024 11:43:30 PM
123789-HxCDF	ND	3.20		ng/Kg	1	5/1/2024 11:43:30 PM
1234678-HpCDF	ND	4.07		ng/Kg	1	5/1/2024 11:43:30 PM
1234789-HpCDF	ND	4.55		ng/Kg	1	5/1/2024 11:43:30 PM
OCDF	ND	48.4		ng/Kg	1	5/1/2024 11:43:30 PM
2378-TCDD	ND	1.45		ng/Kg	1	5/1/2024 11:43:30 PM
12378-PeCDD	ND	5.23		ng/Kg	1	5/1/2024 11:43:30 PM
123478-HxCDD	ND	4.94		ng/Kg	1	5/1/2024 11:43:30 PM
123678-HxCDD	ND	4.65		ng/Kg	1	5/1/2024 11:43:30 PM
123789-HxCDD	ND	3.78		ng/Kg	1	5/1/2024 11:43:30 PM
1234678-HpCDD	ND	4.84		ng/Kg	1	5/1/2024 11:43:30 PM
OCDD	ND	48.4		ng/Kg	1	5/1/2024 11:43:30 PM
Totals-Tetrafurans	ND	3.88		ng/Kg	1	5/1/2024 11:43:30 PM
Totals-Tetradioxins	ND	3.88		ng/Kg	1	5/1/2024 11:43:30 PM
Totals-Pentafurans	ND	3.88		ng/Kg	1	5/1/2024 11:43:30 PM
Totals-Pentadioxins	ND	3.88		ng/Kg	1	5/1/2024 11:43:30 PM
Totals-Hexafurans	ND	3.88		ng/Kg	1	5/1/2024 11:43:30 PM
Totals-Hexadioxins	ND	3.88		ng/Kg	1	5/1/2024 11:43:30 PM
Totals-Heptafurans	ND	3.88		ng/Kg	1	5/1/2024 11:43:30 PM
Totals-Heptadioxins	ND	3.88		ng/Kg	1	5/1/2024 11:43:30 PM
TEQ	5.25			ng/Kg	1	5/1/2024 11:43:30 PM
Surr: 13C-2378-TCDF	48.0	10 - 110		%Rec	1	5/1/2024 11:43:30 PM
Surr: 13C-12378-PeCDF	52.0	10 - 104		%Rec	1	5/1/2024 11:43:30 PM
Surr: 13C-123478-HxCDF	51.4	10 - 134		%Rec	1	5/1/2024 11:43:30 PM
Surr: 13C-1234789-HpCDF	54.0	10 - 125		%Rec	1	5/1/2024 11:43:30 PM

Qualifiers:

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

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Analytical Report

(consolidated)

WO#: **24041390**

Date Reported: **5/3/2024**

CLIENT: Navarro Research & Engineering Inc. **Collection Date:** 4/10/2024 1:21:00 PM

Project: 23EC043B

Lab ID: 24041390-003 **Matrix:** SOLID

Client Sample ID: 300-002-GSV (1321-1323)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HRMS DIOXIN ANALYSIS BY SW8290				**SW8290**	**SW8290**	Analyst: **RIS**
HRMS DIOXIN ANALYSIS - FULL LIST (8290A)						
Surr: 13C-1234-TCDD	100	99 - 101		%Rec	1	5/1/2024 11:43:30 PM
Surr: 13C-2378-TCDD	50.4	10 - 106		%Rec	1	5/1/2024 11:43:30 PM
Surr: 13C-12378-PeCDD	56.4	10 - 109		%Rec	1	5/1/2024 11:43:30 PM
Surr: 13C-123678-HxCDD	74.9	10 - 126		%Rec	1	5/1/2024 11:43:30 PM
Surr: 13C-1234678-HpCDD	48.2	10 - 104		%Rec	1	5/1/2024 11:43:30 PM
Surr: 13C-OCDD	58.8	10 - 117		%Rec	1	5/1/2024 11:43:30 PM
Surr: 13C-123789-HxCDD	100	99 - 101		%Rec	1	5/1/2024 11:43:30 PM
Surr: 37Cl-2378-TCDD	64.6	10 - 116		%Rec	1	5/1/2024 11:43:30 PM
METALS ANALYSIS (6010D)				**SW6010**	**SW3050B**	Analyst: **RJE**
Antimony	ND	2.31		mg/Kg	1	4/21/2024 6:44:00 PM
Boron	ND	9.26		mg/Kg	1	4/21/2024 6:44:00 PM
Chromium	2.38	2.31		mg/Kg	1	4/21/2024 6:44:00 PM
Cobalt	ND	2.31		mg/Kg	1	4/21/2024 6:44:00 PM
Copper	ND	7.41		mg/Kg	1	4/21/2024 6:44:00 PM
Lead	11.3	2.31		mg/Kg	1	4/21/2024 6:44:00 PM
Magnesium	28800	9260		mg/Kg	1000	4/23/2024 10:02:00 AM
Silver	ND	1.39		mg/Kg	1	4/21/2024 6:44:00 PM
Thallium	ND	0.926		mg/Kg	1	4/21/2024 6:44:00 PM
Zinc	67.6	2.31		mg/Kg	1	4/21/2024 6:44:00 PM
SVOC BY SW8270E				**SW8270**	**SW3546**	Analyst: **SAM**
SVOC BY 8270E						
1,2,4-Trichlorobenzene	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
1,2-Dichlorobenzene	ND	0.147		mg/Kg	1	4/24/2024 6:38:00 PM
1,2-Diphenylhydrazine	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
1,3-Dichlorobenzene	ND	0.147		mg/Kg	1	4/24/2024 6:38:00 PM
1,4-Dichlorobenzene	ND	0.147		mg/Kg	1	4/24/2024 6:38:00 PM
1-Methylnaphthalene	ND	0.147		mg/Kg	1	4/24/2024 6:38:00 PM
2,4,5-Trichlorophenol	ND	0.147		mg/Kg	1	4/24/2024 6:38:00 PM
2,4,6-Trichlorophenol	ND	0.147		mg/Kg	1	4/24/2024 6:38:00 PM
2,4-Dichlorophenol	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
2,4-Dimethylphenol	ND	0.147		mg/Kg	1	4/24/2024 6:38:00 PM

Qualifiers:

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

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Analytical Report

(consolidated)

WO#: **24041390**

Date Reported: **5/3/2024**

CLIENT: Navarro Research & Engineering Inc. **Collection Date:** 4/10/2024 1:21:00 PM

Project: 23EC043B

Lab ID: 24041390-003 **Matrix:** SOLID

Client Sample ID: 300-002-GSV (1321-1323)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
SVOC BY SW8270E				**SW8270**	**SW3546**	Analyst: **SAM**
SVOC BY 8270E						
2,4-Dinitrophenol	ND	0.244	QC+	mg/Kg	1	4/24/2024 6:38:00 PM
2,4-Dinitrotoluene	ND	0.147		mg/Kg	1	4/24/2024 6:38:00 PM
2,6-Dinitrotoluene	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
2-Chloronaphthalene	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
2-Chlorophenol	ND	0.147		mg/Kg	1	4/24/2024 6:38:00 PM
2-Methylnaphthalene	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
o-Cresol	ND	0.147		mg/Kg	1	4/24/2024 6:38:00 PM
2-Nitroaniline	ND	0.147		mg/Kg	1	4/24/2024 6:38:00 PM
2-Nitrophenol	ND	0.147	QC+	mg/Kg	1	4/24/2024 6:38:00 PM
3,3´-Dichlorobenzidine	ND	0.489		mg/Kg	1	4/24/2024 6:38:00 PM
m&p-Cresol	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
3-Nitroaniline	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
4,6-Dinitro-o-cresol	ND	0.489	QC+	mg/Kg	1	4/24/2024 6:38:00 PM
4-Bromophenyl phenyl ether	ND	0.147		mg/Kg	1	4/24/2024 6:38:00 PM
p-Chloro-m-cresol	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
4-Chloroaniline	ND	0.147		mg/Kg	1	4/24/2024 6:38:00 PM
4-Chlorophenyl phenyl ether	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
4-Nitroaniline	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
4-Nitrophenol	ND	0.244	QC+	mg/Kg	1	4/24/2024 6:38:00 PM
Acenaphthene	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
Acenaphthylene	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
Aniline	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
Anthracene	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
Benzidine	ND	0.489	QC+	mg/Kg	1	4/24/2024 6:38:00 PM
Benzo(a)anthracene	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
Benzo(a)pyrene	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
Benzo(g,h,i)perylene	ND	0.147		mg/Kg	1	4/24/2024 6:38:00 PM
Benzo(k)fluoranthene	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
Benzo(b)fluoranthene	ND	0.147		mg/Kg	1	4/24/2024 6:38:00 PM
Benzyl alcohol	ND	0.244	QC+	mg/Kg	1	4/24/2024 6:38:00 PM
Bis(2-chloroethoxy)methane	ND	0.147		mg/Kg	1	4/24/2024 6:38:00 PM
Bis(2-chloroethyl) ether	ND	0.147		mg/Kg	1	4/24/2024 6:38:00 PM
Bis(2-chloroisopropyl) ether	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
Bis(2-ethylhexyl) phthalate	ND	1.47		mg/Kg	1	4/24/2024 6:38:00 PM

Qualifiers:

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

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Analytical Report

(consolidated)

WO#: **24041390**

Date Reported: **5/3/2024**

CLIENT: Navarro Research & Engineering Inc. **Collection Date:** 4/10/2024 1:21:00 PM

Project: 23EC043B

Lab ID: 24041390-003 **Matrix:** SOLID

Client Sample ID: 300-002-GSV (1321-1323)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
SVOC BY SW8270E				**SW8270**	**SW3546**	Analyst: **SAM**
SVOC BY 8270E						
Butyl benzyl phthalate	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
Chrysene	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
Di-n-butyl phthalate	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
Di-n-octyl phthalate	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
Dibenzo (a,h) anthracene	ND	0.147		mg/Kg	1	4/24/2024 6:38:00 PM
Dibenzofuran	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
Diethyl phthalate	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
Dimethyl phthalate	ND	0.489		mg/Kg	1	4/24/2024 6:38:00 PM
Fluoranthene	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
Fluorene	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
Hexachlorobenzene	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
Hexachlorobutadiene	ND	0.147		mg/Kg	1	4/24/2024 6:38:00 PM
Hexachloroethane	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
Isophorone	ND	0.147	QC+	mg/Kg	1	4/24/2024 6:38:00 PM
N-Nitrosodi-n-propylamine	ND	0.147		mg/Kg	1	4/24/2024 6:38:00 PM
N-Nitrosodimethylamine	ND	0.147		mg/Kg	1	4/24/2024 6:38:00 PM
N-Nitrosodiphenylamine	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
Naphthalene	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
Nitrobenzene	ND	0.244	QC+	mg/Kg	1	4/24/2024 6:38:00 PM
Pentachlorophenol	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
Phenanthrene	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
Phenol	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
Pyrene	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
Pyridine	ND	0.244		mg/Kg	1	4/24/2024 6:38:00 PM
Surr: 2,4,6-Tribromophenol	73.3	10 - 154		%Rec	1	4/24/2024 6:38:00 PM
Surr: 2-Fluorobiphenyl	76.0	16 - 150		%Rec	1	4/24/2024 6:38:00 PM
Surr: 2-Fluorophenol	80.4	14 - 135		%Rec	1	4/24/2024 6:38:00 PM
Surr: Nitrobenzene-d5	89.9	10 - 139		%Rec	1	4/24/2024 6:38:00 PM
Surr: p-Terphenyl-d14	89.2	10 - 196		%Rec	1	4/24/2024 6:38:00 PM
Surr: Phenol-d6	87.6	20 - 142		%Rec	1	4/24/2024 6:38:00 PM
ANIONS ANALYSIS BY IC (SW-846: 9056)				**SW9056A**		Analyst: **TAL**

Qualifiers:

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

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Analytical Report

(consolidated)

WO#: **24041390**

Date Reported: **5/3/2024**

CLIENT: Navarro Research & Engineering Inc. **Collection Date:** 4/10/2024 1:21:00 PM

Project: 23EC043B

Lab ID: 24041390-003 **Matrix:** SOLID

Client Sample ID: 300-002-GSV (1321-1323)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANIONS ANALYSIS BY IC (SW-846: 9056)				**SW9056A**		Analyst: **TAL**
Nitrate	ND	1.00	m	mg/Kg	10	4/19/2024 2:37:00 PM
Nitrite	ND	1.00		mg/Kg	10	4/19/2024 2:37:00 PM

Qualifiers:

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

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Analytical Report

(consolidated)

WO#: **24041390**

Date Reported: **5/3/2024**

CLIENT: Navarro Research & Engineering Inc. **Collection Date:** 4/10/2024 1:31:00 PM

Project: 23EC043B

Lab ID: 24041390-004 **Matrix:** SOLID

Client Sample ID: 300-002-GSV (1331-1333)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
MERCURY ANALYSIS (7471)				**SW7471**	**SW7471A**	Analyst: **JJF**
Mercury	ND	42		µg/Kg	1	4/19/2024 11:40:00 AM
HRMS DIOXIN ANALYSIS BY SW8290				**SW8290**	**SW8290**	Analyst: **RIS**
HRMS DIOXIN ANALYSIS - FULL LIST (8290A)						
2378-TCDF	ND	1.10		ng/Kg	1	5/2/2024 12:47:00 AM
12378-PeCDF	ND	3.50	QL+	ng/Kg	1	5/2/2024 12:47:00 AM
23478-PeCDF	ND	2.10	QL+	ng/Kg	1	5/2/2024 12:47:00 AM
123478-HxCDF	ND	5.50		ng/Kg	1	5/2/2024 12:47:00 AM
123678-HxCDF	ND	3.50		ng/Kg	1	5/2/2024 12:47:00 AM
234678-HxCDF	ND	3.20		ng/Kg	1	5/2/2024 12:47:00 AM
123789-HxCDF	ND	3.30		ng/Kg	1	5/2/2024 12:47:00 AM
1234678-HpCDF	ND	4.20		ng/Kg	1	5/2/2024 12:47:00 AM
1234789-HpCDF	ND	4.70		ng/Kg	1	5/2/2024 12:47:00 AM
OCDF	ND	50.0		ng/Kg	1	5/2/2024 12:47:00 AM
2378-TCDD	ND	1.50		ng/Kg	1	5/2/2024 12:47:00 AM
12378-PeCDD	ND	5.40		ng/Kg	1	5/2/2024 12:47:00 AM
123478-HxCDD	ND	5.10		ng/Kg	1	5/2/2024 12:47:00 AM
123678-HxCDD	ND	4.80		ng/Kg	1	5/2/2024 12:47:00 AM
123789-HxCDD	ND	3.90		ng/Kg	1	5/2/2024 12:47:00 AM
1234678-HpCDD	ND	5.00		ng/Kg	1	5/2/2024 12:47:00 AM
OCDD	ND	50.0		ng/Kg	1	5/2/2024 12:47:00 AM
Totals-Tetrafurans	ND	4.00		ng/Kg	1	5/2/2024 12:47:00 AM
Totals-Tetradioxins	ND	4.00		ng/Kg	1	5/2/2024 12:47:00 AM
Totals-Pentafurans	ND	4.00		ng/Kg	1	5/2/2024 12:47:00 AM
Totals-Pentadioxins	ND	4.00		ng/Kg	1	5/2/2024 12:47:00 AM
Totals-Hexafurans	ND	4.00		ng/Kg	1	5/2/2024 12:47:00 AM
Totals-Hexadioxins	ND	4.00		ng/Kg	1	5/2/2024 12:47:00 AM
Totals-Heptafurans	ND	4.00		ng/Kg	1	5/2/2024 12:47:00 AM
Totals-Heptadioxins	ND	4.00		ng/Kg	1	5/2/2024 12:47:00 AM
TEQ	5.42			ng/Kg	1	5/2/2024 12:47:00 AM
Surr: 13C-2378-TCDF	58.7	10 - 110		%Rec	1	5/2/2024 12:47:00 AM
Surr: 13C-12378-PeCDF	62.0	10 - 104		%Rec	1	5/2/2024 12:47:00 AM
Surr: 13C-123478-HxCDF	61.0	10 - 134		%Rec	1	5/2/2024 12:47:00 AM
Surr: 13C-1234789-HpCDF	76.0	10 - 125		%Rec	1	5/2/2024 12:47:00 AM

Qualifiers:

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

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Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **24041390**

Date Reported: **5/3/2024**

CLIENT: Navarro Research & Engineering Inc. **Collection Date:** 4/10/2024 1:31:00 PM

Project: 23EC043B

Lab ID: 24041390-004 **Matrix:** SOLID

Client Sample ID: 300-002-GSV (1331-1333)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HRMS DIOXIN ANALYSIS BY SW8290				**SW8290**	**SW8290**	Analyst: **RIS**
HRMS DIOXIN ANALYSIS - FULL LIST (8290A)						
Surr: 13C-1234-TCDD	100	99 - 101		%Rec	1	5/2/2024 12:47:00 AM
Surr: 13C-2378-TCDD	60.4	10 - 106		%Rec	1	5/2/2024 12:47:00 AM
Surr: 13C-12378-PeCDD	62.1	10 - 109		%Rec	1	5/2/2024 12:47:00 AM
Surr: 13C-123678-HxCDD	81.4	10 - 126		%Rec	1	5/2/2024 12:47:00 AM
Surr: 13C-1234678-HpCDD	70.5	10 - 104		%Rec	1	5/2/2024 12:47:00 AM
Surr: 13C-OCDD	90.7	10 - 117		%Rec	1	5/2/2024 12:47:00 AM
Surr: 13C-123789-HxCDD	100	99 - 101		%Rec	1	5/2/2024 12:47:00 AM
Surr: 37Cl-2378-TCDD	82.2	10 - 116		%Rec	1	5/2/2024 12:47:00 AM
METALS ANALYSIS (6010D)				**SW6010**	**SW3050B**	Analyst: **RJE**
Antimony	ND	2.25		mg/Kg	1	4/21/2024 6:47:00 PM
Boron	10.8	9.01		mg/Kg	1	4/21/2024 6:47:00 PM
Chromium	5.55	2.25		mg/Kg	1	4/21/2024 6:47:00 PM
Cobalt	2.51	2.25		mg/Kg	1	4/21/2024 6:47:00 PM
Copper	ND	7.21		mg/Kg	1	4/21/2024 6:47:00 PM
Lead	3.82	2.25		mg/Kg	1	4/21/2024 6:47:00 PM
Magnesium	16500	901		mg/Kg	100	4/22/2024 3:13:00 PM
Silver	ND	1.35		mg/Kg	1	4/21/2024 6:47:00 PM
Thallium	ND	0.901		mg/Kg	1	4/21/2024 6:47:00 PM
Zinc	19.2	2.25		mg/Kg	1	4/21/2024 6:47:00 PM
SVOC BY SW8270E				**SW8270**	**SW3546**	Analyst: **SAM**
SVOC BY 8270E						
1,2,4-Trichlorobenzene	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
1,2-Dichlorobenzene	ND	0.148		mg/Kg	1	4/24/2024 7:16:00 PM
1,2-Diphenylhydrazine	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
1,3-Dichlorobenzene	ND	0.148		mg/Kg	1	4/24/2024 7:16:00 PM
1,4-Dichlorobenzene	ND	0.148		mg/Kg	1	4/24/2024 7:16:00 PM
1-Methylnaphthalene	ND	0.148		mg/Kg	1	4/24/2024 7:16:00 PM
2,4,5-Trichlorophenol	ND	0.148		mg/Kg	1	4/24/2024 7:16:00 PM
2,4,6-Trichlorophenol	ND	0.148		mg/Kg	1	4/24/2024 7:16:00 PM
2,4-Dichlorophenol	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
2,4-Dimethylphenol	ND	0.148		mg/Kg	1	4/24/2024 7:16:00 PM

Qualifiers:

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

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Analytical Report

(consolidated)

WO#: **24041390**

Date Reported: **5/3/2024**

CLIENT: Navarro Research & Engineering Inc. **Collection Date:** 4/10/2024 1:31:00 PM

Project: 23EC043B

Lab ID: 24041390-004 **Matrix:** SOLID

Client Sample ID: 300-002-GSV (1331-1333)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
SVOC BY SW8270E				**SW8270**	**SW3546**	Analyst: **SAM**
SVOC BY 8270E						
2,4-Dinitrophenol	ND	0.247	QC+	mg/Kg	1	4/24/2024 7:16:00 PM
2,4-Dinitrotoluene	ND	0.148		mg/Kg	1	4/24/2024 7:16:00 PM
2,6-Dinitrotoluene	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
2-Chloronaphthalene	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
2-Chlorophenol	ND	0.148		mg/Kg	1	4/24/2024 7:16:00 PM
2-Methylnaphthalene	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
o-Cresol	ND	0.148		mg/Kg	1	4/24/2024 7:16:00 PM
2-Nitroaniline	ND	0.148		mg/Kg	1	4/24/2024 7:16:00 PM
2-Nitrophenol	ND	0.148	QC+	mg/Kg	1	4/24/2024 7:16:00 PM
3,3´-Dichlorobenzidine	ND	0.495		mg/Kg	1	4/24/2024 7:16:00 PM
m&p-Cresol	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
3-Nitroaniline	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
4,6-Dinitro-o-cresol	ND	0.495	QC+	mg/Kg	1	4/24/2024 7:16:00 PM
4-Bromophenyl phenyl ether	ND	0.148		mg/Kg	1	4/24/2024 7:16:00 PM
p-Chloro-m-cresol	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
4-Chloroaniline	ND	0.148		mg/Kg	1	4/24/2024 7:16:00 PM
4-Chlorophenyl phenyl ether	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
4-Nitroaniline	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
4-Nitrophenol	ND	0.247	QC+	mg/Kg	1	4/24/2024 7:16:00 PM
Acenaphthene	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
Acenaphthylene	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
Aniline	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
Anthracene	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
Benzidine	ND	0.495	QC+	mg/Kg	1	4/24/2024 7:16:00 PM
Benzo(a)anthracene	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
Benzo(a)pyrene	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
Benzo(g,h,i)perylene	ND	0.148		mg/Kg	1	4/24/2024 7:16:00 PM
Benzo(k)fluoranthene	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
Benzo(b)fluoranthene	ND	0.148		mg/Kg	1	4/24/2024 7:16:00 PM
Benzyl alcohol	ND	0.247	QC+	mg/Kg	1	4/24/2024 7:16:00 PM
Bis(2-chloroethoxy)methane	ND	0.148		mg/Kg	1	4/24/2024 7:16:00 PM
Bis(2-chloroethyl) ether	ND	0.148		mg/Kg	1	4/24/2024 7:16:00 PM
Bis(2-chloroisopropyl) ether	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
Bis(2-ethylhexyl) phthalate	ND	1.48		mg/Kg	1	4/24/2024 7:16:00 PM

Qualifiers:

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

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Analytical Report

(consolidated)

WO#: **24041390**

Date Reported: **5/3/2024**

CLIENT: Navarro Research & Engineering Inc. **Collection Date:** 4/10/2024 1:31:00 PM

Project: 23EC043B

Lab ID: 24041390-004 **Matrix:** SOLID

Client Sample ID: 300-002-GSV (1331-1333)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
SVOC BY SW8270E				**SW8270**	**SW3546**	Analyst: **SAM**
SVOC BY 8270E						
Butyl benzyl phthalate	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
Chrysene	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
Di-n-butyl phthalate	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
Di-n-octyl phthalate	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
Dibenzo (a,h) anthracene	ND	0.148		mg/Kg	1	4/24/2024 7:16:00 PM
Dibenzofuran	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
Diethyl phthalate	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
Dimethyl phthalate	ND	0.495		mg/Kg	1	4/24/2024 7:16:00 PM
Fluoranthene	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
Fluorene	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
Hexachlorobenzene	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
Hexachlorobutadiene	ND	0.148		mg/Kg	1	4/24/2024 7:16:00 PM
Hexachloroethane	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
Isophorone	ND	0.148	QC+	mg/Kg	1	4/24/2024 7:16:00 PM
N-Nitrosodi-n-propylamine	ND	0.148		mg/Kg	1	4/24/2024 7:16:00 PM
N-Nitrosodimethylamine	ND	0.148		mg/Kg	1	4/24/2024 7:16:00 PM
N-Nitrosodiphenylamine	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
Naphthalene	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
Nitrobenzene	ND	0.247	QC+	mg/Kg	1	4/24/2024 7:16:00 PM
Pentachlorophenol	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
Phenanthrene	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
Phenol	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
Pyrene	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
Pyridine	ND	0.247		mg/Kg	1	4/24/2024 7:16:00 PM
Surr: 2,4,6-Tribromophenol	79.8	10 - 154		%Rec	1	4/24/2024 7:16:00 PM
Surr: 2-Fluorobiphenyl	77.4	16 - 150		%Rec	1	4/24/2024 7:16:00 PM
Surr: 2-Fluorophenol	84.9	14 - 135		%Rec	1	4/24/2024 7:16:00 PM
Surr: Nitrobenzene-d5	90.4	10 - 139		%Rec	1	4/24/2024 7:16:00 PM
Surr: p-Terphenyl-d14	91.4	10 - 196		%Rec	1	4/24/2024 7:16:00 PM
Surr: Phenol-d6	90.8	20 - 142		%Rec	1	4/24/2024 7:16:00 PM
ANIONS ANALYSIS BY IC (SW-846: 9056)				**SW9056A**		Analyst: **TAL**

Qualifiers:

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

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Analytical Report

(consolidated)

WO#: **24041390**

Date Reported: **5/3/2024**

CLIENT: Navarro Research & Engineering Inc. **Collection Date:** 4/10/2024 1:31:00 PM

Project: 23EC043B

Lab ID: 24041390-004 **Matrix:** SOLID

Client Sample ID: 300-002-GSV (1331-1333)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANIONS ANALYSIS BY IC (SW-846: 9056)				**SW9056A**		Analyst: **TAL**
Nitrate	ND	1.00	m	mg/Kg	10	4/19/2024 3:04:00 PM
Nitrite	ND	1.00		mg/Kg	10	4/19/2024 3:04:00 PM

Qualifiers:

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

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QC SUMMARY REPORT

WO#: **24041390**

03-May-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B **BatchID:** **74725**

Sample ID: **MB-74725**	SampType: **MBLK**	TestCode: **HG_S(7471B)**	Units: **µg/Kg**	Prep Date: **4/19/2024**	RunNo: **184044**
Client ID: **PBS**	Batch ID: **74725**	TestNo: **SW7471**	**SW7471A**	Analysis Date: **4/19/2024**	SeqNo: **4989346**

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

Sample ID: **LCS-74725**	SampType: **LCS**	TestCode: **HG_S(7471B)**	Units: **µg/Kg**	Prep Date: **4/19/2024**	RunNo: **184044**
Client ID: **LCSS**	Batch ID: **74725**	TestNo: **SW7471**	**SW7471A**	Analysis Date: **4/19/2024**	SeqNo: **4989347**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	340	42	333.3	0	101	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceede
M	Manual Integration used to determine area response	ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode				

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QC SUMMARY REPORT

WO#: **24041390**

03-May-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B **BatchID:** **74725**

Sample ID: **24041295-001AMS** SampType: **MS** TestCode: **HG_S(7471)** Units: **µg/Kg-dry** Prep Date: **4/19/2024** RunNo: **184044**

Client ID: **BatchQC** Batch ID: **74725** TestNo: **SW7471** **SW7471A** Analysis Date: **4/19/2024** SeqNo: **4989351**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1600	170	1365	290.4	97.2	75	125				

Sample ID: **24041295-001AMSD** SampType: **MSD** TestCode: **HG_S(7471)** Units: **µg/Kg-dry** Prep Date: **4/19/2024** RunNo: **184044**

Client ID: **BatchQC** Batch ID: **74725** TestNo: **SW7471** **SW7471A** Analysis Date: **4/19/2024** SeqNo: **4989352**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1600	180	1430	290.4	93.4	75	125	1617	0.561	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceede
M	Manual Integration used to determine area response	ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode				

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QC SUMMARY REPORT

WO#: **24041390**

03-May-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B **BatchID:** **74731**

Sample ID: **MB-74731** SampType: **MBLK** TestCode: **Mtl-ICP_S(60** Units: **mg/Kg** Prep Date: **4/19/2024** RunNo: **184138**

Client ID: **PBS** Batch ID: **74731** TestNo: **SW6010** **SW3050B** Analysis Date: **4/22/2024** SeqNo: **4992955**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	2.29									
Boron	ND	9.17									
Chromium	ND	2.29									
Cobalt	ND	2.29									
Copper	ND	7.34									
Lead	ND	2.29									
Magnesium	ND	9.17									
Silver	ND	1.38									
Thallium	ND	0.917									
Zinc	ND	2.29									

Sample ID: **LCS-74731** SampType: **LCS** TestCode: **Mtl-ICP_S(60** Units: **mg/Kg** Prep Date: **4/19/2024** RunNo: **184138**

Client ID: **LCSS** Batch ID: **74731** TestNo: **SW6010** **SW3050B** Analysis Date: **4/22/2024** SeqNo: **4992956**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	16.9	2.14	17.09	0	99.1	80	120				
Boron	20.2	8.55	17.09	0	118	80	120				
Chromium	7.24	2.14	6.838	0	106	80	120				
Cobalt	17.8	2.14	17.09	0	104	80	120				
Copper	ND	6.84	5.128	0	105	80	120				
Lead	17.3	2.14	17.09	0	101	80	120				
Silver	1.70	1.28	1.709	0	99.5	80	120				
Thallium	17.4	0.855	17.09	0	102	80	120				
Zinc	9.03	2.14	42.74	0	21.1	80	120				S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceede
M	Manual Integration used to determine area response	ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode				

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SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

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

QC SUMMARY REPORT

WO#: **24041390**

03-May-24

Client: Navarro Research & Engineering Inc.
Project: 23EC043B **BatchID:** **74731**

Sample ID: **MB-74731** SampType: **MBLK** TestCode: **Mtl-ICP_S(60** Units: **mg/Kg** Prep Date: **4/19/2024** RunNo: **184120**
Client ID: **PBS** Batch ID: **74731** TestNo: **SW6010** **SW3050B** Analysis Date: **4/21/2024** SeqNo: **4991586**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	2.29									
Boron	ND	9.17									
Chromium	ND	2.29									
Cobalt	ND	2.29									
Copper	ND	7.34									
Lead	ND	2.29									
Magnesium	ND	9.17									
Silver	ND	1.38									
Thallium	ND	0.917									
Zinc	ND	2.29									

Sample ID: **LCS-74731** SampType: **LCS** TestCode: **Mtl-ICP_S(60** Units: **mg/Kg** Prep Date: **4/19/2024** RunNo: **184120**
Client ID: **LCSS** Batch ID: **74731** TestNo: **SW6010** **SW3050B** Analysis Date: **4/21/2024** SeqNo: **4991589**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	75.7	2.14	85.47	0	88.5	80	120				
Boron	73.4	8.55	85.47	0	85.9	80	120				
Chromium	83.4	2.14	85.47	0	97.6	80	120				
Cobalt	82.9	2.14	85.47	0	97.0	80	120				
Copper	82.2	6.84	85.47	0	96.1	80	120				
Lead	82.1	2.14	85.47	0	96.1	80	120				
Magnesium	80.5	8.55	85.47	0	94.2	80	120				
Silver	41.1	1.28	42.74	0	96.1	80	120				
Thallium	80.6	0.855	85.47	0	94.2	80	120				
Zinc	80.5	2.14	85.47	0	94.2	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceede
M	Manual Integration used to determine area response	ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode				

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QC SUMMARY REPORT

WO#: **24041390**
03-May-24

Client: Navarro Research & Engineering Inc.
Project: 23EC043B **BatchID:** **74731**

Sample ID: **LCS-74731**	SampType: **LCS**	TestCode: **Mtl-ICP_S(60**	Units: **mg/Kg**	Prep Date: **4/19/2024**	RunNo: **184120**
Client ID: **LCSS**	Batch ID: **74731**	TestNo: **SW6010**	**SW3050B**	Analysis Date: **4/21/2024**	SeqNo: **4991589**

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

Sample ID: **LCS-74731**	SampType: **LCS**	TestCode: **Mtl-ICP_S(60**	Units: **mg/Kg**	Prep Date: **4/19/2024**	RunNo: **184120**
Client ID: **LCSS**	Batch ID: **74731**	TestNo: **SW6010**	**SW3050B**	Analysis Date: **4/21/2024**	SeqNo: **4991590**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	15.6	2.14	17.09	0	91.6	80	120				
Boron	17.3	8.55	17.09	0	101	80	120				
Chromium	6.80	2.14	6.838	0	99.4	80	120				
Cobalt	17.2	2.14	17.09	0	101	80	120				
Copper	ND	6.84	5.128	0	98.2	80	120				
Lead	16.4	2.14	17.09	0	95.7	80	120				
Silver	1.58	1.28	1.709	0	92.4	80	120				
Thallium	16.6	0.855	17.09	0	97.0	80	120				
Zinc	8.65	2.14	8.547	0	101	80	120				

Sample ID: **24041390-001AMS**	SampType: **MS**	TestCode: **Mtl-ICP_S(60**	Units: **mg/Kg**	Prep Date: **4/19/2024**	RunNo: **184120**
Client ID: **300-002-GSV (1331-**	Batch ID: **74731**	TestNo: **SW6010**	**SW3050B**	Analysis Date: **4/21/2024**	SeqNo: **4991593**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	21.8	2.17	86.96	0	25.1	75	125				S
Boron	36.2	8.70	86.96	5.964	34.7	75	125				S
Chromium	31.8	2.17	86.96	2.198	34.1	75	125				S
Cobalt	27.8	2.17	86.96	0.7658	31.1	75	125				S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceede
M	Manual Integration used to determine area response	ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode				

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QC SUMMARY REPORT

WO#: **24041390**

03-May-24

Client: Navarro Research & Engineering Inc.
Project: 23EC043B **BatchID:** **74731**

Sample ID: **24041390-001AMS** SampType: **MS** TestCode: **Mtl-ICP_S(60** Units: **mg/Kg** Prep Date: **4/19/2024** RunNo: **184120**
Client ID: **300-002-GSV (1331-** Batch ID: **74731** TestNo: **SW6010** **SW3050B** Analysis Date: **4/21/2024** SeqNo: **4991593**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	34.6	6.96	86.96	0	39.8	75	125				S
Lead	33.7	2.17	86.96	5.671	32.2	75	125				S
Magnesium	4360	8.70	86.96	4780	-481	75	125				ES
Silver	17.6	1.30	43.48	0	40.4	75	125				S
Thallium	26.9	0.870	86.96	0	30.9	75	125				SQMR
Zinc	86.5	2.17	86.96	55.69	35.4	75	125				S

Sample ID: **24041390-001AMSD** SampType: **MSD** TestCode: **Mtl-ICP_S(60** Units: **mg/Kg** Prep Date: **4/19/2024** RunNo: **184120**
Client ID: **300-002-GSV (1331-** Batch ID: **74731** TestNo: **SW6010** **SW3050B** Analysis Date: **4/21/2024** SeqNo: **4991594**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	26.3	2.45	98.04	0	26.8	75	125	21.84	18.4	20	S
Boron	43.0	9.80	98.04	5.964	37.7	75	125	36.18	17.2	20	S
Chromium	38.3	2.45	98.04	2.198	36.8	75	125	31.83	18.4	20	S
Cobalt	33.8	2.45	98.04	0.7658	33.7	75	125	27.79	19.6	20	S
Copper	41.1	7.84	98.04	0	41.9	75	125	34.57	17.2	20	S
Lead	40.1	2.45	98.04	5.671	35.1	75	125	33.70	17.3	20	S
Magnesium	5000	9.80	98.04	4780	220	75	125	4362	13.5	20	ES
Silver	21.1	1.47	49.02	0	43.0	75	125	17.58	18.1	20	S
Thallium	33.1	0.980	98.04	0	33.7	75	125	26.90	20.6	20	RS
Zinc	99.6	2.45	98.04	55.69	44.8	75	125	86.50	14.1	20	S

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceede
M	Manual Integration used to determine area response	ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode				

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QC SUMMARY REPORT

WO#: **24041390**

03-May-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B **BatchID:** **74799**

Sample ID: **MB-74799** SampType: **MBLK** TestCode: **SVOC-MSTR** Units: **mg/Kg** Prep Date: **4/22/2024** RunNo: **184386**

Client ID: **PBS** Batch ID: **74799** TestNo: **SW8270** **SW3546** Analysis Date: **4/24/2024** SeqNo: **4998815**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	ND	0.246									
1,2-Dichlorobenzene	ND	0.148									
1,2-Diphenylhydrazine	ND	0.246									
1,3-Dichlorobenzene	ND	0.148									
1,4-Dichlorobenzene	ND	0.148									
1-Methylnaphthalene	ND	0.148									
2,4,5-Trichlorophenol	ND	0.148									
2,4,6-Trichlorophenol	ND	0.148									
2,4-Dichlorophenol	ND	0.246									
2,4-Dimethylphenol	ND	0.148									
2,4-Dinitrophenol	ND	0.246									QC+
2,4-Dinitrotoluene	ND	0.148									
2,6-Dinitrotoluene	ND	0.246									
2-Chloronaphthalene	ND	0.246									
2-Chlorophenol	ND	0.148									
2-Methylnaphthalene	ND	0.246									
2-Nitrophenol	ND	0.148									QC+
3,3´-Dichlorobenzidine	ND	0.492									
4,6-Dinitro-o-cresol	ND	0.492									QC+
4-Bromophenyl phenyl ether	ND	0.148									
4-Chlorophenyl phenyl ether	ND	0.246									
4-Nitrophenol	ND	0.246									QC+
Acenaphthene	ND	0.246									
Acenaphthylene	ND	0.246									
Anthracene	ND	0.246									
Benzidine	ND	0.492									QC+

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceede
M	Manual Integration used to determine area response	ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode				

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QC SUMMARY REPORT

WO#: **24041390**
03-May-24

Client: Navarro Research & Engineering Inc.
Project: 23EC043B **BatchID:** **74799**

Sample ID: **MB-74799** SampType: **MBLK** TestCode: **SVOC-MSTR** Units: **mg/Kg** Prep Date: **4/22/2024** RunNo: **184386**
Client ID: **PBS** Batch ID: **74799** TestNo: **SW8270** **SW3546** Analysis Date: **4/24/2024** SeqNo: **4998815**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(a)anthracene	ND	0.246									
Benzo(a)pyrene	ND	0.246									
Benzo(g,h,i)perylene	ND	0.148									
Benzo(k)fluoranthene	ND	0.246									
Benzo(b)fluoranthene	ND	0.148									
Bis(2-chloroethoxy)methane	ND	0.148									
Bis(2-chloroethyl) ether	ND	0.148									
Bis(2-chloroisopropyl) ether	ND	0.246									
Bis(2-ethylhexyl) phthalate	ND	1.48									
Butyl benzyl phthalate	ND	0.246									
Chrysene	ND	0.246									
Di-n-butyl phthalate	ND	0.246									
Di-n-octyl phthalate	ND	0.246									
Dibenzo (a,h) anthracene	ND	0.148									
Diethyl phthalate	ND	0.246									
Dimethyl phthalate	ND	0.492									
Fluoranthene	ND	0.246									
Fluorene	ND	0.246									
Hexachlorobenzene	ND	0.246									
Hexachlorobutadiene	ND	0.148									
Hexachloroethane	ND	0.246									
Indeno(1,2,3-cd)pyrene	ND	0.246									
Isophorone	ND	0.148									QC+
N-Nitrosodi-n-propylamine	ND	0.148									
N-Nitrosodimethylamine	ND	0.148									
N-Nitrosodiphenylamine	ND	0.246									

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceede
M	Manual Integration used to determine area response	ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode				

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QC SUMMARY REPORT

WO#: **24041390**

03-May-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B **BatchID:** **74799**

Sample ID: **MB-74799** SampType: **MBLK** TestCode: **SVOC-MSTR** Units: **mg/Kg** Prep Date: **4/22/2024** RunNo: **184386**

Client ID: **PBS** Batch ID: **74799** TestNo: **SW8270** **SW3546** Analysis Date: **4/24/2024** SeqNo: **4998815**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	0.246									
Nitrobenzene	ND	0.246									QC+
p-Chloro-m-cresol	ND	0.246									
Pentachlorophenol	ND	0.246									
Phenanthrene	ND	0.246									
Phenol	ND	0.246									
Pyrene	ND	0.246									
m&p-Cresol	ND	0.246									
Dibenzofuran	ND	0.246									
o-Cresol	ND	0.148									
2-Nitroaniline	ND	0.148									
3-Nitroaniline	ND	0.246									
4-Nitroaniline	ND	0.246									
4-Chloroaniline	ND	0.148									
Aniline	ND	0.246									
Benzyl alcohol	ND	0.246									QC+
Pyridine	ND	0.246									
Surr: 2,4,6-Tribromophenol	1.55		2.459		63.0	10	154				
Surr: 2-Fluorobiphenyl	1.46		2.459		59.2	16	150				
Surr: 2-Fluorophenol	1.55		2.459		63.2	14	135				
Surr: Nitrobenzene-d5	1.66		2.459		67.4	10	139				
Surr: p-Terphenyl-d14	1.70		2.459		69.1	10	196				
Surr: Phenol-d6	1.69		2.459		68.8	20	142				

Qualifiers:

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R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode				

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QC SUMMARY REPORT

WO#: **24041390**

03-May-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B **BatchID:** **74799**

Sample ID: **LCS-74799** SampType: **LCS** TestCode: **SVOC-MSTR** Units: **mg/Kg** Prep Date: **4/22/2024** RunNo: **184386**

Client ID: **LCSS** Batch ID: **74799** TestNo: **SW8270** **SW3546** Analysis Date: **4/24/2024** SeqNo: **4998816**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	1.68	0.244	1.954	0	86.2	34.1	130				
1,2-Dichlorobenzene	1.54	0.147	1.954	0	78.6	28.7	130				
1,2-Diphenylhydrazine	2.09	0.244	1.954	0	107	43	133				
1,3-Dichlorobenzene	1.54	0.147	1.954	0	78.7	26.3	130				
1,4-Dichlorobenzene	1.49	0.147	1.954	0	76.2	27.4	130				
1-Methylnaphthalene	1.71	0.147	1.954	0	87.3	35.5	130				
2,4,5-Trichlorophenol	1.75	0.147	1.954	0	89.8	34.4	133				
2,4,6-Trichlorophenol	1.77	0.147	1.954	0	90.8	33.7	135				
2,4-Dichlorophenol	1.78	0.244	1.954	0	91.3	40.8	130				
2,4-Dimethylphenol	1.98	0.147	1.954	0	101	36.9	130				
2,4-Dinitrophenol	2.05	0.244	1.954	0	105	11	147				QC+
2,4-Dinitrotoluene	1.85	0.147	1.954	0	94.9	45.3	130				
2,6-Dinitrotoluene	1.88	0.244	1.954	0	96.3	41.6	130				
2-Chloronaphthalene	1.83	0.244	1.954	0	93.4	41	130				
2-Chlorophenol	1.84	0.147	1.954	0	94.0	37	130				
2-Methylnaphthalene	1.74	0.244	1.954	0	88.9	36.2	130				
2-Nitrophenol	2.08	0.147	1.954	0	106	35.7	130				QC+
3,3´-Dichlorobenzidine	3.31	0.489	3.908	0	84.8	10	209				
4,6-Dinitro-o-cresol	2.42	0.489	1.954	0	124	27	145				QC+
4-Bromophenyl phenyl ether	1.90	0.147	1.954	0	97.3	38.5	130				
4-Chlorophenyl phenyl ether	1.82	0.244	1.954	0	93.1	46	130				
4-Nitrophenol	2.09	0.244	1.954	0	107	43.4	130				QC+
Acenaphthene	1.69	0.244	1.954	0	86.4	41.9	130				
Acenaphthylene	1.85	0.244	1.954	0	94.4	43.5	130				
Anthracene	1.88	0.244	1.954	0	96.0	44.8	130				
Benzidine	2.87	0.489	3.908	0	73.5	10	130				QC+

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceede
M	Manual Integration used to determine area response	ND	Not Detected	PL	Permit Limit
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QC SUMMARY REPORT

WO#: **24041390**

03-May-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B **BatchID:** **74799**

Sample ID: **LCS-74799** SampType: **LCS** TestCode: **SVOC-MSTR** Units: **mg/Kg** Prep Date: **4/22/2024** RunNo: **184386**

Client ID: **LCSS** Batch ID: **74799** TestNo: **SW8270** **SW3546** Analysis Date: **4/24/2024** SeqNo: **4998816**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(a)anthracene	1.81	0.244	1.954	0	92.6	46.5	130				
Benzo(a)pyrene	1.78	0.244	1.954	0	91.2	47.2	136				
Benzo(g,h,i)perylene	1.71	0.147	1.954	0	87.3	43.9	131				
Benzo(k)fluoranthene	1.77	0.244	1.954	0	90.6	44.1	130				
Benzo(b)fluoranthene	1.80	0.147	1.954	0	92.4	44.3	130				
Bis(2-chloroethoxy)methane	1.72	0.147	1.954	0	88.2	38	130				
Bis(2-chloroethyl) ether	1.60	0.147	1.954	0	81.9	17	130				
Bis(2-chloroisopropyl) ether	1.66	0.244	1.954	0	84.9	20.6	130				
Bis(2-ethylhexyl) phthalate	1.85	1.47	1.954	0	94.9	53	136				
Butyl benzyl phthalate	1.88	0.244	1.954	0	96.4	45	134				
Chrysene	1.84	0.244	1.954	0	94.0	43.4	125				
Di-n-butyl phthalate	1.68	0.244	1.954	0	85.9	49	135				
Di-n-octyl phthalate	2.02	0.244	1.954	0	103	46.7	142				
Dibenzo (a,h) anthracene	1.66	0.147	1.954	0	84.9	46.4	132				
Diethyl phthalate	1.88	0.244	1.954	0	96.2	45.4	130				
Dimethyl phthalate	1.82	0.489	1.954	0	93.1	40.9	130				
Fluoranthene	1.82	0.244	1.954	0	93.1	47.7	130				
Fluorene	1.83	0.244	1.954	0	93.8	40.6	130				
Hexachlorobenzene	1.75	0.244	1.954	0	89.7	34.5	130				
Hexachlorobutadiene	1.69	0.147	1.954	0	86.3	32.2	130				
Hexachloroethane	1.65	0.244	1.954	0	84.3	27.7	130				
Indeno(1,2,3-cd)pyrene	1.39	0.244	1.954	0	71.4	41.8	130				
Isophorone	2.05	0.147	1.954	0	105	39.2	130				QC+
N-Nitrosodi-n-propylamine	1.92	0.147	1.954	0	98.2	30.5	130				
N-Nitrosodimethylamine	1.72	0.147	1.954	0	88.3	12.9	130				
N-Nitrosodiphenylamine	1.94	0.244	1.954	0	99.2	44.9	130				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceede
M	Manual Integration used to determine area response	ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode				

Original

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

QC SUMMARY REPORT

WO#: **24041390**

03-May-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B **BatchID:** **74799**

Sample ID: **LCS-74799** SampType: **LCS** TestCode: **SVOC-MSTR** Units: **mg/Kg** Prep Date: **4/22/2024** RunNo: **184386**

Client ID: **LCSS** Batch ID: **74799** TestNo: **SW8270** **SW3546** Analysis Date: **4/24/2024** SeqNo: **4998816**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	1.61	0.244	1.954	0	82.6	35	130				
Nitrobenzene	2.05	0.244	1.954	0	105	36.2	130				QC+
p-Chloro-m-cresol	1.89	0.244	1.954	0	96.8	40.4	130				
Pentachlorophenol	1.65	0.244	1.954	0	84.5	29.6	130				
Phenanthrene	1.78	0.244	1.954	0	91.0	42.8	130				
Phenol	1.91	0.244	1.954	0	97.7	36.6	130				
Pyrene	1.78	0.244	1.954	0	91.3	49.9	130				
m&p-Cresol	1.87	0.244	1.954	0	95.7	41.9	130				
Dibenzofuran	1.77	0.244	1.954	0	90.7	44	130				
o-Cresol	1.99	0.147	1.954	0	102	39.1	130				
2-Nitroaniline	2.08	0.147	1.954	0	106	42.1	130				
3-Nitroaniline	1.75	0.244	1.954	0	89.3	29.9	130				
4-Nitroaniline	1.76	0.244	1.954	0	89.8	38.1	163				
4-Chloroaniline	1.44	0.147	1.954	0	73.5	20	130				
Aniline	1.56	0.244	1.954	0	79.8	10	130				
Benzyl alcohol	2.09	0.244	1.954	0	107	12	157				QC+
Pyridine	1.28	0.244	1.954	0	65.7	10	130				
Surr: 2,4,6-Tribromophenol	2.12		2.443		86.9	10	154				
Surr: 2-Fluorobiphenyl	1.91		2.443		78.2	16	150				
Surr: 2-Fluorophenol	2.16		2.443		88.5	14	135				
Surr: Nitrobenzene-d5	2.27		2.443		92.9	10	139				
Surr: p-Terphenyl-d14	2.26		2.443		92.5	10	196				
Surr: Phenol-d6	2.28		2.443		93.3	20	142				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceede
M	Manual Integration used to determine area response	ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode				

Original

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Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **24041390**

03-May-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B **BatchID:** **74799**

Sample ID: **24041276-001AMS** SampType: **MS** TestCode: **SVOC-MSTR** Units: **mg/Kg-dry** Prep Date: **4/22/2024** RunNo: **184386**

Client ID: **BatchQC** Batch ID: **74799** TestNo: **SW8270** **SW3546** Analysis Date: **4/24/2024** SeqNo: **4998822**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	2.02	0.305	2.439	0	82.9	10	130				
1,2-Dichlorobenzene	1.90	0.183	2.439	0	77.9	10	130				
1,2-Diphenylhydrazine	2.51	0.305	2.439	0	103	10	134				
1,3-Dichlorobenzene	1.85	0.183	2.439	0	76.0	10	130				
1,4-Dichlorobenzene	1.82	0.183	2.439	0	74.6	10	130				
1-Methylnaphthalene	2.07	0.183	2.439	0	84.9	10	130				
2,4,5-Trichlorophenol	2.25	0.183	2.439	0	92.2	10	130				
2,4,6-Trichlorophenol	2.29	0.183	2.439	0	93.9	11	142				
2,4-Dichlorophenol	2.21	0.305	2.439	0	90.7	10	130				
2,4-Dimethylphenol	2.44	0.183	2.439	0	99.9	10	130				
2,4-Dinitrophenol	1.45	0.305	2.439	0	59.6	10	140				QC+
2,4-Dinitrotoluene	2.25	0.183	2.439	0	92.2	18	139				
2,6-Dinitrotoluene	2.26	0.305	2.439	0	92.5	10	130				
2-Chloronaphthalene	2.18	0.305	2.439	0	89.2	10	130				
2-Chlorophenol	2.21	0.183	2.439	0	90.7	10	130				
2-Methylnaphthalene	2.09	0.305	2.439	0	85.6	10	130				
2-Nitrophenol	2.50	0.183	2.439	0	102	10	130				QC+
3,3´-Dichlorobenzidine	3.92	0.610	4.878	0	80.4	10	147				
4,6-Dinitro-o-cresol	2.29	0.610	2.439	0	93.9	10	148				QC+
4-Bromophenyl phenyl ether	2.33	0.183	2.439	0	95.4	10	130				
4-Chlorophenyl phenyl ether	2.20	0.305	2.439	0	90.4	10	133				
4-Nitrophenol	2.87	0.305	2.439	0	118	19	145				QC+
Acenaphthene	2.05	0.305	2.439	0	83.9	10	130				
Acenaphthylene	2.21	0.305	2.439	0	90.5	10	130				
Anthracene	2.28	0.305	2.439	0	93.4	21	148				
Benzidine	1.11	0.610	4.878	0	22.8	10	130				QC+QMR

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceede
M	Manual Integration used to determine area response	ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode				

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QC SUMMARY REPORT

WO#: **24041390**

03-May-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B **BatchID:** **74799**

Sample ID: **24041276-001AMS** SampType: **MS** TestCode: **SVOC-MSTR** Units: **mg/Kg-dry** Prep Date: **4/22/2024** RunNo: **184386**

Client ID: **BatchQC** Batch ID: **74799** TestNo: **SW8270** **SW3546** Analysis Date: **4/24/2024** SeqNo: **4998822**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(a)anthracene	2.20	0.305	2.439	0	90.3	10	130				
Benzo(a)pyrene	2.14	0.305	2.439	0	87.9	10	140				
Benzo(g,h,i)perylene	2.18	0.183	2.439	0	89.5	10	149				
Benzo(k)fluoranthene	2.04	0.305	2.439	0	83.7	10	134				
Benzo(b)fluoranthene	2.18	0.183	2.439	0	89.6	10	175				
Bis(2-chloroethoxy)methane	2.08	0.183	2.439	0	85.5	10	130				
Bis(2-chloroethyl) ether	1.96	0.183	2.439	0	80.3	10	130				
Bis(2-chloroisopropyl) ether	2.03	0.305	2.439	0	83.2	10	130				
Bis(2-ethylhexyl) phthalate	2.39	1.83	2.439	0	98.1	10	171				
Butyl benzyl phthalate	2.40	0.305	2.439	0	98.2	16	162				
Chrysene	2.25	0.305	2.439	0	92.1	10	130				
Di-n-butyl phthalate	2.05	0.305	2.439	0	83.9	10	172				
Di-n-octyl phthalate	2.63	0.305	2.439	0	108	10	215				
Dibenzo (a,h) anthracene	2.13	0.183	2.439	0	87.5	12	148				
Diethyl phthalate	2.29	0.305	2.439	0	93.9	10	130				
Dimethyl phthalate	2.23	0.610	2.439	0	91.4	10	130				
Fluoranthene	2.16	0.305	2.439	0	88.7	10	158				
Fluorene	2.21	0.305	2.439	0	90.7	10	135				
Hexachlorobenzene	2.06	0.305	2.439	0	84.7	10	130				
Hexachlorobutadiene	2.06	0.183	2.439	0	84.5	10	130				
Hexachloroethane	1.99	0.305	2.439	0	81.7	10	130				
Indeno(1,2,3-cd)pyrene	1.74	0.305	2.439	0	71.4	14	142				
Isophorone	2.52	0.183	2.439	0	103	10	130				QC+
N-Nitrosodi-n-propylamine	2.38	0.183	2.439	0	97.5	10	130				
N-Nitrosodimethylamine	1.99	0.183	2.439	0	81.6	10	130				
N-Nitrosodiphenylamine	2.35	0.305	2.439	0	96.2	10	134				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceede
M	Manual Integration used to determine area response	ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode				

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QC SUMMARY REPORT

WO#: **24041390**

03-May-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B **BatchID:** **74799**

Sample ID: **24041276-001AMS** SampType: **MS** TestCode: **SVOC-MSTR** Units: **mg/Kg-dry** Prep Date: **4/22/2024** RunNo: **184386**

Client ID: **BatchQC** Batch ID: **74799** TestNo: **SW8270** **SW3546** Analysis Date: **4/24/2024** SeqNo: **4998822**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	1.94	0.305	2.439	0	79.6	10	130				
Nitrobenzene	2.49	0.305	2.439	0	102	10	130				QC+
p-Chloro-m-cresol	2.40	0.305	2.439	0	98.2	21	143				
Pentachlorophenol	2.03	0.305	2.439	0	83.2	10	146				
Phenanthrene	2.15	0.305	2.439	0	88.3	10	158				
Phenol	2.30	0.305	2.439	0	94.4	10	130				
Pyrene	2.08	0.305	2.439	0	85.4	10	139				
m&p-Cresol	2.29	0.305	2.439	0	93.9	10	130				
Dibenzofuran	2.13	0.305	2.439	0	87.3	10	130				
o-Cresol	2.42	0.183	2.439	0	99.4	10	130				
2-Nitroaniline	2.59	0.183	2.439	0	106	21	146				
3-Nitroaniline	2.07	0.305	2.439	0	85.0	40	140				
4-Nitroaniline	2.12	0.305	2.439	0	86.8	10	158				
4-Chloroaniline	1.69	0.183	2.439	0	69.4	10	130				
Aniline	1.85	0.305	2.439	0	76.1	10	130				
Benzyl alcohol	2.57	0.305	2.439	0	105	10	130				QC+
Pyridine	1.47	0.305	2.439	0	60.3	10	130				
Surr: 2,4,6-Tribromophenol	2.61		3.049		85.5	10	154				
Surr: 2-Fluorobiphenyl	2.29		3.049		75.0	16	150				
Surr: 2-Fluorophenol	2.52		3.049		82.6	14	135				
Surr: Nitrobenzene-d5	2.65		3.049		87.0	10	139				
Surr: p-Terphenyl-d14	2.69		3.049		88.1	10	196				
Surr: Phenol-d6	2.77		3.049		90.7	20	142				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceede
M	Manual Integration used to determine area response	ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode				

Original

Summit Environmental Technologies, Inc.
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Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **24041390**

03-May-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B **BatchID:** **74799**

Sample ID: **24041276-001AMSD** SampType: **MSD** TestCode: **SVOC-MSTR** Units: **mg/Kg-dry** Prep Date: **4/22/2024** RunNo: **184386**

Client ID: **BatchQC** Batch ID: **74799** TestNo: **SW8270** **SW3546** Analysis Date: **4/24/2024** SeqNo: **4998823**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	1.82	0.300	2.398	0	75.9	10	130	2.021	10.4	30	
1,2-Dichlorobenzene	1.66	0.180	2.398	0	69.4	10	130	1.899	13.2	30	
1,2-Diphenylhydrazine	2.27	0.300	2.398	0	94.5	10	134	2.514	10.4	30	
1,3-Dichlorobenzene	1.64	0.180	2.398	0	68.3	10	130	1.854	12.3	30	
1,4-Dichlorobenzene	1.62	0.180	2.398	0	67.5	10	130	1.818	11.6	30	
1-Methylnaphthalene	1.84	0.180	2.398	0	76.8	10	130	2.071	11.8	30	
2,4,5-Trichlorophenol	1.99	0.180	2.398	0	83.0	10	130	2.247	12.1	30	
2,4,6-Trichlorophenol	2.05	0.180	2.398	0	85.6	11	142	2.289	10.9	30	
2,4-Dichlorophenol	1.97	0.300	2.398	0	82.0	10	130	2.211	11.7	30	
2,4-Dimethylphenol	2.16	0.180	2.398	0	90.2	10	130	2.436	11.9	30	
2,4-Dinitrophenol	1.13	0.300	2.398	0	47.0	10	140	1.454	25.2	30	QC+
2,4-Dinitrotoluene	1.99	0.180	2.398	0	83.2	18	139	2.249	12.0	30	
2,6-Dinitrotoluene	2.03	0.300	2.398	0	84.8	10	130	2.256	10.4	30	
2-Chloronaphthalene	1.97	0.300	2.398	0	82.2	10	130	2.176	9.85	30	
2-Chlorophenol	1.95	0.180	2.398	0	81.2	10	130	2.211	12.7	30	
2-Methylnaphthalene	1.87	0.300	2.398	0	78.1	10	130	2.087	10.8	30	
2-Nitrophenol	2.27	0.180	2.398	0	94.8	10	130	2.497	9.39	30	QC+
3,3´-Dichlorobenzidine	3.14	0.600	4.796	0	65.6	10	147	3.921	22.0	30	
4,6-Dinitro-o-cresol	1.83	0.600	2.398	0	76.4	10	148	2.289	22.2	30	QC+
4-Bromophenyl phenyl ether	2.04	0.180	2.398	0	85.0	10	130	2.327	13.2	30	
4-Chlorophenyl phenyl ether	1.97	0.300	2.398	0	82.0	10	133	2.203	11.4	30	
4-Nitrophenol	2.57	0.300	2.398	0	107	19	145	2.872	11.0	30	QC+
Acenaphthene	1.84	0.300	2.398	0	76.6	10	130	2.047	10.8	30	
Acenaphthylene	2.00	0.300	2.398	0	83.3	10	130	2.207	10.0	30	
Anthracene	1.98	0.300	2.398	0	82.6	21	148	2.278	13.9	30	
Benzidine	0.661	0.600	4.796	0	13.8	10	130	1.110	50.6	30	RQC+

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceede
M	Manual Integration used to determine area response	ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode				

Original

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QC SUMMARY REPORT

WO#: **24041390**
03-May-24

Client: Navarro Research & Engineering Inc.
Project: 23EC043B **BatchID:** **74799**

Sample ID: **24041276-001AMSD** SampType: **MSD** TestCode: **SVOC-MSTR** Units: **mg/Kg-dry** Prep Date: **4/22/2024** RunNo: **184386**
Client ID: **BatchQC** Batch ID: **74799** TestNo: **SW8270** **SW3546** Analysis Date: **4/24/2024** SeqNo: **4998823**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(a)anthracene	1.91	0.300	2.398	0	79.5	10	130	2.202	14.4	30	
Benzo(a)pyrene	1.88	0.300	2.398	0	78.5	10	140	2.144	13.0	30	
Benzo(g,h,i)perylene	1.90	0.180	2.398	0	79.4	10	149	2.183	13.7	30	
Benzo(k)fluoranthene	1.90	0.300	2.398	0	79.0	10	134	2.041	7.40	30	
Benzo(b)fluoranthene	1.94	0.180	2.398	0	80.8	10	175	2.185	12.0	30	
Bis(2-chloroethoxy)methane	1.85	0.180	2.398	0	77.3	10	130	2.085	11.7	30	
Bis(2-chloroethyl) ether	1.71	0.180	2.398	0	71.3	10	130	1.957	13.5	30	
Bis(2-chloroisopropyl) ether	1.82	0.300	2.398	0	75.7	10	130	2.028	11.1	30	
Bis(2-ethylhexyl) phthalate	2.09	1.80	2.398	0	87.0	10	171	2.392	13.6	30	
Butyl benzyl phthalate	2.07	0.300	2.398	0	86.5	16	162	2.396	14.4	30	
Chrysene	2.00	0.300	2.398	0	83.2	10	130	2.247	11.9	30	
Di-n-butyl phthalate	1.79	0.300	2.398	0	74.6	10	172	2.047	13.4	30	
Di-n-octyl phthalate	2.36	0.300	2.398	0	98.4	10	215	2.630	10.8	30	
Dibenzo (a,h) anthracene	1.87	0.180	2.398	0	78.0	12	148	2.135	13.2	30	
Diethyl phthalate	2.06	0.300	2.398	0	86.0	10	130	2.291	10.5	30	
Dimethyl phthalate	2.02	0.600	2.398	0	84.4	10	130	2.228	9.62	30	
Fluoranthene	1.90	0.300	2.398	0	79.4	10	158	2.163	12.7	30	
Fluorene	1.97	0.300	2.398	0	82.1	10	135	2.213	11.6	30	
Hexachlorobenzene	1.87	0.300	2.398	0	78.0	10	130	2.064	9.83	30	
Hexachlorobutadiene	1.86	0.180	2.398	0	77.4	10	130	2.060	10.4	30	
Hexachloroethane	1.74	0.300	2.398	0	72.5	10	130	1.993	13.6	30	
Indeno(1,2,3-cd)pyrene	1.52	0.300	2.398	0	63.2	14	142	1.741	13.9	30	
Isophorone	2.25	0.180	2.398	0	94.0	10	130	2.524	11.3	30	QC+
N-Nitrosodi-n-propylamine	2.07	0.180	2.398	0	86.3	10	130	2.378	13.9	30	
N-Nitrosodimethylamine	1.78	0.180	2.398	0	74.4	10	130	1.989	10.9	30	
N-Nitrosodiphenylamine	2.12	0.300	2.398	0	88.6	10	134	2.347	9.96	30	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceede
M	Manual Integration used to determine area response	ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode				

Original

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Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **24041390**

03-May-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B **BatchID:** **74799**

Sample ID: **24041276-001AMSD** SampType: **MSD** TestCode: **SVOC-MSTR** Units: **mg/Kg-dry** Prep Date: **4/22/2024** RunNo: **184386**

Client ID: **BatchQC** Batch ID: **74799** TestNo: **SW8270** **SW3546** Analysis Date: **4/24/2024** SeqNo: **4998823**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	1.74	0.300	2.398	0	72.4	10	130	1.941	11.1	30	
Nitrobenzene	2.24	0.300	2.398	0	93.6	10	130	2.490	10.4	30	QC+
p-Chloro-m-cresol	2.14	0.300	2.398	0	89.2	21	143	2.396	11.3	30	
Pentachlorophenol	1.80	0.300	2.398	0	75.0	10	146	2.030	12.1	30	
Phenanthrene	1.90	0.300	2.398	0	79.3	10	158	2.152	12.4	30	
Phenol	2.06	0.300	2.398	0	85.9	10	130	2.301	11.1	30	
Pyrene	1.83	0.300	2.398	0	76.3	10	139	2.083	13.0	30	
m&p-Cresol	2.07	0.300	2.398	0	86.3	10	130	2.290	10.2	30	
Dibenzofuran	1.91	0.300	2.398	0	79.7	10	130	2.129	10.8	30	
o-Cresol	2.17	0.180	2.398	0	90.7	10	130	2.424	10.9	30	
2-Nitroaniline	2.36	0.180	2.398	0	98.5	21	146	2.594	9.32	30	
3-Nitroaniline	1.87	0.300	2.398	0	78.1	70	130	2.072	10.1	30	
4-Nitroaniline	1.84	0.300	2.398	0	76.8	10	158	2.117	13.9	30	
4-Chloroaniline	1.42	0.180	2.398	0	59.3	10	130	1.693	17.5	30	
Aniline	1.62	0.300	2.398	0	67.6	10	130	1.855	13.5	30	
Benzyl alcohol	2.27	0.300	2.398	0	94.5	10	130	2.570	12.6	30	QC+
Pyridine	1.33	0.300	2.398	0	55.6	10	130	1.471	9.79	30	
Surr: 2,4,6-Tribromophenol	2.35		2.998		78.3	10	154		0	30	
Surr: 2-Fluorobiphenyl	2.07		2.998		69.1	16	150		0	30	
Surr: 2-Fluorophenol	2.30		2.998		76.6	14	135		0	30	
Surr: Nitrobenzene-d5	2.41		2.998		80.4	10	139		0	30	
Surr: p-Terphenyl-d14	2.31		2.998		76.9	10	196		0	30	
Surr: Phenol-d6	2.46		2.998		82.2	20	142		0	30	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceede
M	Manual Integration used to determine area response	ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode				

Original

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QC SUMMARY REPORT

WO#: **24041390**

03-May-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B **BatchID:** **74842**

Sample ID: **MB-74842** SampType: **MBLK** TestCode: **DX-Full_S(82** Units: **ng/Kg** Prep Date: **4/23/2024** RunNo: **184369**

Client ID: **PBS** Batch ID: **74842** TestNo: **SW8290** **SW8290** Analysis Date: **4/24/2024** SeqNo: **4998391**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2378-TCDF	ND	1.10									
12378-PeCDF	ND	3.50									
23478-PeCDF	ND	2.10									
123478-HxCDF	ND	5.50									
123678-HxCDF	ND	3.50									
234678-HxCDF	ND	3.20									
123789-HxCDF	ND	3.30									
1234678-HpCDF	ND	4.20									
1234789-HpCDF	ND	4.70									
OCDF	ND	50.0									
2378-TCDD	ND	1.50									
12378-PeCDD	ND	5.40									
123478-HxCDD	ND	5.10									
123678-HxCDD	ND	4.80									
123789-HxCDD	ND	3.90									
1234678-HpCDD	ND	5.00									
OCDD	ND	50.0									
Totals-Tetrafurans	ND	4.00									
Totals-Tetradioxins	ND	4.00									
Totals-Pentafurans	ND	4.00									
Totals-Pentadioxins	ND	4.00									
Totals-Hexafurans	ND	4.00									
Totals-Hexadioxins	ND	4.00									
Totals-Heptafurans	ND	4.00									
Totals-Heptadioxins	ND	4.00									
Surr: 13C-2378-TCDF	523		800.0		65.3	10	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceede
M	Manual Integration used to determine area response	ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode				

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QC SUMMARY REPORT

WO#: **24041390**

03-May-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B **BatchID:** **74842**

Sample ID: **MB-74842** SampType: **MBLK** TestCode: **DX-Full_S(82** Units: **ng/Kg** Prep Date: **4/23/2024** RunNo: **184369**

Client ID: **PBS** Batch ID: **74842** TestNo: **SW8290** **SW8290** Analysis Date: **4/24/2024** SeqNo: **4998391**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 13C-12378-PeCDF	575		800.0		71.9	10	104				
Surr: 13C-123478-HxCDF	690		800.0		86.3	10	134				
Surr: 13C-1234789-HpCDF	663		800.0		82.9	10	125				
Surr: 13C-2378-TCDD	558		800.0		69.8	10	106				
Surr: 13C-12378-PeCDD	557		800.0		69.6	10	109				
Surr: 13C-123678-HxCDD	687		800.0		85.9	10	126				
Surr: 13C-1234678-HpCDD	510		800.0		63.8	10	104				
Surr: 13C-OCDD	1590		1600		99.4	10	117				
Surr: 37Cl-2378-TCDD	47.4		80.00		59.2	10	116				

Sample ID: **LCS-74842** SampType: **LCS** TestCode: **DX-Full_S(82** Units: **ng/Kg** Prep Date: **4/23/2024** RunNo: **184369**

Client ID: **LCSS** Batch ID: **74842** TestNo: **SW8290** **SW8290** Analysis Date: **4/25/2024** SeqNo: **4998392**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2378-TCDF	88.8	1.10	80.00	0	111	61.4	130				
12378-PeCDF	532	3.50	400.0	0	133	70	130				S
23478-PeCDF	530	2.10	400.0	0	132	70	131				S
123478-HxCDF	407	5.50	400.0	0	102	70	130				
123678-HxCDF	424	3.50	400.0	0	106	70	134				
234678-HxCDF	449	3.20	400.0	0	112	69.5	130				
123789-HxCDF	433	3.30	400.0	0	108	25.1	159				
1234678-HpCDF	370	4.20	400.0	0	92.6	70	130				
1234789-HpCDF	394	4.70	400.0	0	98.5	70	130				
OCDF	972	50.0	800.0	0	122	5.07	191				
2378-TCDD	87.7	1.50	80.00	0	110	46.2	142				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceede
M	Manual Integration used to determine area response	ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode				

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QC SUMMARY REPORT

WO#: **24041390**

03-May-24

Client: Navarro Research & Engineering Inc.
Project: 23EC043B **BatchID:** **74842**

Sample ID: **LCS-74842**	SampType: **LCS**	TestCode: **DX-Full_S(82**	Units: **ng/Kg**	Prep Date: **4/23/2024**	RunNo: **184369**
Client ID: **LCSS**	Batch ID: **74842**	TestNo: **SW8290**	**SW8290**	Analysis Date: **4/25/2024**	SeqNo: **4998392**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
12378-PeCDD	495	5.40	400.0	0	124	70	130				
123478-HxCDD	437	5.10	400.0	0	109	59.8	140				
123678-HxCDD	406	4.80	400.0	0	102	70	132				
123789-HxCDD	415	3.90	400.0	0	104	46.2	149				
1234678-HpCDD	463	5.00	400.0	0	116	42	156				
OCDD	818	50.0	800.0	0	102	10	336				
Surr: 13C-2378-TCDF	648		800.0		81.0	10	110				
Surr: 13C-12378-PeCDF	690		800.0		86.3	10	104				
Surr: 13C-123478-HxCDF	646		800.0		80.8	10	134				
Surr: 13C-1234789-HpCDF	801		800.0		100	10	125				
Surr: 13C-2378-TCDD	642		800.0		80.3	10	106				
Surr: 13C-12378-PeCDD	679		800.0		84.9	10	109				
Surr: 13C-123678-HxCDD	737		800.0		92.1	10	126				
Surr: 13C-1234678-HpCDD	588		800.0		73.5	10	104				
Surr: 13C-OCDD	1810		1600		113	10	117				
Surr: 37Cl-2378-TCDD	64.2		80.00		80.3	10	116				

Sample ID: **LCSD-74842**	SampType: **LCSD**	TestCode: **DX-Full_S(82**	Units: **ng/Kg**	Prep Date: **4/23/2024**	RunNo: **184369**
Client ID: **LCSS02**	Batch ID: **74842**	TestNo: **SW8290**	**SW8290**	Analysis Date: **4/25/2024**	SeqNo: **4998394**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2378-TCDF	88.0	1.10	80.00	0	110	61.4	130	88.75	0.842	20	
12378-PeCDF	498	3.50	400.0	0	124	70	130	531.6	6.54	20	
23478-PeCDF	537	2.10	400.0	0	134	70	131	529.8	1.37	20	S
123478-HxCDF	418	5.50	400.0	0	105	70	130	407.2	2.74	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceede
M	Manual Integration used to determine area response	ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode				

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QC SUMMARY REPORT

WO#: **24041390**

03-May-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B **BatchID:** **74842**

Sample ID: **LCSD-74842** SampType: **LCSD** TestCode: **DX-Full_S(82** Units: **ng/Kg** Prep Date: **4/23/2024** RunNo: **184369**

Client ID: **LCSS02** Batch ID: **74842** TestNo: **SW8290** **SW8290** Analysis Date: **4/25/2024** SeqNo: **4998394**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
123678-HxCDF	427	3.50	400.0	0	107	70	134	423.8	0.760	20	
234678-HxCDF	462	3.20	400.0	0	116	69.5	130	449.3	2.84	20	
123789-HxCDF	449	3.30	400.0	0	112	25.1	159	432.7	3.63	20	
1234678-HpCDF	377	4.20	400.0	0	94.1	70	130	370.3	1.69	20	
1234789-HpCDF	386	4.70	400.0	0	96.4	70	130	393.8	2.11	20	
OCDF	919	50.0	800.0	0	115	5.07	191	972.4	5.60	20	
2378-TCDD	86.0	1.50	80.00	0	107	46.2	142	87.67	1.96	20	
12378-PeCDD	500	5.40	400.0	0	125	70	130	495.3	1.02	20	
123478-HxCDD	449	5.10	400.0	0	112	59.8	140	436.7	2.89	20	
123678-HxCDD	401	4.80	400.0	0	100	70	132	406.1	1.23	20	
123789-HxCDD	425	3.90	400.0	0	106	46.2	149	415.5	2.24	20	
1234678-HpCDD	466	5.00	400.0	0	116	42	156	463.2	0.592	20	
OCDD	946	50.0	800.0	0	118	10	336	817.8	14.5	20	
Surr: 13C-2378-TCDF	605		800.0		75.6	10	110		0	20	
Surr: 13C-12378-PeCDF	677		800.0		84.6	10	104		0	20	
Surr: 13C-123478-HxCDF	646		800.0		80.8	10	134		0	20	
Surr: 13C-1234789-HpCDF	795		800.0		99.4	10	125		0	20	
Surr: 13C-2378-TCDD	664		800.0		83.0	10	106		0	20	
Surr: 13C-12378-PeCDD	653		800.0		81.6	10	109		0	20	
Surr: 13C-123678-HxCDD	752		800.0		93.9	10	126		0	20	
Surr: 13C-1234678-HpCDD	614		800.0		76.7	10	104		0	20	
Surr: 13C-OCDD	1920		1600		120	10	117		0	20	S
Surr: 37Cl-2378-TCDD	61.0		80.00		76.2	10	116		0	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceede
M	Manual Integration used to determine area response	ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode				

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QC SUMMARY REPORT

WO#: **24041390**

03-May-24

Client: Navarro Research & Engineering Inc.
Project: 23EC043B **BatchID:** **R184104**

Sample ID: **MB** SampType: **MBLK** TestCode: **Anions_S(90** Units: **mg/Kg** Prep Date: RunNo: **184104**
Client ID: **PBS** Batch ID: **R184104** TestNo: **SW9056A** Analysis Date: **4/19/2024** SeqNo: **4991149**

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

Sample ID: **LCS** SampType: **LCS** TestCode: **Anions_S(90** Units: **mg/Kg** Prep Date: RunNo: **184104**
Client ID: **LCSS** Batch ID: **R184104** TestNo: **SW9056A** Analysis Date: **4/19/2024** SeqNo: **4991151**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate	4.46	0.100	4.600	0	97.0	80	120				
Nitrite	6.59	0.100	6.600	0	99.8	80	120				

Sample ID: **LCSD** SampType: **LCSD** TestCode: **Anions_S(90** Units: **mg/Kg** Prep Date: RunNo: **184104**
Client ID: **LCSS02** Batch ID: **R184104** TestNo: **SW9056A** Analysis Date: **4/19/2024** SeqNo: **4991152**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate	4.47	0.100	4.600	0	97.1	80	120	4.463	0.0493	15	
Nitrite	6.60	0.100	6.600	0	100	80	120	6.589	0.117	15	

Sample ID: **Filtered Blank** SampType: **MBLK** TestCode: **Anions_S(90** Units: **mg/Kg** Prep Date: RunNo: **184104**
Client ID: **PBS** Batch ID: **R184104** TestNo: **SW9056A** Analysis Date: **4/19/2024** SeqNo: **4991153**

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

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceede
M	Manual Integration used to determine area response	ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode				

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QC SUMMARY REPORT

WO#: **24041390**

03-May-24

Client: Navarro Research & Engineering Inc.
Project: 23EC043B **BatchID:** **R184104**

Sample ID: **Filtered Blank**	SampType: **MBLK**	TestCode: **Anions_S(90**	Units: **mg/Kg**	Prep Date:	RunNo: **184104**
Client ID: **PBS**	Batch ID: **R184104**	TestNo: **SW9056A**		Analysis Date: **4/19/2024**	SeqNo: **4991153**

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

Sample ID: **Filtered LCS**	SampType: **LCS**	TestCode: **Anions_S(90**	Units: **mg/Kg**	Prep Date:	RunNo: **184104**
Client ID: **LCSS**	Batch ID: **R184104**	TestNo: **SW9056A**		Analysis Date: **4/19/2024**	SeqNo: **4991154**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate	4.47	0.100	4.600	0	97.1	80	120				
Nitrite	6.59	0.100	6.600	0	99.8	80	120				

Sample ID: **24041390-001ADUP**	SampType: **DUP**	TestCode: **Anions_S(90**	Units: **mg/Kg**	Prep Date:	RunNo: **184104**
Client ID: **300-002-GSV (1331-**	Batch ID: **R184104**	TestNo: **SW9056A**		Analysis Date: **4/19/2024**	SeqNo: **4991157**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate	ND	1.00		0	0			0	0	15	R
Nitrite	ND	1.00		0	0			0	0	15	

Sample ID: **24041390-001AMS**	SampType: **MS**	TestCode: **Anions_S(90**	Units: **mg/Kg**	Prep Date:	RunNo: **184104**
Client ID: **300-002-GSV (1331-**	Batch ID: **R184104**	TestNo: **SW9056A**		Analysis Date: **4/19/2024**	SeqNo: **4991158**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate	44.8	1.00	46.00	0.4430	96.4	80	120				
Nitrite	67.0	1.00	66.00	0	102	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceede
M	Manual Integration used to determine area response	ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode				

Original

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QC SUMMARY REPORT

WO#: **24041390**

03-May-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B **BatchID:** **R184104**

Sample ID: **24041390-001AMS** SampType: **MS** TestCode: **Anions_S(90** Units: **mg/Kg** Prep Date: RunNo: **184104**

Client ID: **300-002-GSV (1331-** Batch ID: **R184104** TestNo: **SW9056A** Analysis Date: **4/19/2024** SeqNo: **4991158**

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

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceede
M	Manual Integration used to determine area response	ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode				

Original

Qualifiers and Acronyms

WO#: **24041390**
Date: **5/3/2024**

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

Qualifiers

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

Acronyms

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

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

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC. Analytical Laboratories

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

DATES REPORT

WO#: **24041390**

03-May-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
24041390-001A	300-002-GSV (1331-1333)	4/9/2024 1:31:00 PM	Solid	Anions Analysis by IC (SW-846: 9056			4/19/2024 12:25:00 PM
				HRMS Dioxin Analysis - Full List (82		4/23/2024 9:00:00 PM	5/1/2024 9:35:30 PM
				Mercury Analysis (7471)		4/19/2024 8:50:00 AM	4/19/2024 11:26:00 AM
				Metals Analysis (6010D)		4/19/2024 8:35:00 AM	4/21/2024 6:29:00 PM
				Metals Analysis (6010D)		4/19/2024 8:35:00 AM	4/22/2024 3:02:00 PM
				Metals Analysis (6010D)		4/19/2024 8:35:00 AM	4/23/2024 9:53:00 AM
				SVOC by 8270E		4/22/2024 12:00:00 PM	4/24/2024 5:21:00 PM
24041390-002A	300-002-GSV (0911-0913)	4/10/2024 9:11:00 AM		Anions Analysis by IC (SW-846: 9056			4/19/2024 1:45:00 PM
				HRMS Dioxin Analysis - Full List (82		4/23/2024 9:00:00 PM	5/1/2024 10:39:30 PM
				Mercury Analysis (7471)		4/19/2024 8:50:00 AM	4/19/2024 11:28:00 AM
				Metals Analysis (6010D)		4/19/2024 8:35:00 AM	4/21/2024 6:40:00 PM
				Metals Analysis (6010D)		4/19/2024 8:35:00 AM	4/22/2024 3:06:00 PM
				Metals Analysis (6010D)		4/19/2024 8:35:00 AM	4/23/2024 9:57:00 AM
				SVOC by 8270E		4/22/2024 12:00:00 PM	4/24/2024 5:59:00 PM
24041390-003A	300-002-GSV (1321-1323)	4/10/2024 1:21:00 PM		Anions Analysis by IC (SW-846: 9056			4/19/2024 2:37:00 PM
				HRMS Dioxin Analysis - Full List (82		4/23/2024 9:00:00 PM	5/1/2024 11:43:30 PM
				Mercury Analysis (7471)		4/19/2024 8:50:00 AM	4/19/2024 11:37:00 AM
				Metals Analysis (6010D)		4/19/2024 8:35:00 AM	4/21/2024 6:44:00 PM
				Metals Analysis (6010D)		4/19/2024 8:35:00 AM	4/22/2024 3:10:00 PM
				Metals Analysis (6010D)		4/19/2024 8:35:00 AM	4/23/2024 10:02:00 AM
				SVOC by 8270E		4/22/2024 12:00:00 PM	4/24/2024 6:38:00 PM
24041390-004A	300-002-GSV (1331-1333)	4/10/2024 1:31:00 PM		Anions Analysis by IC (SW-846: 9056			4/19/2024 3:04:00 PM

Original

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

DATES REPORT

WO#: **24041390**

03-May-24

Client: Navarro Research & Engineering Inc.

Project: 23EC043B

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
24041390-004A	300-002-GSV (1331-1333)	4/10/2024 1:31:00 PM	Solid	HRMS Dioxin Analysis - Full List (82		4/23/2024 9:00:00 PM	5/2/2024 12:47:00 AM
				Mercury Analysis (7471)		4/19/2024 8:50:00 AM	4/19/2024 11:40:00 AM
				Metals Analysis (6010D)		4/19/2024 8:35:00 AM	4/21/2024 6:47:00 PM
				Metals Analysis (6010D)		4/19/2024 8:35:00 AM	4/22/2024 3:13:00 PM
				SVOC by 8270E		4/22/2024 12:00:00 PM	4/24/2024 7:16:00 PM

Original

WSTF CHAIN OF CUSTODY RECORD – SUMMIT

Date 4/17/2024

24041390

Laboratory: Summit (Alliance TG) PO#23EC043B

Address shipping questions to:

☐ Lori Minnick, 575-524-5119

☐ Other _____, 575-524-_____

Send sample receipt confirmation and analytical reports to:

☒ Kyle Williams, jerry.k.williams@nasa.gov

☒ Stephanie Portillo, stephanie.portillo@nasa.gov

Special Instructions

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

Return Address:

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

Sample Number	Sample Location	# of Containers	Sample Matrix*	SVOC – 8270D	Metals & Hg – 6010, 7471B, Nitrate/Nitrite – 300.0	Dioxins/Furans – 8290A									Charge Number (WSTF Use Only)	Comments
2404091331	300-002-GSV, 10bgs	1	S	X											23EEHWMU	
2404091332	300-002-GSV, 10bgs	1	S		X											
2404091333	300-002-GSV, 10bgs	1	S			X										
2404100911	300-002-GSV, 40bgs	1	S	X												
2404100912	300-002-GSV, 40bgs	1	S		X											
2404100913	300-002-GSV, 40bgs	1	S			X										
2404101321	300-002-GSV, 80bgs	1	S	X												
2404101322	300-002-GSV, 80bgs	1	S		X											
2404101323	300-002-GSV, 80bgs	1	S			X										U.O – 0.2 = 5.8
2404101331	300-002-GSV, 80bgs	1	S	X												C.S. intact 4/17/24
2404101332	300-002-GSV, 80bgs	1	S		X											Fedex cooler

Relinquished By:	Date/Time:	Accepted By:	Date/Time:
[signature]	4/17/24 10:00 h	[signature]	4/18/24 0920

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

WSTF CHAIN OF CUSTODY RECORD – SUMMIT

Date 4/17/2024

Laboratory: Summit (Alliance TG) PO#23EC043B

Address shipping questions to:

☐ Lori Minnick, 575-524-5119

☐ Other _____, 575-524-_____

Send sample receipt confirmation and analytical reports to:

☒ Kyle Williams, jerry.k.williams@nasa.gov

☒ Stephanie Portillo, stephanie.portillo@nasa.gov

Special Instructions

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

Return Address:

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

Sample Number	Sample Location	# of Containers	Sample Matrix*	Analytical Requirements: SVOC – 8270D	Metals & Hg – 6010, 7471B, Nitrate/Nitrite – 300.0	Dioxins/Furans – 8290A									Charge Number (WSTF Use Only)	Comments
2404101333	300-002-GSV, 80bgs	1	S			X									23EEHWMU	

Relinquished By:	Date/Time:	Accepted By:	Date/Time:
[signature]	4/17/24 10:00 h		

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

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

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

Sample Log-In Check List

Client Name: NAV-NM-88012 Work Order Number: 24041390 RcptNo: 1

Logged by:	Christina N. Gemma	4/18/2024 9:20:00 AM	C. Gemma
Completed By:	Christina N. Gemma	4/18/2024 2:28:55 PM	C. Gemma
Reviewed By:	Salwa A. Najjar	4/18/2024 4:00:22 PM	Salwa Najjar

Chain of Custody

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

Log In

3.	Coolers are present?	Yes ☑	No ☐	NA ☐
4.	Shipping container/cooler in good condition?	Yes ☑	No ☐	
	Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
	No. Seal Date: 4/17/2024 Signed By:			
5.	Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
6.	Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
7.	Sample(s) in proper container(s)?	Yes ☑	No ☐	
8.	Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
9.	Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
10.	Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
11.	Is the headspace in the VOA vials less than 1/4 inch or 6 mm?	Yes ☐	No ☐	No VOA Vials ☑
12.	Were any sample containers received broken?	Yes ☐	No ☑	
13.	Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
14.	Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
15.	Is it clear what analyses were requested?	Yes ☑	No ☐	
16.	Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

Special Handling (if applicable)

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

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

18. Additional remarks:

Cooler Information

Cooler No	Temp ºC	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.8	Good	Yes		4/17/2024	

April 30, 2024

Test Report

SwRI Project #:	26040.09.001
SwRI Task Order:	240418-7
Batch Number:	M607-939
Date Received:	04/18/2024
Purchase Order:	23EC056B

Prepared by:

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

Prepared for:

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

Alice Yau

Digitally signed by Alice Yau
Date: 2024.04.30 10:59:36 -05'00'

Authorized for Release
04/30/2024 12:00PM
Alice Yau, Project Manager
Alice.Yau@swri.org
210-522-5042

Elaine Wild

Digitally signed by Elaine Wild
Reason: FOR
Date: 2024.04.30 10:28:03 -05'00'

Mike Dammann
Laboratory Director

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

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

CLIENT: Navarro Research and Engineering Inc.
SwRI PROJECT #: 26040.09.001
TASK ORDERS: 240418-7
NAVARRO PO #: 23EC056B

NARRATIVE

(M607-939)

CLIENT:	**Navarro Research and Engineering Inc.**
SwRI PROJECT #:	**26040.09.001**
BATCH #:	**M607-939**
TASK ORDERS:	**240418-7**
REPORT DATE:	**04/30/2024**

NARRATIVE FOR NDMA/DMN/BROMACIL ANALYSIS

1. Samples were extracted with dichloromethane (DCM) and analyzed by GC/MS in selective ion monitoring mode for N-Nitrosodimethylamine (NDMA), N-Nitrodimethylamine (DMN) and Bromacil according to the modified Method 607.

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

3. The sample reporting limit is 0.33 ppb (ng/g; µg/kg) for 30 gram Soxhlet extraction of soil samples. All targets were quantified within the calibration curve range 0.33 - 167 ng/g.

4. Laboratory control sample (LCS) and matrix spike samples (if any) were spiked at 16.7 ppb, then extracted and analyzed. Recovery of NDMA exceeded the limit 110% but the method recovery criteria was established for aqueous matrix so it should be considered advisory. Recoveries of DMN and Bromacil met their respective criteria of 30-150% for DMN, and 40-190% for Bromacil.

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

6. Laboratory process blanks (PB) and LCS using sodium sulfate as matrix were extracted and analyzed with every extraction batch.

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

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

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

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

CLIENT: Navarro Research and Engineering Inc.
SwRI PROJECT #: 26040.09.001
TASK ORDERS: 240418-7
NAVARRO PO #: 23EC056B

TASK ORDER AND CHAIN OF CUSTODY

(M607-939)

Southwest Research Institute

Laboratory Task Order

TO #: 240418-7 Revision: 1

Project(s): 26040.09.001
Manager(s): Yau, Alice
To Client: 05/09/24

SDG: M607-939

SRR #'s: 71048
Client(s): Navarro Research and Engineering Inc.

Instructions

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

Documents Related to this task order: 392921[COC for SRR 71048], 392922[Paperwork for SRR 71048]

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

Test: E607S
Section: EXTLAB

Holding: 14 days from CED

EXTRACTION BY METHOD 607.

Cnt: 4

System ID	Type	Cont	Matrix	Customer ID	CED	Method Date
719364		1	Soil	2404091337 (300-002-GSV-10)	09 Apr 24	23 Apr 24
719365		1	Soil	2404100917 (300-002-GSV-40)	10 Apr 24	24 Apr 24
719366		1	Soil	2404101327 (300-002-GSV-80)	10 Apr 24	24 Apr 24
719367		1	Soil	2404101337 (300-002-GSV-80(D))	10 Apr 24	24 Apr 24

Test: T607W
Section: TDG

Holding: 40 days from VTSR

NDMA/DMN ANALYSIS BY GC/MS/SIM

Cnt: 4

System ID	Type	Cont	Matrix	Customer ID	VTSR	Method Date
719364		1	Soil	2404091337 (300-002-GSV-10)	18 Apr 24	28 May 24
719365		1	Soil	2404100917 (300-002-GSV-40)	18 Apr 24	28 May 24
719366		1	Soil	2404101327 (300-002-GSV-80)	18 Apr 24	28 May 24
719367		1	Soil	2404101337 (300-002-GSV-80(D))	18 Apr 24	28 May 24

Date 4-17-24

WSTF CHAIN OF CUSTODY RECORD

Laboratory: SwRI PO# 18EC010B

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

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

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

Sample Number	Sample Location	# of Containers	Sample Matrix*	Analytical Requirements: NDMA/Bromacil 607						Charge Number (WSTF Use Only)
2404091337	300.002-GSV-10	1	S	X						HWMU.0007
2404100917	300-002-GSV-40	1	S	X						"
2404101327	300-002-GSV-80	1	S	X						"
2404101337	300002-GSV-80(D)	1	S	X						"

Client: Navarro Research
SRR # 71048
Project # 26040.09.001
Case: ~~18EC010B~~ 23 E
VTSR: 04/18/24
Sample(s) Received: Intac
Temperature: 1.7°CSN # C

Relinquished By:	Date/Time:	Accepted By:	
Jerry W Jennings	4-17-24 1100HRS	David Mares	04

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

WSTF 381B (05/2016)

NASA-WSTF SHIPPING DOCUMENT

1 Ocean Blue DBS

SHIPPED FROM: **NASA JSC WHITE SANDS TEST FACILITY** **12600 NASA ROAD; BLDG. 120** **LAS CRUCES, NEW MEXICO 88012**	WSTF ORIGINATOR/MAIL CODE/TELEPHONE NO. Debra Smith / 524-5023 Jerry Williams / 524-5304		
	ORDER OR CONTRACT NUMBER PO 23EC056B		SHIPMENT CONTROL NO
SHIP TO: (ADDRESS, PHONE#, POINT OF CONTACT) Southwest Research Institute 6220 Culebra Road San Antonio, TX 78238 Alice Yau 210-522-5042	PROJECT or TASK NUMBER HWMU 505-100		SHIP VIA
	Contain Batteries NO	NO. PKG.	DATE SHIPPED / AirBill/ PRO #/Bol #
	Battery Type-Part #	AUTHORIZED BY:	DEPT.

ITEM NO.	EQUIPMENT CONTROL NO.	MODEL NO./ STOCK NO./ PART NO.	ITEM NAME - MANUFACTURER'S NAME AND SERIAL NO.	UNIT OF ISSUE	QTY.
1			GC/MS/SIM analysis of soil samples for NDMA, DMN & BROMACIL based on modified method 607	EA	4
2			GC/MS/SIM analysis of water samples for NDMA, DMN & BROMACIL based on modified method 607	EA	0

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

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

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

PACKED BY:	# CONTAINERS	TYPE CONTAINERS	DIMENSIONS	WEIGHT
Please check off the applicable labels! ☐ FRAGILE ☐ GLASS ☐ DELICATE ☐ DO NOT XRAY ☐ REFRIGERATE ☐ OTHER ☐ BUBBLEWRAP ☐ FOAM				
	TOTAL CONTAINERS			TOTAL WEIGHT

RECEIVED BY: David Mann

REPRESENTING: SwRI

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

Client: Navarro Research and Engineering Inc.
SRR # 71048
Project # 26040.09.001
Case: ~~18EC010B~~ 23EC056B MS 4-30-24
VTSR: 04/18/24
Sample(s) Received: Intact
Temperature: 1.7°CSN # 029926

WSTF 196 (1/06)

CLIENT:	**Navarro Research and Engineering Inc.**
SwRI PROJECT #:	**26040.09.001**
TASK ORDERS:	**240418-7**
NAVARRO PO #:	**23EC056B**

ANALYTICAL DATA REPORT SHEETS

(M607-939)

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2404091337 (300-002-GSV-10)

Client: Navarro Research and Engineering Inc.
Batch: M607-939
Task Order: 240418-7
Matrix: Soil
Sample Wt/Vol: 30.32 g

Project: 26040.09.001
Date Received: 4/18/2024
Date Extracted: 4/22/2024
Date Analyzed: 4/25/2024
Date Reported: 4/30/2024

Lab Sample ID: 719364
Lab File Name: A04252402.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: ng/g
Method: TAP 01-0408-031

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

U - Undetected, indicates not found above the detection limit

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

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2404100917 (300-002-GSV-40)

Client: Navarro Research and Engineering Inc.
Batch: M607-939
Task Order: 240418-7
Matrix: Soil
Sample Wt/Vol: 30.12 g

Project: 26040.09.001
Date Received: 4/18/2024
Date Extracted: 4/22/2024
Date Analyzed: 4/25/2024
Date Reported: 4/30/2024

Lab Sample ID: 719365
Lab File Name: A04252403.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: ng/g
Method: TAP 01-0408-031

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

U - Undetected, indicates not found above the detection limit

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

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2404101327 (300-002-GSV-80)

Client: Navarro Research and Engineering Inc.
Batch: M607-939
Task Order: 240418-7
Matrix: Soil
Sample Wt/Vol: 30.28 g

Project: 26040.09.001
Date Received: 4/18/2024
Date Extracted: 4/22/2024
Date Analyzed: 4/25/2024
Date Reported: 4/30/2024

Lab Sample ID: 719366
Lab File Name: A04252404.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: ng/g
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.33	U
4164-28-7	N-Nitrodimethylamine	<0.33	U
314-40-9	Bromacil	0.20	J

U - Undetected, indicates not found above the detection limit

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

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2404101337 (300-002-GSV-80(D))

Client: Navarro Research and Engineering Inc.
Batch: M607-939
Task Order: 240418-7
Matrix: Soil
Sample Wt/Vol: 30.08 g

Project: 26040.09.001
Date Received: 4/18/2024
Date Extracted: 4/22/2024
Date Analyzed: 4/25/2024
Date Reported: 4/30/2024

Lab Sample ID: 719367
Lab File Name: A04252405.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: ng/g
Method: TAP 01-0408-031

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

U - Undetected, indicates not found above the detection limit

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

CLIENT:	**Navarro Research and Engineering Inc.**
SwRI PROJECT #:	**26040.09.001**
TASK ORDERS:	**240418-7**
NAVARRO PO #:	**23EC056B**

QA DATA SHEETS

(BLANK, MATRIX SPIKE, SURROGATE, CALIBRATION)

(M607-939)

Southwest Research Institute

Method 607 Surrogate Recovery Summary

Client: Navarro Research and Engineering Inc.

Matrix: Soil SDG: M607-939

Project: 26040.09.001

	Client Sample ID	Lab Sample ID	N-Nitroso-di-n-propylamine-d14	
			% Recovery	Recovery Limits
1	PB24D22CM1	PB24D22CM1	101	40-160
2	2404091337 (300-002-GSV-10)	719364	85	40-160
3	2404100917 (300-002-GSV-40)	719365	98	40-160
4	2404101327 (300-002-GSV-80)	719366	97	40-160
5	2404101337 (300-002-GSV-80(D))	719367	101	40-160
6	LCS24D22CM1	LCS24D22CM1	96	40-160

Southwest Research Institute

Method 607 Blank Spike Recovery Report

Sample ID
LCS24D22CM1

Client: Navarro Research and Engineering Inc.
Batch: M607-939
Task Order: N/A
Matrix: Na2SO4
Sample Wt/Vol: 30.01 g

Project: 26040.09.001
Date Received: N/A
Date Extracted: 4/22/2024
Date Analyzed: 4/25/2024
Date Reported: 4/30/2024

Lab Sample ID: LCS24D22CM1
Blank ID: PB24D22CM1

ANALYTE	Spike Added ng/g	Blank Conc ng/g	LCS Conc ng/g	% Recovery	QC % Recovery Limits
N-Nitrosodimethylamine	16.7	0	18.7	112 *	13 - 110
N-Nitrodimethylamine	16.7	0	21.0	126	30 - 150
Bromacil	16.7	0	26.2	157	40 - 190

Southwest Research Institute

Method 607 Blank Summary

Blank ID: PB24D22CM1
Project: 26040.09.001
Client: Navarro Research and Engineering Inc.
SDG: M607-939
Matrix: Soil

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

Client Sample ID	Lab Sample ID	Date Acquired	Time Acquired
2404091337 (300-002-GSV-10)	719364	4/25/2024	10:25:00
2404100917 (300-002-GSV-40)	719365	4/25/2024	10:52:00
2404101327 (300-002-GSV-80)	719366	4/25/2024	11:19:00
2404101337 (300-002-GSV-80(D))	719367	4/25/2024	11:46:00
LCS24D22CM1	LCS24D22CM1	4/25/2024	12:13:00

Southwest Research Institute

Continuing Calibration Check Sheet

SwRI Project #:	26040.09.001	Calibration Date:	04/25/2024
Sponsor:	Navarro Research and Engineering Inc.	Analytical Method:	TAP 01-0408-031
SwRI Standard ID:	257250	Std Concentration:	0.5 µg/mL
File ID #:	A042524S1	Initial Calibration Date:	04/23/2024

ANALYTE	Mean RRF	CC RRF	% Dev
N-Nitrosodimethylamine	0.370	0.375	-1.4
N-Nitrodimethylamine	0.136	0.133	1.9
N-Nitroso-di-n-propylamine-d14	0.119	0.117	1.4
Bromacil	2.063	1.564	24.2

Southwest Research Institute

Initial Calibration Data Sheet

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

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

Southwest Research Institute

Method 607 Internal Standard Summary

Filename: A042524S1.txt
Standard ID: 257250
Project: 26040.09.001

Date Analyzed: 04/25/2024
Time Analyzed: 09:06:00
Client: Navarro Research and Engineering Inc.

		IS1		IS2	
		Area	RT	Area	RT
Mid Point Standard		582494	8.64	170853	15.21
Upper Limit		1164988	8.97	341706	15.54
Lower Limit		291247	8.31	85426.5	14.88
Client Sample ID	**Lab Sample ID**				
PB24D22CM1	PB24D22CM1	503443	8.64	145205	15.20
2404091337 (300-002-GSV-10)	719364	501723	8.64	148678	15.20
2404100917 (300-002-GSV-40)	719365	484625	8.64	158293	15.21
2404101327 (300-002-GSV-80)	719366	477894	8.64	159582	15.20
2404101337 (300-002-GSV-80(D))	719367	483807	8.64	158339	15.20
LCS24D22CM1	LCS24D22CM1	485834	8.64	151769	15.20

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

* Flag indicating value is outside QC limits

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID: PB24D22CM1

Client: Navarro Research and Engineering Inc.
Batch: M607-939
Task Order: N/A
Matrix: Na2SO4
Sample Wt/Vol: 30.10 g

Project: 26040.09.001
Date Received: N/A
Date Extracted: 4/22/2024
Date Analyzed: 4/25/2024
Date Reported: 4/30/2024

Lab Sample ID: PB24D22CM1
Lab File Name: A04252401.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: ng/g
Method: TAP 01-0408-031

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

U - Undetected, indicates not found above the detection limit

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

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID: LCS24D22CM1

Client: Navarro Research and Engineering Inc.
Batch: M607-939
Task Order: N/A
Matrix: Na2SO4
Sample Wt/Vol: 30.01 g

Project: 26040.09.001
Date Received: N/A
Date Extracted: 4/22/2024
Date Analyzed: 4/25/2024
Date Reported: 4/30/2024

Lab Sample ID: LCS24D22CM1
Lab File Name: A04252406.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: ng/g
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	18.7	
4164-28-7	N-Nitrodimethylamine	21.0	
314-40-9	Bromacil	26.2	

U - Undetected, indicates not found above the detection limit

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

CLIENT:	**Navarro Research and Engineering Inc.**
SwRI PROJECT #:	**26040.09.001**
TASK ORDERS:	**240418-7**
NAVARRO PO #:	**23EC056B**

EXTRACTION AND INJECTION LOG

(M607-939)

Preparation Log

Semi-volatiles

A37743

A37743

Southwest Research Institute
San Antonio, Texas 78238

Batch: 20240422-P004 (Ver. 1)
Status: APPROVED

Client(s): Navarro Research and Engineering Inc.
Task Order(s): 240418-7
SDG(s): M607-939
Case(s): 23EC056B
Project(s): 26040.09.001
Method(s): 3540C (TAP: 01-0402-152)
Matrix(s): Soil
Reagent(s): Sodium Sulfate CIMS#259565, DCM Optima Fisher CIMS#256269
Balance(s): #61 (AN:UNDEFINED)
Wiretrol(s): 50-100uL 218870
Reference Book(s): 23-0406-018 P096
Time In: 04/22/2024 16:25:55 Time Out: 04/23/2024 08:25:55
Location: Handed to AY

Sample Identification	Client Identification	Matrix	Solv Vol DCM	Sample WT (g)	FEV DCM (uL)	FV DCM (uL)
PB24D22CM1 ①	NA	Sodium Sulfate	200	30.10	1000	1000
LCS24D22CM1 ②	NA	Sodium Sulfate	200	30.01	1000	1000
719364 ①	2404091337 (300-002-GSV-10)	Soil	200	30.32	1000	1000
719365 ①	2404100917 (300-002-GSV-40)	Soil	200	30.12	1000	1000
719366 ①	2404101327 (300-002-GSV-80)	Soil	200	30.28	1000	1000
719367 ①	2404101337 (300-002-GSV-80(D))	Soil	200	30.08	1000	1000

① spiked 0.100 mL of CI# 254622 M607 surrogate (Lot# 062422, Source: Absolute Standards, Inc., Exp: 06/24/2027)
② spiked 0.05 mL of CI# 226098 607 MS/LCS solution (Lot# 224743, 070722, 041922, SDGI-021, Source: Fisher Scientific, Absolute Standards, Inc., Cambridge Isotope Laboratories, Exp: 01/09/2025) and
0.100 mL of CI# 254622 M607 surrogate (Lot# 062422, Source: Absolute Standards, Inc., Exp: 06/24/2027)

Comments:
Hamed Edrisi:Set-Up, Spike,Extract
Marina Lebron:Set-Up, Extract, Concentrate, Qualitative Transfer
Christina Menn:Set-Up, Spike Witness,Extract, Blow Down, Qualitative Transfer, Final Volume

CGL - 04/30/2024

Prepared by: EDRISI, HAMED Date: 04/22/2024

Reviewed by: YAU, ALICE Date: 04/25/2024

Disposal Int/Date/Loc:

Preparation Log

Semi-volatiles

A37743

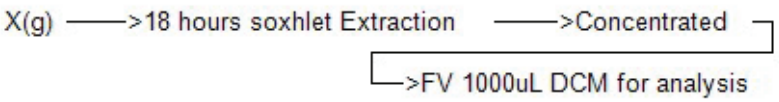
A37743

Southwest Research Institute
San Antonio, Texas 78238

Batch: 20240422-P004 (Ver. 1)
Status: APPROVED

Client(s): Navarro Research and Engineering Inc.
Task Order(s): 240418-7
SDG(s): M607-939
Case(s): 23EC056B
Project(s): 26040.09.001
Method(s): 3540C (TAP: 01-0402-152)
Matrix(s): Soil
Reagent(s): Sodium Sulfate CIMS#259565, DCM Optima Fisher CIMS#256269
Balance(s): #61 (AN:UNDEFINED)
Wiretrol(s): 50-100uL 218870
Reference Book(s): 23-0406-018 P096
Time In: 04/22/2024 16:25:55 Time Out: 04/23/2024 08:25:55
Location: Handed to AY

All Samples:



Prepared by: EDRISI, HAMED Date: 04/22/2024

Reviewed by: YAU, ALICE Date: 04/25/2024

Disposal Int/Date/Loc: _____

Southwest Research Institute GC/MS Injection Log

OPERATOR: AYY SEQUENCE DATE: 4/25/2024 INSTRUMENT: Amidala
COLUMN: Agilent DB-1701 (30 m;0.25 mm;0.25 µm film)
DETECTOR TYPE: MS INJECTION TYPE: Pulsed splitless
CARRIER GAS: Helium SOLVENT: DCM
METHOD FILE: MET_607C.M
CLIENT NAME: Navarro Research and Engineering Inc. PROJECT NUMBER: 26040.09.001
TASK ORDER: 240418-7 METHOD: MET_607C.M MATRIX: Soil
DATA PATH: C:\MassHunter\GCMS\1\data\2024\042524.sequence

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

FILENAME	VIAL	DATE/TIME	METHOD	SAMPLE DESCRIPTION
A042524S1	100	4/25/2024 09:06	MET_607C	M607 Std4 0.5 ug/mL CIMS: 257250
A04252401	1	4/25/2024 09:58	MET_607C	PB24D22CM1 IS=0.2NG/UL
A04252402	2	4/25/2024 10:25	MET_607C	2404091337 (300-002-GSV-10) IS=0.2NG/UL 719364
A04252403	3	4/25/2024 10:52	MET_607C	2404100917 (300-002-GSV-40) IS=0.2NG/UL 719365
A04252404	4	4/25/2024 11:19	MET_607C	2404101327 (300-002-GSV-80) IS=0.2NG/UL 719366
A04252405	5	4/25/2024 11:46	MET_607C	2404101337 (300-002-GSV-80(D)) IS=0.2NG/UL 719367
A04252406	6	4/25/2024 12:13	MET_607C	LCS24D22CM1 IS=0.2NG/UL

END OF SEQUENCE
Page 1 of 1

Appendix E Rock Core Matrix Diffusion Data

SANBORN HEAD

Data Report for Rock Core Sampling and Analysis

NASA White Sands Test Facility
Las Cruces, NM

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

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

1.0 INTRODUCTION

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

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

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

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

2.0 FIELD SAMPLING COLLECTION METHODS

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

2.1 Drilling and Core Collection

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

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

2.2 VOC and SVOC Sample Collection and Processing

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

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

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

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

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

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

2.3 Physical Property Sample Collection

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

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

3.0 LABORATORY ANALYSIS AND VOC EXTRACTION

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

Pace's laboratory report is presented in Appendix A.

4.0 RESULTS

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

4.1 Rock Core VOC Results and Porewater Estimates

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

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

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

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

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

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

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

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

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

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

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

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

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

Table A: Organic Carbon Partitioning Coefficients

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

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

4.2 Figures

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

4.3 Results from Field Blanks and Duplicates

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

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

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

5.0 REFERENCES

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

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

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

Tables

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

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

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

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

Notes:

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

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

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

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

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

Notes:

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

2. Refer to Table 3 for results.

3. Definitions: ft bgs - feet below ground surface

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

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

Notes:

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

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

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

TABLE 4
Total VOC Concentrations in Rock Core Samples

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

TABLE 4
Total VOC Concentrations in Rock Core Samples

| Samples (1) | | | Comments/Observations (2) | | | VOC Analytical Results µg/kg (3) | | |

TABLE 4
Total VOC Concentrations in Rock Core Samples

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

TABLE 4
Total VOC Concentrations in Rock Core Samples

| Samples (1) | | | Comments/Observations (2) | | | VOC Analytical Results µg/kg (3) | | |

TABLE 4
Total VOC Concentrations in Rock Core Samples

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

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

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

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

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

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

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

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

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

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

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

Notes

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

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

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

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

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

| Blank ID | Semi-Volatile Organic Compounds In Water (µg/Kg) | | | | | | | | | | Volatile Organic Compounds In Methanol Extract (µg/Kg) | | | | | | | | | |

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

| Sample ID | SVOC Analytical Results µg/kg | | | | | | | | | | VOC Analytical Results µg/kg | | | | | | | | | |

Figures

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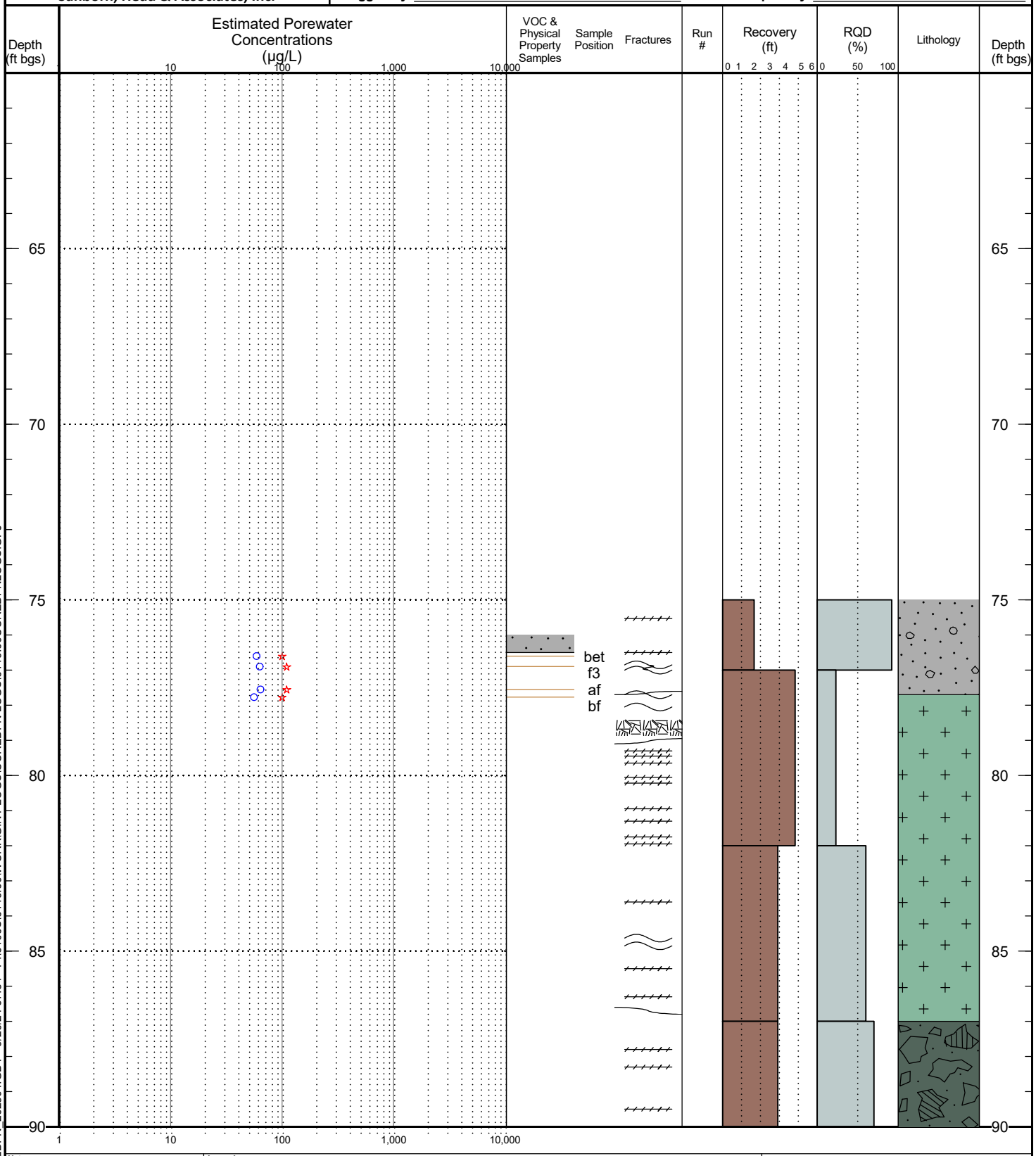
Sanborn, Head & Associates, Inc.

300.001.GSV

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

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



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

Legend

Contaminants denoted by color:
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- Trichlorofluoromethane

Sample Position:
- af - Above fracture
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- bet - Between fractures
- mat - Matrix
- f# - Tenths of feet from fracture

Fractures:
- Mechanical Fracture
- Fracture
- Extermely Fractured

Lithology:
- Conglomerate
- Breccia
- Limestone
- Andesite
- No Recovery
- Rhyolite

CORE DFN ™
DISCRETE FRACTURE NETWORK APPROACH

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

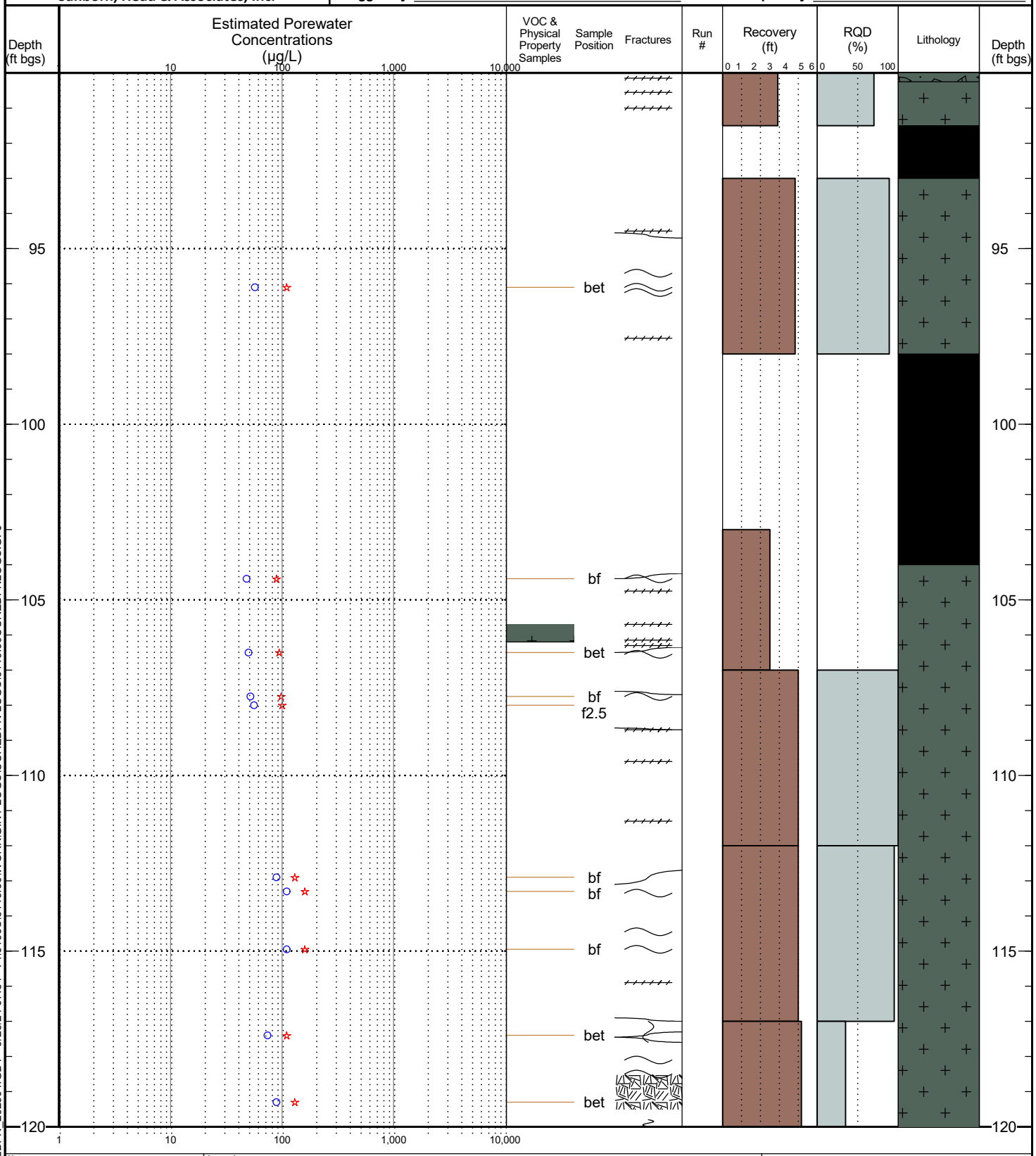
SANBORN HEAD

Sanborn, Head & Associates, Inc.

300.001.GSV

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

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



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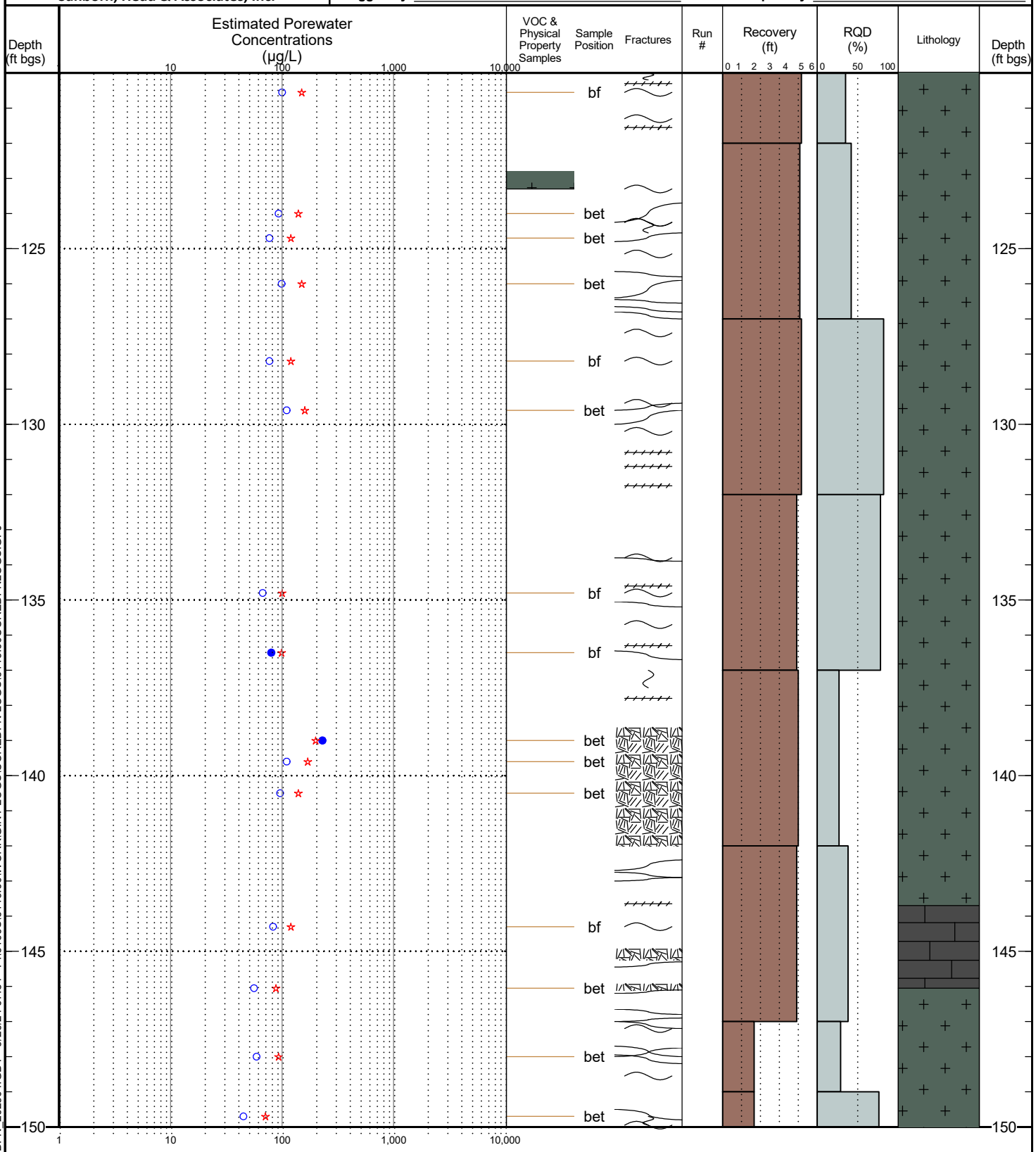

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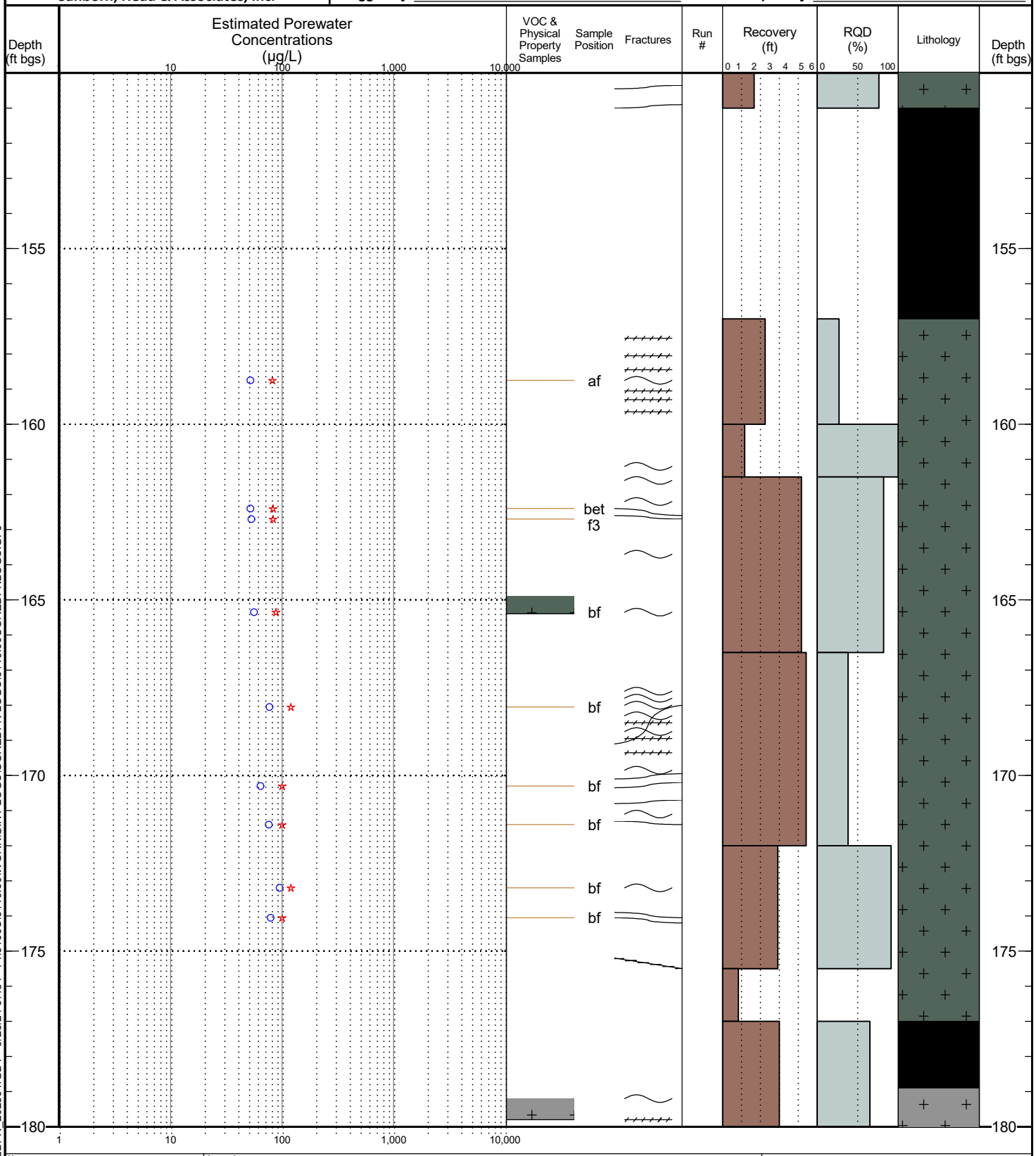

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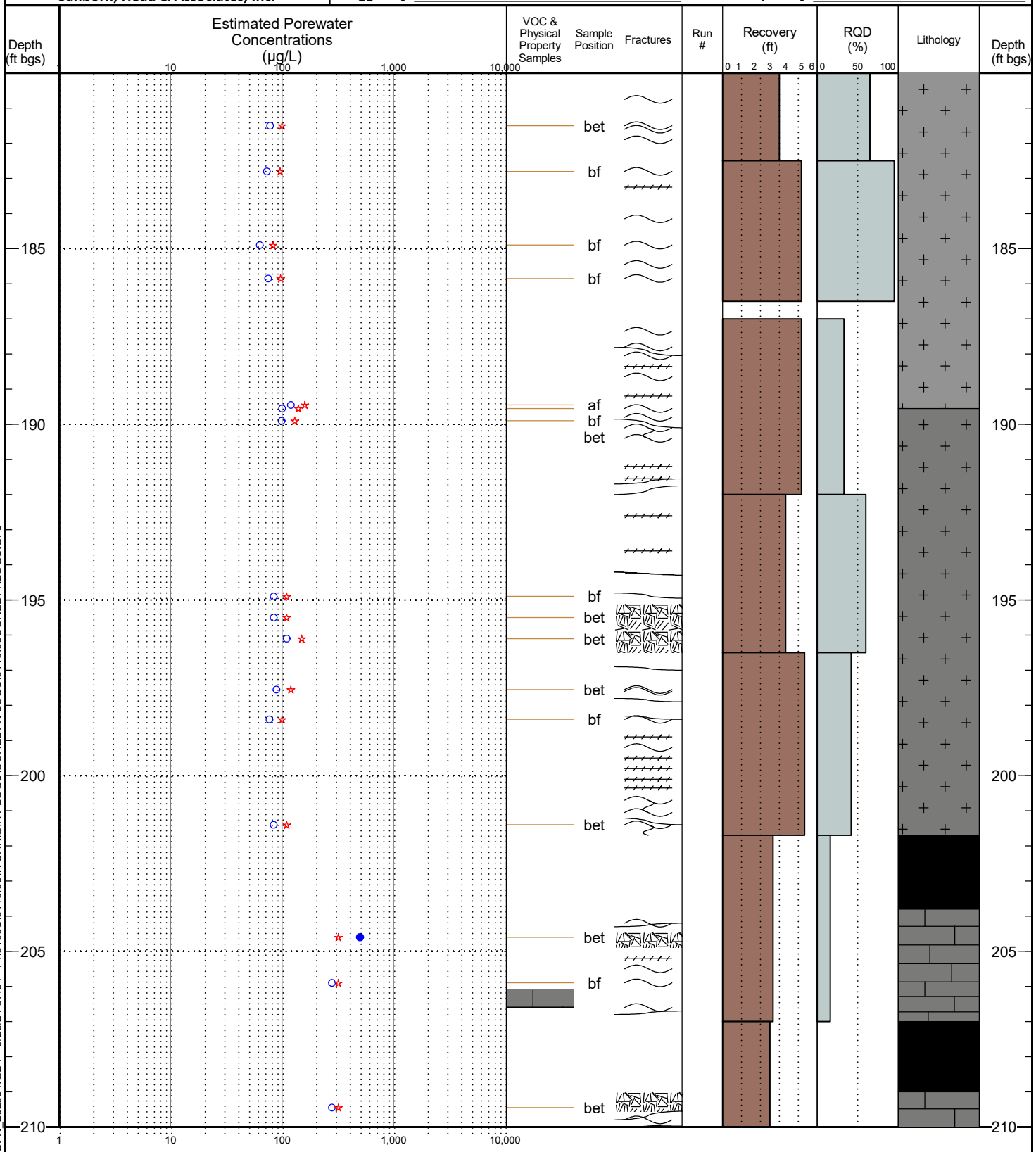

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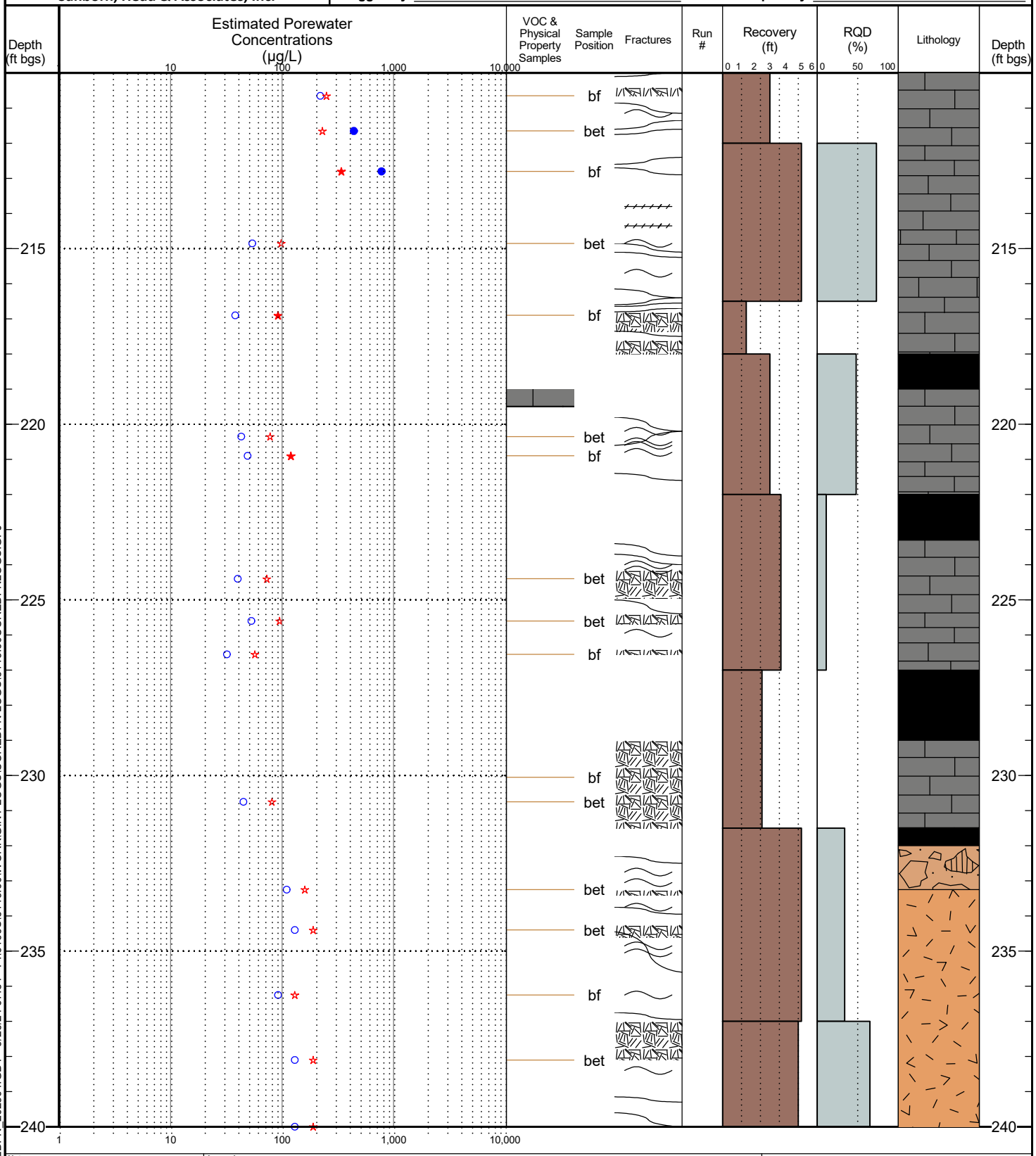

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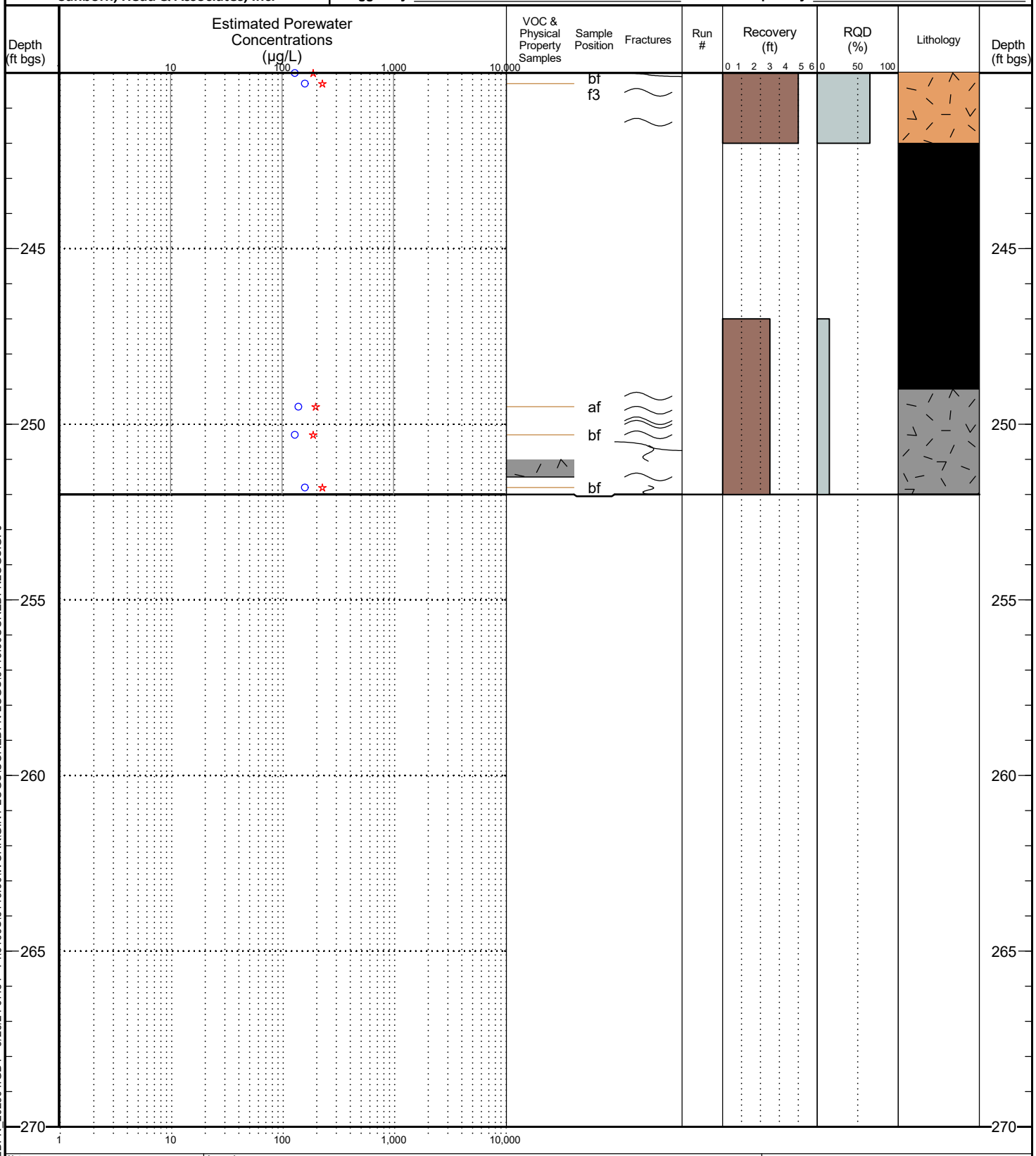

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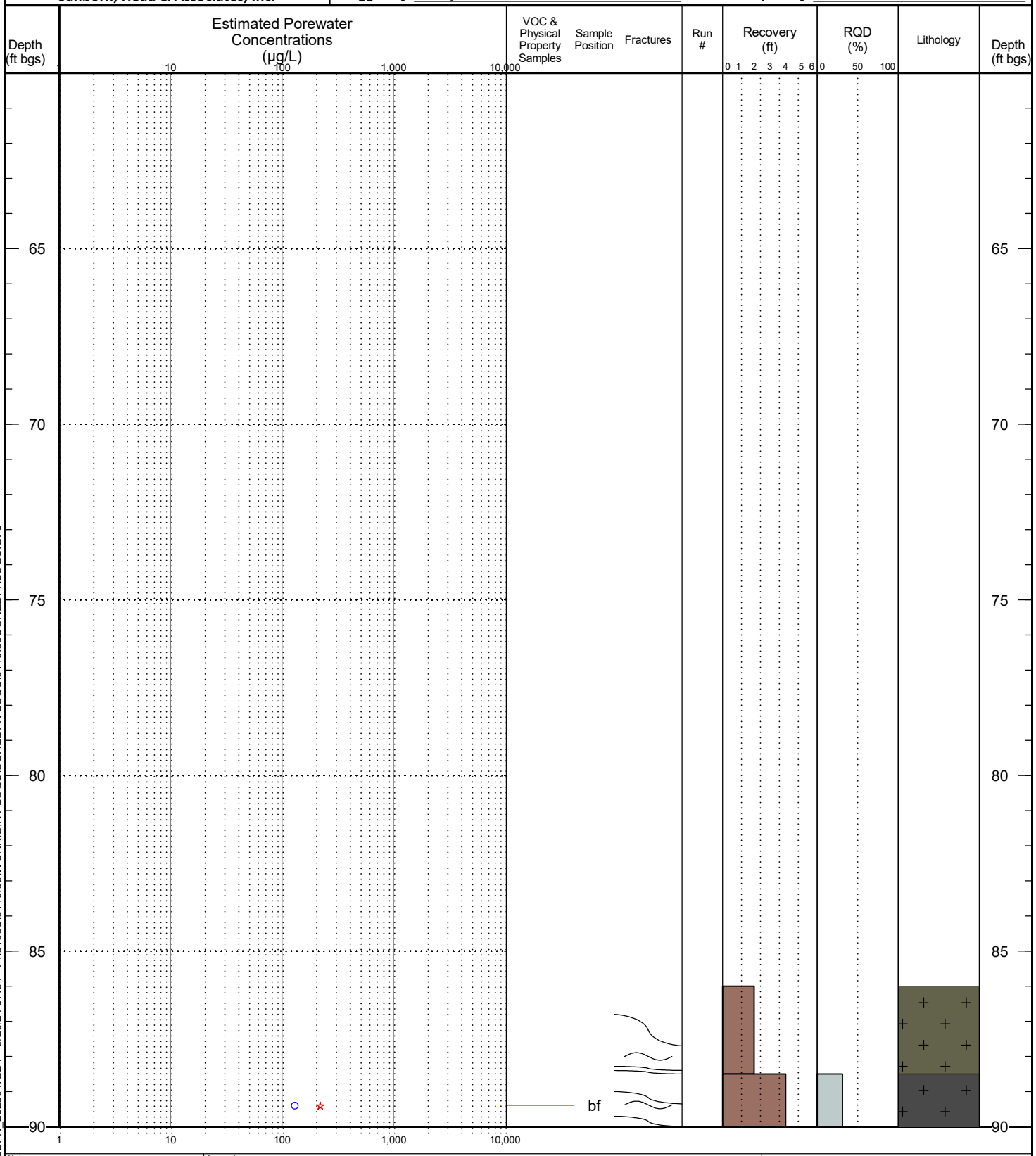

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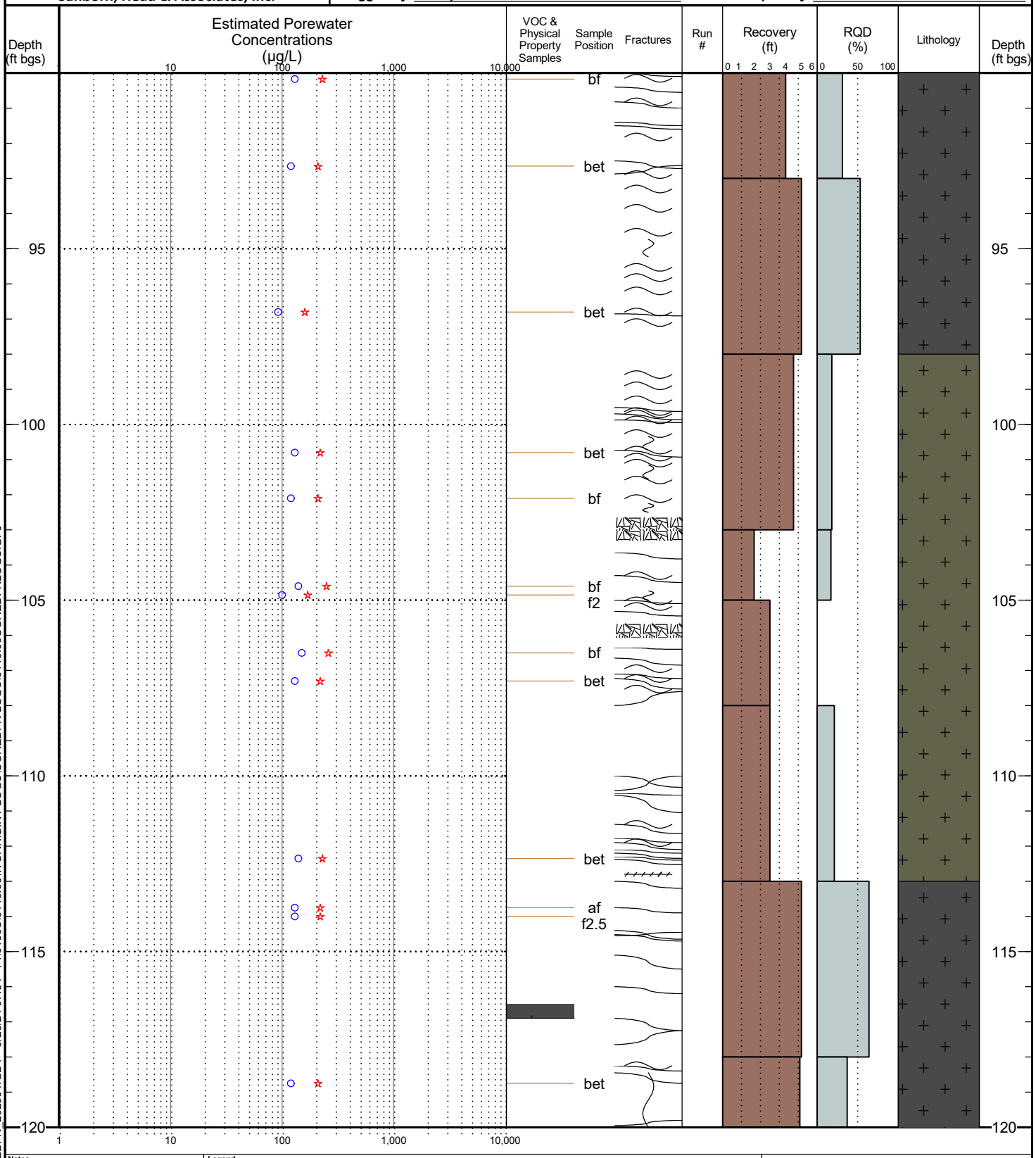

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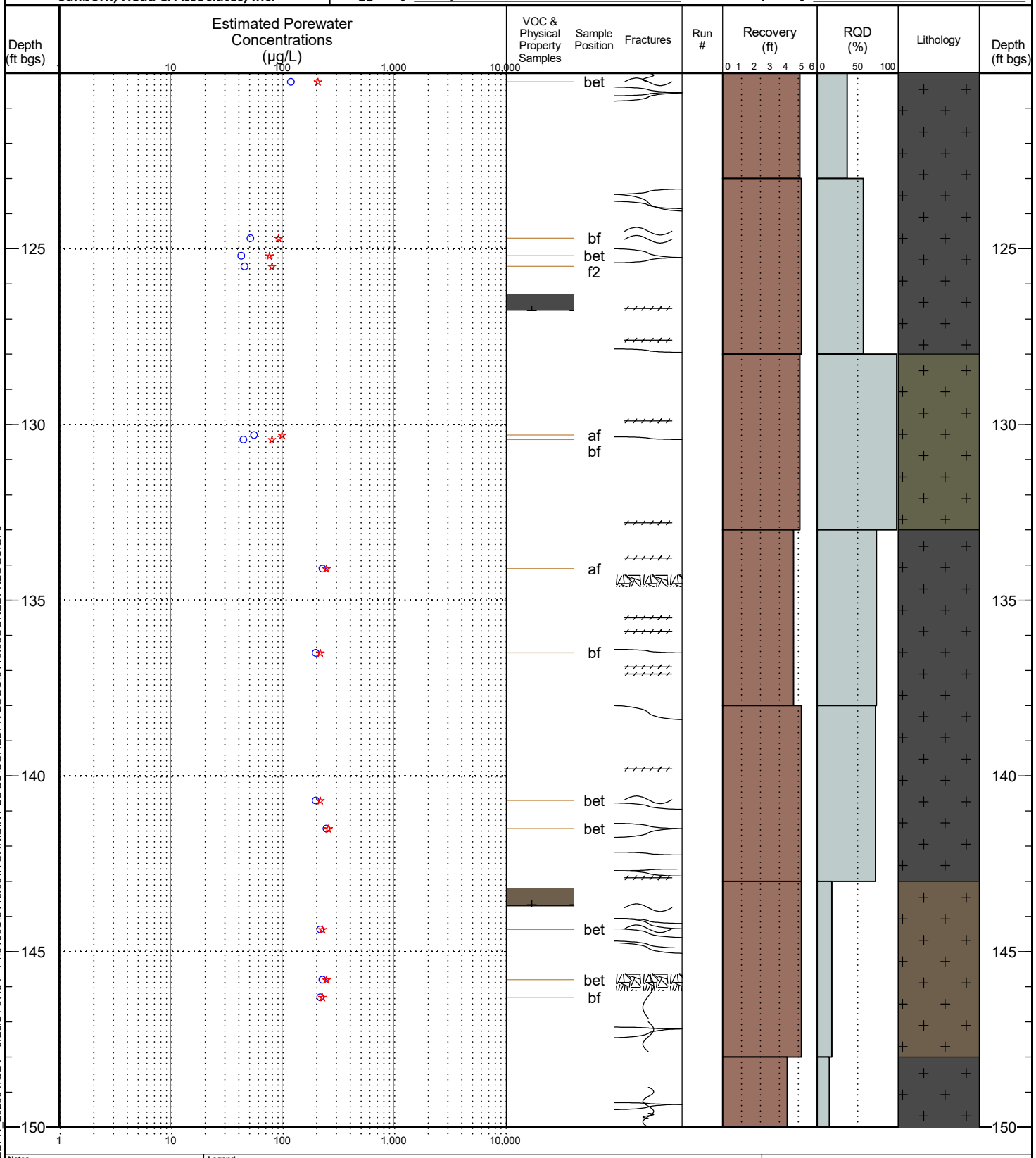

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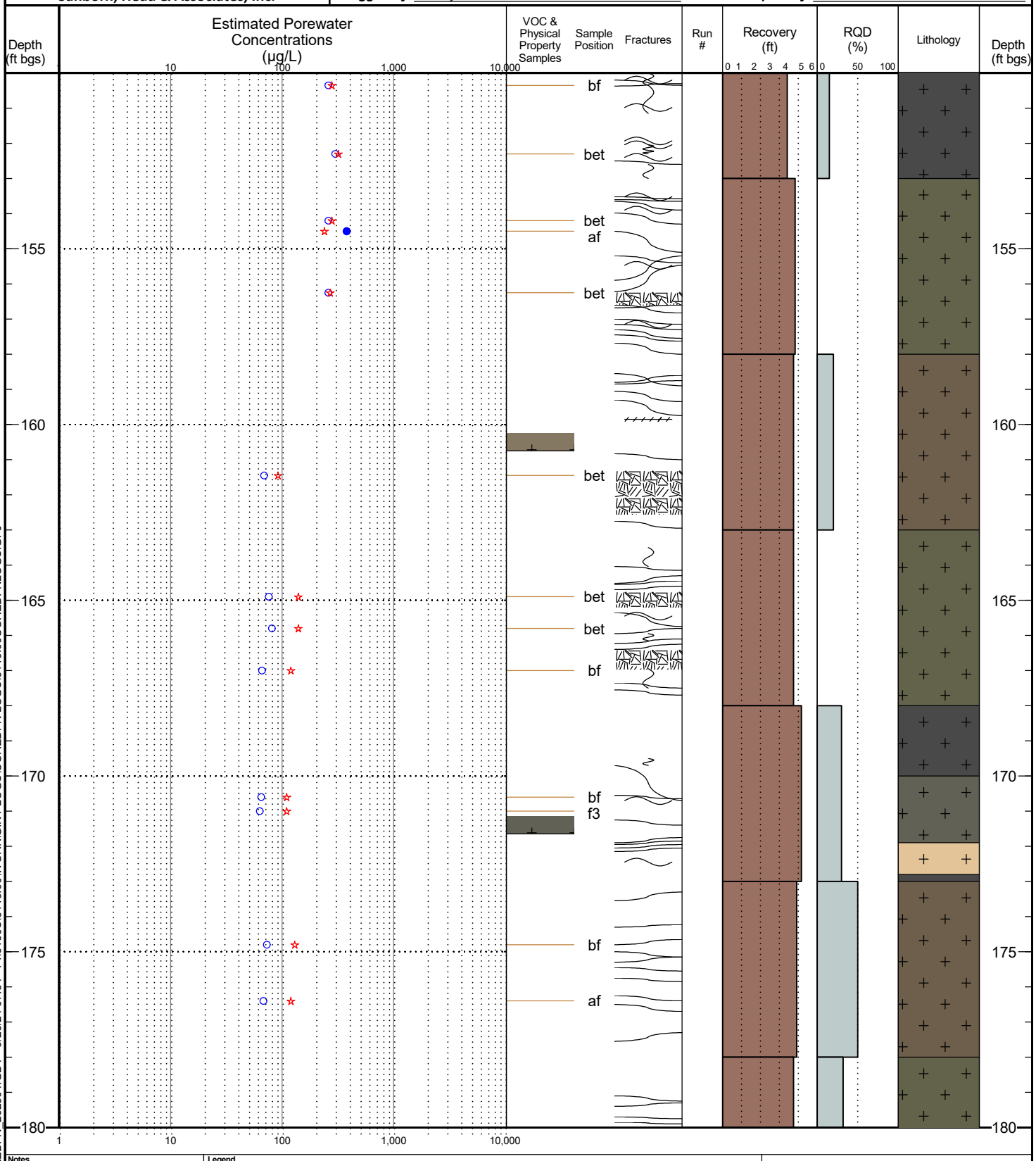

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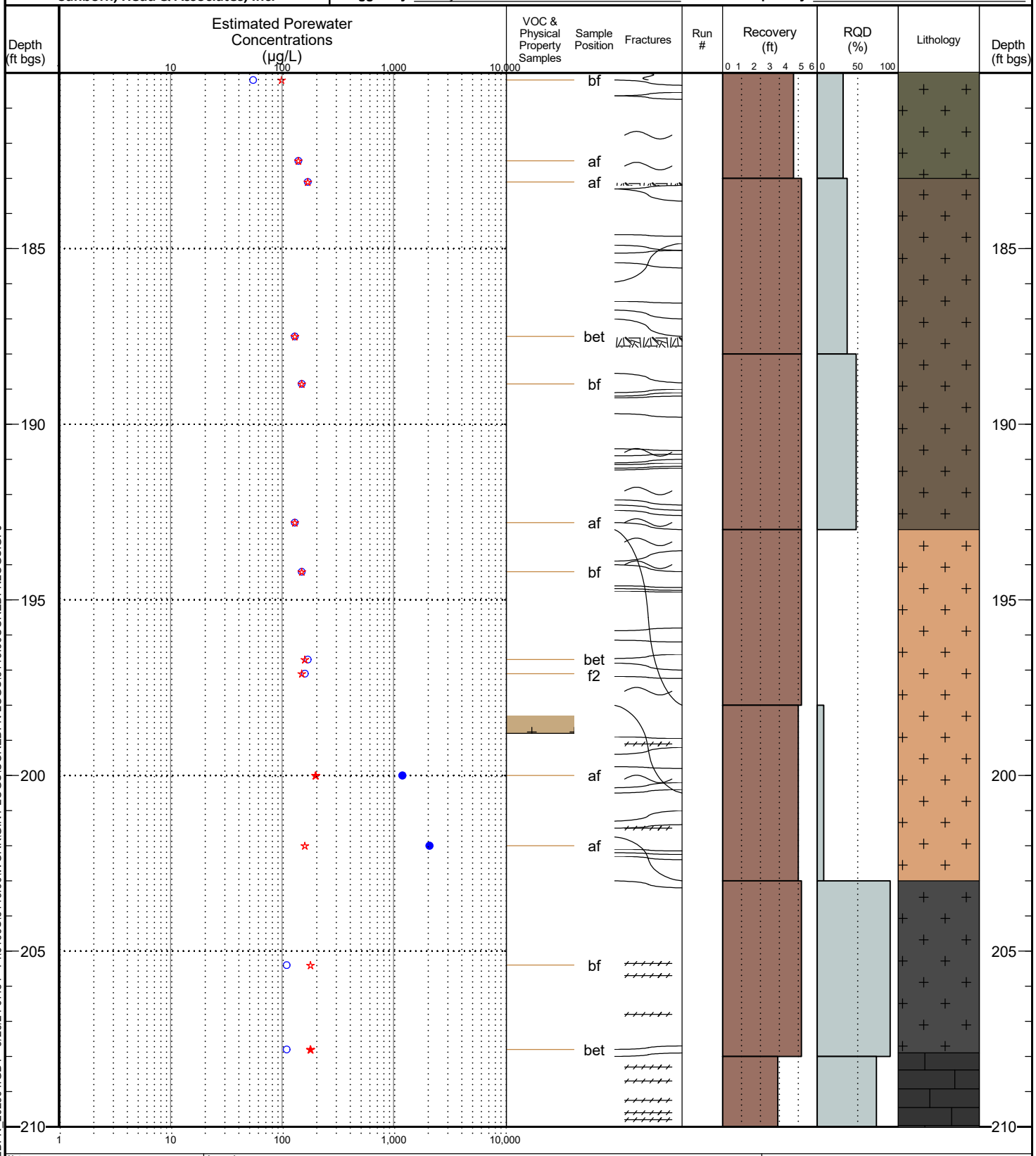

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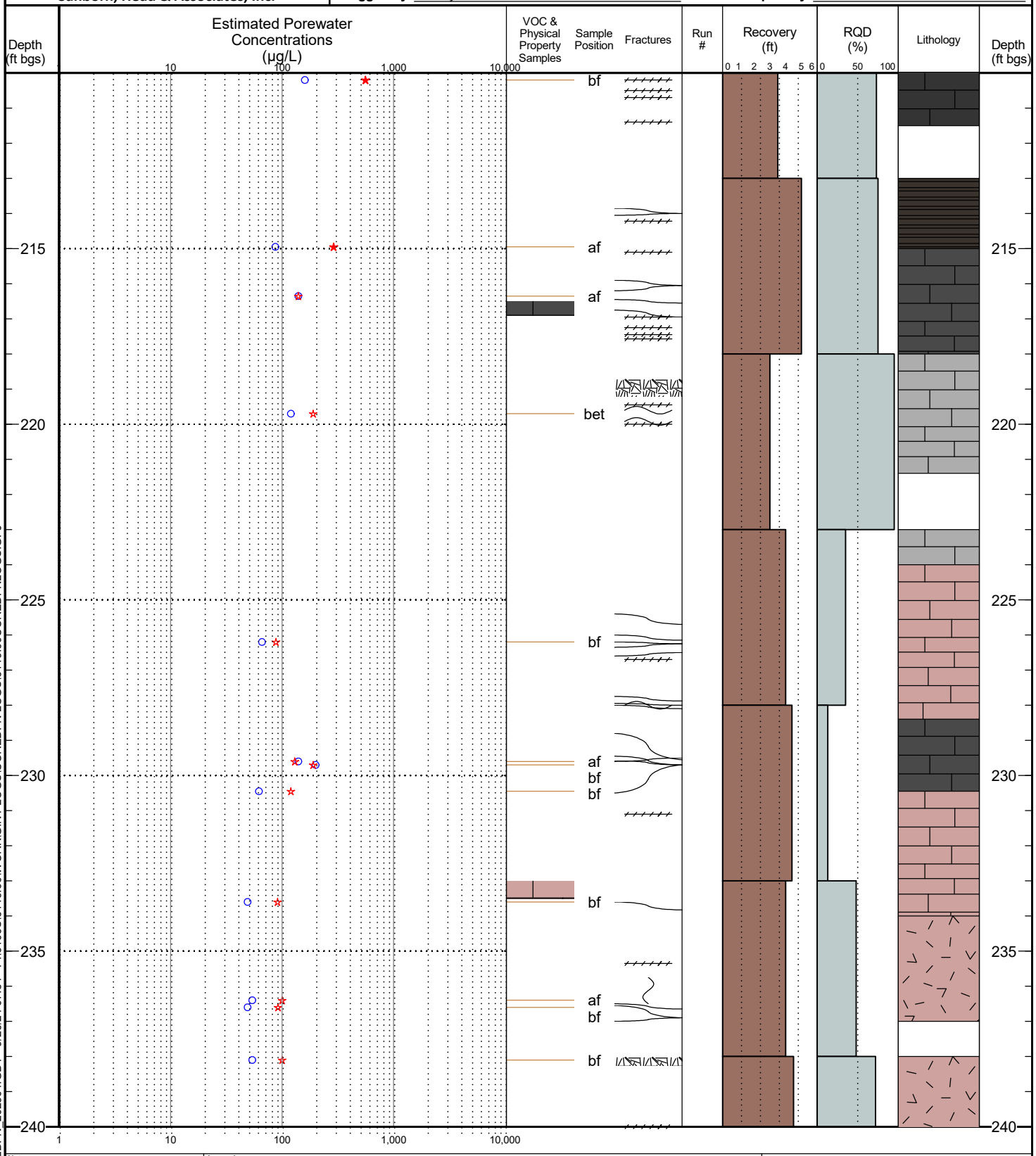

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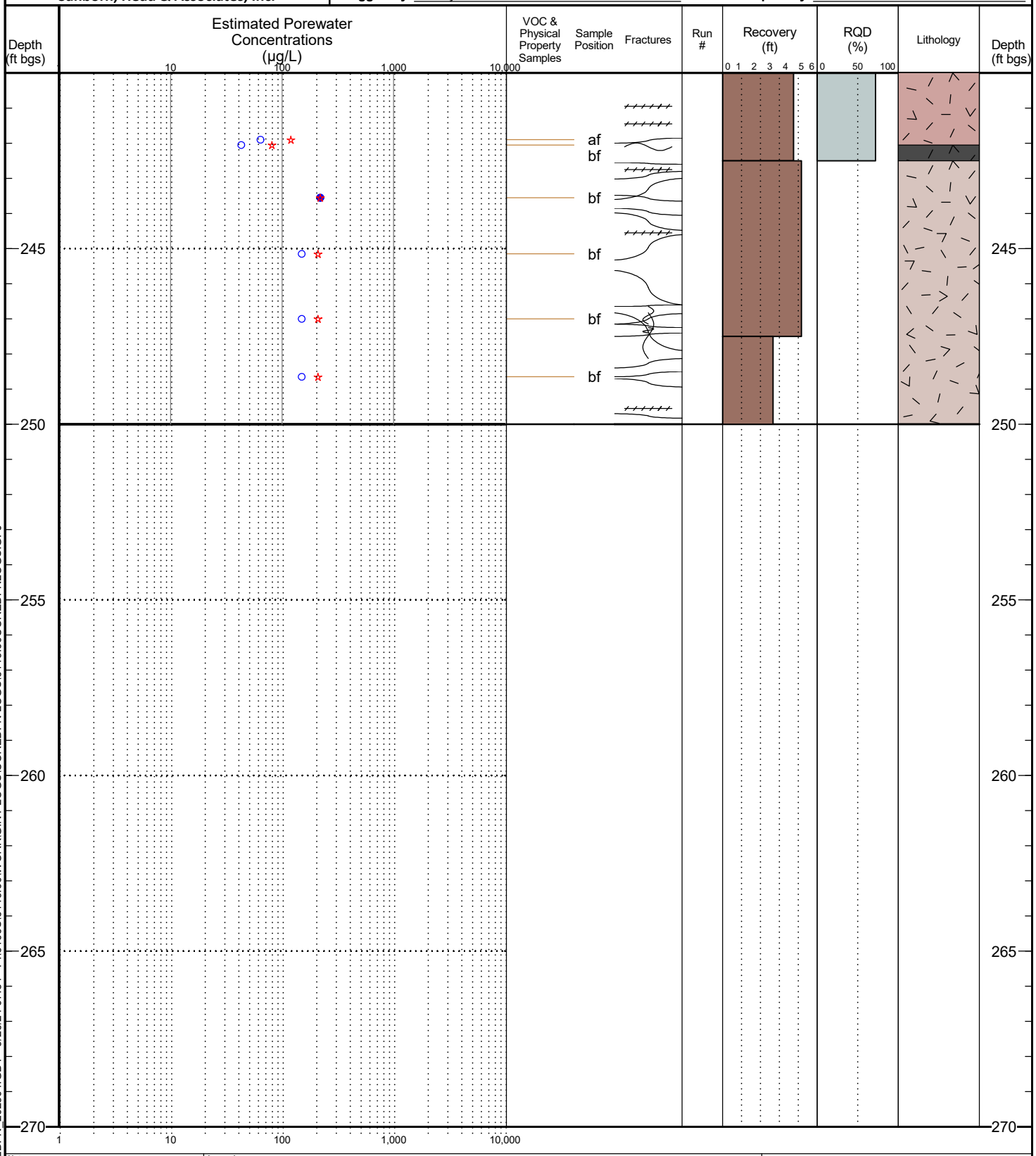

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Appendix A

Pace Analytical: Final Report

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

May 06, 2024

Jessica Bulova
Sanborn, Head & Associates
20 Foundry Street
Concord, NH 03301

RE: Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Dear Jessica Bulova:

Enclosed are the analytical results for sample(s) received by the laboratory on April 23, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Green Bay

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tod Noltemeyer

Tod Noltemeyer
tod.noltemeyer@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Jeff Austin, NASA
Goeff Giles, NASA-WSTF-Navarro

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Pace Analytical Services Green Bay
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
Texas Certification #: T104704529-21-8
Virginia VELAP Certification ID: 11873
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-21-00008
Federal Fish & Wildlife Permit #: 51774A

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SAMPLE SUMMARY

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40277226001	EB-01_20240417	Water	04/17/24 12:17	04/23/24 09:30
40277226002	EB-02_20240419	Water	04/19/24 13:32	04/23/24 09:30
40277226003	EB-03_20240420	Water	04/20/24 13:59	04/23/24 09:30
40277226004	EB-04_20240421	Water	04/21/24 10:41	04/23/24 09:30
40277226005	EB-05_20240422	Water	04/22/24 13:49	04/23/24 09:30
40277226006	300-002-GSV-89.4-SVOC_20240417	Solid	04/17/24 13:01	04/23/24 09:30
40277226007	300-002-GSV-90.17-SVOC20240417	Solid	04/17/24 13:01	04/23/24 09:30
40277226008	300-002-GSV-92.65-SVOC20240417	Solid	04/17/24 13:01	04/23/24 09:30
40277226009	300-002-GSV-96.8-SVOC_20240417	Solid	04/17/24 14:56	04/23/24 09:30
40277226010	300-002-GSV-100.8-SVOC20240417	Solid	04/17/24 15:33	04/23/24 09:30
40277226011	300-002-GSV-102.1-SVOC20240417	Solid	04/17/24 15:34	04/23/24 09:30
40277226012	300-002-GSV-104.6-SVOC20240418	Solid	04/18/24 09:25	04/23/24 09:30
40277226013	300-002-GSV-104.85-SVOC_240418	Solid	04/18/24 09:26	04/23/24 09:30
40277226014	300-002-GSV-106.5-SVOC_240418	Solid	04/18/24 09:58	04/23/24 09:30
40277226015	300-002-GSV-107.3-SVOC_240418	Solid	04/18/24 09:59	04/23/24 09:30
40277226016	300-002-GSV-112.35-SVOC_240418	Solid	04/18/24 13:45	04/23/24 09:30
40277226017	300-002-GSV-113.75-SVOC_240419	Solid	04/19/24 11:43	04/23/24 09:30
40277226018	300-002-GSV-114-SVOC_240419	Solid	04/19/24 11:44	04/23/24 09:30
40277226019	300-002-GSV-118.75-SVOC_240419	Solid	04/19/24 12:25	04/23/24 09:30
40277226020	300-002-GSV-120.25-SVOC_240419	Solid	04/19/24 12:26	04/23/24 09:30
40277226021	300-002-GSV-124.7-SVOC_240419	Solid	04/19/24 13:05	04/23/24 09:30
40277226022	300-002-GSV-125.2-SVOC_240419	Solid	04/19/24 13:06	04/23/24 09:30
40277226023	300-002-GSV-125.5-SVOC_240419	Solid	04/19/24 13:07	04/23/24 09:30
40277226024	300-002-GSV-130.3-SVOC_240419	Solid	04/19/24 13:42	04/23/24 09:30
40277226025	300-002-GSV-130.3-SVOC-DUP_419	Solid	04/19/24 13:42	04/23/24 09:30
40277226026	300-002-GSV-130.43-SVOC_240419	Solid	04/19/24 13:43	04/23/24 09:30
40277226027	300-002-GSV-134.1-SVOC_240419	Solid	04/19/24 15:02	04/23/24 09:30
40277226028	300-002-GSV-136.5-SVOC_240419	Solid	04/19/24 15:03	04/23/24 09:30
40277226029	300-002-GSV-140.7-SVOC_240419	Solid	04/19/24 15:35	04/23/24 09:30
40277226030	300-002-GSV-141.5-SVOC_240419	Solid	04/19/24 15:36	04/23/24 09:30
40277226031	300-002-GSV-144.37-SVOC_240419	Solid	04/19/24 16:18	04/23/24 09:30
40277226032	300-002-GSV-145.8-SVOC_240419	Solid	04/19/24 16:19	04/23/24 09:30
40277226033	300-002-GSV-146.3-SVOC_240419	Solid	04/19/24 16:20	04/23/24 09:30

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Green Bay, WI 54302
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SAMPLE SUMMARY

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40277226034	300-002-GSV-150.35-SVOC_240420	Solid	04/20/24 09:52	04/23/24 09:30
40277226035	300-002-GSV-152.3-SVOC_240420	Solid	04/20/24 09:53	04/23/24 09:30
40277226036	300-002-GSV-154.2-SVOC_240420	Solid	04/20/24 10:30	04/23/24 09:30
40277226037	300-002-GSV-154.5-SVOC_240420	Solid	04/20/24 10:31	04/23/24 09:30
40277226038	300-002-GSV-156.25-SVOC_240420	Solid	04/20/24 10:32	04/23/24 09:30
40277226039	300-002-GSV-161.45-SVOC_240420	Solid	04/20/24 11:34	04/23/24 09:30
40277226040	300-002-GSV-164.9-SVOC_240420	Solid	04/20/24 12:47	04/23/24 09:30
40277226041	300-002-GSV-165.8-SVOC_240420	Solid	04/20/24 12:48	04/23/24 09:30
40277226042	300-002-GSV-167-SVOC_240420	Solid	04/20/24 12:49	04/23/24 09:30
40277226043	300-002-GSV-170.6-SVOC_240420	Solid	04/20/24 13:45	04/23/24 09:30
40277226044	300-002-GSV-171-SVOC_240420	Solid	04/20/24 13:46	04/23/24 09:30
40277226045	300-002-GSV-171-SVOC-DUP_0420	Solid	04/20/24 13:46	04/23/24 09:30
40277226046	300-002-GSV-174.8-SVOC_240420	Solid	04/20/24 14:17	04/23/24 09:30
40277226047	300-002-GSV-176.4-SVOC_240420	Solid	04/20/24 14:18	04/23/24 09:30
40277226048	300-002-GSV-180.2-SVOC_240420	Solid	04/20/24 14:52	04/23/24 09:30
40277226049	300-002-GSV-182.5-SVOC_240420	Solid	04/20/24 14:53	04/23/24 09:30
40277226050	300-002-GSV-183.1-SVOC_240420	Solid	04/20/24 15:30	04/23/24 09:30
40277226051	300-002-GSV-187.5-SVOC_240420	Solid	04/20/24 15:31	04/23/24 09:30
40277226052	300-002-GSV-188.85-SVOC_240420	Solid	04/20/24 16:17	04/23/24 09:30
40277226053	300-002-GSV-192.8-SVOC_240420	Solid	04/20/24 16:18	04/23/24 09:30
40277226054	300-002-GSV-194.2-SVOC_240421	Solid	04/21/24 08:55	04/23/24 09:30
40277226055	300-002-GSV-196.7-SVOC_240421	Solid	04/21/24 08:56	04/23/24 09:30
40277226056	300-002-GSV-197.1-SVOC_240421	Solid	04/21/24 08:57	04/23/24 09:30
40277226057	300-002-GSV-200-SVOC_240421	Solid	04/21/24 09:30	04/23/24 09:30
40277226058	300-002-GSV-202-SVOC_240421	Solid	04/21/24 09:31	04/23/24 09:30
40277226059	300-002-GSV-205.4-SVOC_240421	Solid	04/21/24 10:30	04/23/24 09:30
40277226060	300-002-GSV-207.8-SVOC_240421	Solid	04/21/24 10:31	04/23/24 09:30
40277226061	300-002-GSV-210.2-SVOC_240421	Solid	04/21/24 11:53	04/23/24 09:30
40277226062	300-002-GSV-214.95-SVOC_240421	Solid	04/21/24 13:42	04/23/24 09:30
40277226063	300-002-GSV-216.35-SVOC_240421	Solid	04/21/24 13:43	04/23/24 09:30
40277226064	300-002-GSV-219.7-SVOC_240421	Solid	04/21/24 15:46	04/23/24 09:30
40277226065	300-002-GSV-219.7-SVOC-DUP_421	Solid	04/21/24 15:46	04/23/24 09:30
40277226066	300-002-GSV-226.2-SVOC_240421	Solid	04/21/24 16:25	04/23/24 09:30
40277226067	300-002-GSV-229.6-SVOC_240422	Solid	04/22/24 09:55	04/23/24 09:30
40277226068	300-002-GSV-229.7-SVOC_240422	Solid	04/22/24 09:56	04/23/24 09:30

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SAMPLE SUMMARY

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40277226069	**300-002-GSV-230.45-SVOC_240422**	Solid	04/22/24 09:57	04/23/24 09:30
40277226070	**300-002-GSV-233.6-SVOC_240422**	Solid	04/22/24 10:30	04/23/24 09:30
40277226071	**300-002-GSV-236.4-SVOC_240422**	Solid	04/22/24 10:31	04/23/24 09:30
40277226072	**300-002-GSV-236.6-SVOC_240422**	Solid	04/22/24 10:32	04/23/24 09:30
40277226073	**300-002-GSV-238.1-SVOC_240422**	Solid	04/22/24 11:11	04/23/24 09:30
40277226074	**300-002-GSV-241.9-SVOC_240422**	Solid	04/22/24 11:12	04/23/24 09:30
40277226075	**300-002-GSV-242.05-SVOC_240422**	Solid	04/22/24 11:13	04/23/24 09:30
40277226076	**300-002-GSV-243.55-SVOC_240422**	Solid	04/22/24 12:20	04/23/24 09:30
40277226077	**300-002-GSV-245.15-SVOC_240422**	Solid	04/22/24 12:21	04/23/24 09:30
40277226078	**300-002-GSV-247-SVOC_240422**	Solid	04/22/24 12:22	04/23/24 09:30
40277226079	**300-002-GSV-248.65-SVOC_240422**	Solid	04/22/24 13:36	04/23/24 09:30
40277226080	**300-002-GSV-248.65-SVOC-DUP_22**	Solid	04/22/24 13:36	04/23/24 09:30

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SAMPLE ANALYTE COUNT

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40277226001	EB-01_20240417	EPA 8270E	RJN	10
40277226002	EB-02_20240419	EPA 8270E	RJN	10
40277226003	EB-03_20240420	EPA 8270E	RJN	10
40277226004	EB-04_20240421	EPA 8270E	RJN	10
40277226005	EB-05_20240422	EPA 8270E	RJN	10
40277226006	300-002-GSV-89.4-SVOC_20240417	EPA 8270E	TPO	11
40277226007	300-002-GSV-90.17-SVOC20240417	EPA 8270E	TPO	11
40277226008	300-002-GSV-92.65-SVOC20240417	EPA 8270E	TPO	11
40277226009	300-002-GSV-96.8-SVOC_20240417	EPA 8270E	TPO	11
40277226010	300-002-GSV-100.8-SVOC20240417	EPA 8270E	TPO	11
40277226011	300-002-GSV-102.1-SVOC20240417	EPA 8270E	TPO	11
40277226012	300-002-GSV-104.6-SVOC20240418	EPA 8270E	TPO	11
40277226013	300-002-GSV-104.85-SVOC_240418	EPA 8270E	TPO	11
40277226014	300-002-GSV-106.5-SVOC_240418	EPA 8270E	TPO	11
40277226015	300-002-GSV-107.3-SVOC_240418	EPA 8270E	TPO	11
40277226016	300-002-GSV-112.35-SVOC_240418	EPA 8270E	TPO	11
40277226017	300-002-GSV-113.75-SVOC_240419	EPA 8270E	TPO	11
40277226018	300-002-GSV-114-SVOC_240419	EPA 8270E	TPO	11
40277226019	300-002-GSV-118.75-SVOC_240419	EPA 8270E	TPO	11
40277226020	300-002-GSV-120.25-SVOC_240419	EPA 8270E	TPO	11
40277226021	300-002-GSV-124.7-SVOC_240419	EPA 8270E	TPO	11
40277226022	300-002-GSV-125.2-SVOC_240419	EPA 8270E	TPO	11
40277226023	300-002-GSV-125.5-SVOC_240419	EPA 8270E	TPO	11
40277226024	300-002-GSV-130.3-SVOC_240419	EPA 8270E	TPO	11
40277226025	300-002-GSV-130.3-SVOC-DUP_419	EPA 8270E	TPO	11
40277226026	300-002-GSV-130.43-SVOC_240419	EPA 8270E	TPO	11
40277226027	300-002-GSV-134.1-SVOC_240419	EPA 8270E	TPO	11
40277226028	300-002-GSV-136.5-SVOC_240419	EPA 8270E	TPO	11
40277226029	300-002-GSV-140.7-SVOC_240419	EPA 8270E	TPO	11
40277226030	300-002-GSV-141.5-SVOC_240419	EPA 8270E	TPO	11
40277226031	300-002-GSV-144.37-SVOC_240419	EPA 8270E	TPO	11
40277226032	300-002-GSV-145.8-SVOC_240419	EPA 8270E	TPO	11
40277226033	300-002-GSV-146.3-SVOC_240419	EPA 8270E	TPO	11
40277226034	300-002-GSV-150.35-SVOC_240420	EPA 8270E	TPO	11
40277226035	300-002-GSV-152.3-SVOC_240420	EPA 8270E	TPO	11
40277226036	300-002-GSV-154.2-SVOC_240420	EPA 8270E	TPO	11
40277226037	300-002-GSV-154.5-SVOC_240420	EPA 8270E	TPO	11

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SAMPLE ANALYTE COUNT

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40277226038	300-002-GSV-156.25-SVOC_240420	EPA 8270E	TPO	11
40277226039	300-002-GSV-161.45-SVOC_240420	EPA 8270E	TPO	11
40277226040	300-002-GSV-164.9-SVOC_240420	EPA 8270E	TPO	11
40277226041	300-002-GSV-165.8-SVOC_240420	EPA 8270E	TPO	11
40277226042	300-002-GSV-167-SVOC_240420	EPA 8270E	TPO	11
40277226043	300-002-GSV-170.6-SVOC_240420	EPA 8270E	TPO	11
40277226044	300-002-GSV-171-SVOC_240420	EPA 8270E	TPO	11
40277226045	300-002-GSV-171-SVOC-DUP_0420	EPA 8270E	TPO	11
40277226046	300-002-GSV-174.8-SVOC_240420	EPA 8270E	TPO	11
40277226047	300-002-GSV-176.4-SVOC_240420	EPA 8270E	TPO	11
40277226048	300-002-GSV-180.2-SVOC_240420	EPA 8270E	TPO	11
40277226049	300-002-GSV-182.5-SVOC_240420	EPA 8270E	TPO	11
40277226050	300-002-GSV-183.1-SVOC_240420	EPA 8270E	TPO	11
40277226051	300-002-GSV-187.5-SVOC_240420	EPA 8270E	TPO	11
40277226052	300-002-GSV-188.85-SVOC_240420	EPA 8270E	TPO	11
40277226053	300-002-GSV-192.8-SVOC_240420	EPA 8270E	TPO	11
40277226054	300-002-GSV-194.2-SVOC_240421	EPA 8270E	TPO	11
40277226055	300-002-GSV-196.7-SVOC_240421	EPA 8270E	TPO	11
40277226056	300-002-GSV-197.1-SVOC_240421	EPA 8270E	TPO	11
40277226057	300-002-GSV-200-SVOC_240421	EPA 8270E	TPO	11
40277226058	300-002-GSV-202-SVOC_240421	EPA 8270E	TPO	11
40277226059	300-002-GSV-205.4-SVOC_240421	EPA 8270E	TPO	11
40277226060	300-002-GSV-207.8-SVOC_240421	EPA 8270E	TPO	11
40277226061	300-002-GSV-210.2-SVOC_240421	EPA 8270E	TPO	11
40277226062	300-002-GSV-214.95-SVOC_240421	EPA 8270E	TPO	11
40277226063	300-002-GSV-216.35-SVOC_240421	EPA 8270E	TPO	11
40277226064	300-002-GSV-219.7-SVOC_240421	EPA 8270E	TPO	11
40277226065	300-002-GSV-219.7-SVOC-DUP_421	EPA 8270E	TPO	11
40277226066	300-002-GSV-226.2-SVOC_240421	EPA 8270E	TPO	11
40277226067	300-002-GSV-229.6-SVOC_240422	EPA 8270E	TPO	11
40277226068	300-002-GSV-229.7-SVOC_240422	EPA 8270E	TPO	11
40277226069	300-002-GSV-230.45-SVOC_240422	EPA 8270E	TPO	11
40277226070	300-002-GSV-233.6-SVOC_240422	EPA 8270E	TPO	11
40277226071	300-002-GSV-236.4-SVOC_240422	EPA 8270E	TPO	11
40277226072	300-002-GSV-236.6-SVOC_240422	EPA 8270E	TPO	11
40277226073	300-002-GSV-238.1-SVOC_240422	EPA 8270E	TPO	11
40277226074	300-002-GSV-241.9-SVOC_240422	EPA 8270E	TPO	11

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40277226075	**300-002-GSV-242.05-SVOC_240422**	EPA 8270E	TPO	11
40277226076	**300-002-GSV-243.55-SVOC_240422**	EPA 8270E	TPO	11
40277226077	**300-002-GSV-245.15-SVOC_240422**	EPA 8270E	TPO	11
40277226078	**300-002-GSV-247-SVOC_240422**	EPA 8270E	TPO	11
40277226079	**300-002-GSV-248.65-SVOC_240422**	EPA 8270E	TPO	11
40277226080	**300-002-GSV-248.65-SVOC-DUP_22**	EPA 8270E	TPO	11

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Method: **EPA 8270E**
Description: 8270E MSSV FULL LIST MICROWAVE
Client: Sanborn, Head & Associates
Date: May 06, 2024

General Information:
75 samples were analyzed for EPA 8270E by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 472660

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- 300-002-GSV-100.8-SVOC20240417 (Lab ID: 40277226010)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-102.1-SVOC20240417 (Lab ID: 40277226011)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-104.6-SVOC20240418 (Lab ID: 40277226012)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-104.85-SVOC_240418 (Lab ID: 40277226013)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-106.5-SVOC_240418 (Lab ID: 40277226014)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-107.3-SVOC_240418 (Lab ID: 40277226015)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-112.35-SVOC_240418 (Lab ID: 40277226016)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-113.75-SVOC_240419 (Lab ID: 40277226017)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-114-SVOC_240419 (Lab ID: 40277226018)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-118.75-SVOC_240419 (Lab ID: 40277226019)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-120.25-SVOC_240419 (Lab ID: 40277226020)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-124.7-SVOC_240419 (Lab ID: 40277226021)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-125.2-SVOC_240419 (Lab ID: 40277226022)
  - 2,4,6-Tribromophenol (S)

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Method: **EPA 8270E**
Description: 8270E MSSV FULL LIST MICROWAVE
Client: Sanborn, Head & Associates
Date: May 06, 2024

QC Batch: 472660

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- 300-002-GSV-125.5-SVOC_240419 (Lab ID: 40277226023)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-130.3-SVOC-DUP_419 (Lab ID: 40277226025)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-130.3-SVOC_240419 (Lab ID: 40277226024)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-89.4-SVOC_20240417 (Lab ID: 40277226006)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-90.17-SVOC20240417 (Lab ID: 40277226007)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-92.65-SVOC20240417 (Lab ID: 40277226008)
  - 2,4,6-Tribromophenol (S)
- 300-002-GSV-96.8-SVOC_20240417 (Lab ID: 40277226009)
  - 2,4,6-Tribromophenol (S)
- BLANK (Lab ID: 2707088)
  - 2,4,6-Tribromophenol (S)
- LCS (Lab ID: 2707089)
  - 2,4,6-Tribromophenol (S)
- LCSD (Lab ID: 2707090)
  - 2,4,6-Tribromophenol (S)
- MS (Lab ID: 2707091)
  - 2,4,6-Tribromophenol (S)

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

QC Batch: 472917

S0: Surrogate recovery outside laboratory control limits.

- MS (Lab ID: 2708855)
  - Nitrobenzene-d5 (S)
- MSD (Lab ID: 2708856)
  - Nitrobenzene-d5 (S)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Method: **EPA 8270E**
Description: 8270E MSSV FULL LIST MICROWAVE
Client: Sanborn, Head & Associates
Date: May 06, 2024

QC Batch: 472882

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
- LCS (Lab ID: 2708621)
  - N-Nitrodimethylamine

R1: RPD value was outside control limits.
- LCSD (Lab ID: 2708622)
  - N-Nitrosodimethylamine

QC Batch: 473062

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
- LCSD (Lab ID: 2709274)
  - N-Nitrodimethylamine

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 472917

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40277353002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 2708855)
  - N-Nitrodimethylamine

R1: RPD value was outside control limits.
- MSD (Lab ID: 2708856)
  - N-Nitrodimethylamine

Additional Comments:

Batch Comments:

The LCS and DUPLICATE failed for N-Nitrodimethylamine. There are insufficient data points for laboratory generated limits so default limits were used. There was insufficient sample amount to re-extract and re-analyze.
- QC Batch: 472883

The LCSD failed for N-Nitrodimethylamine. There are insufficient data points for laboratory generated limits so default limits were used. There was an insufficient sample amount to re-extract and re-analyze.
- QC Batch: 473158

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Method: **EPA 8270E**
Description: 8270E MSSV Low Volume
Client: Sanborn, Head & Associates
Date: May 06, 2024

General Information:
5 samples were analyzed for EPA 8270E by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 472533

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: EB-01_20240417 **Lab ID: 40277226001** Collected: 04/17/24 12:17 Received: 04/23/24 09:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV Low Volume	Analytical Method: EPA 8270E Preparation Method: EPA 3510 Pace Analytical Services - Green Bay								
Di-n-butylphthalate	**<1.3**	ug/L	5.5	1.3	1	04/24/24 08:12	04/25/24 12:49	84-74-2	
bis(2-Ethylhexyl)phthalate	**<2.3**	ug/L	5.5	2.3	1	04/24/24 08:12	04/25/24 12:49	117-81-7	
N-Nitrosodimethylamine	**<1.6**	ug/L	5.5	1.6	1	04/24/24 08:12	04/25/24 12:49	62-75-9	
1,4-Dioxane (p-Dioxane)	**<2.3**	ug/L	5.5	2.3	1	04/24/24 08:12	04/25/24 12:49	123-91-1	
N-Nitrodimethylamine	**<6.3**	ug/L	11.0	6.3	1	04/24/24 08:12	04/25/24 12:49	4164-28-7	
Surrogates									
Nitrobenzene-d5 (S)	94	%	38-130		1	04/24/24 08:12	04/25/24 12:49	4165-60-0	
2-Fluorobiphenyl (S)	58	%	23-130		1	04/24/24 08:12	04/25/24 12:49	321-60-8	
Terphenyl-d14 (S)	111	%	52-136		1	04/24/24 08:12	04/25/24 12:49	1718-51-0	
Phenol-d6 (S)	37	%	11-130		1	04/24/24 08:12	04/25/24 12:49	13127-88-3	
2-Fluorophenol (S)	56	%	10-130		1	04/24/24 08:12	04/25/24 12:49	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: EB-02_20240419 **Lab ID: 40277226002** Collected: 04/19/24 13:32 Received: 04/23/24 09:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV Low Volume	Analytical Method: EPA 8270E Preparation Method: EPA 3510 Pace Analytical Services - Green Bay								
Di-n-butylphthalate	**<1.2**	ug/L	4.9	1.2	1	04/24/24 08:12	04/25/24 13:11	84-74-2	
bis(2-Ethylhexyl)phthalate	**<2.1**	ug/L	4.9	2.1	1	04/24/24 08:12	04/25/24 13:11	117-81-7	
N-Nitrosodimethylamine	**<1.4**	ug/L	4.9	1.4	1	04/24/24 08:12	04/25/24 13:11	62-75-9	
1,4-Dioxane (p-Dioxane)	**<2.0**	ug/L	4.9	2.0	1	04/24/24 08:12	04/25/24 13:11	123-91-1	
N-Nitrodimethylamine	**<5.6**	ug/L	9.7	5.6	1	04/24/24 08:12	04/25/24 13:11	4164-28-7	
Surrogates									
Nitrobenzene-d5 (S)	89	%	38-130		1	04/24/24 08:12	04/25/24 13:11	4165-60-0	
2-Fluorobiphenyl (S)	75	%	23-130		1	04/24/24 08:12	04/25/24 13:11	321-60-8	
Terphenyl-d14 (S)	112	%	52-136		1	04/24/24 08:12	04/25/24 13:11	1718-51-0	
Phenol-d6 (S)	30	%	11-130		1	04/24/24 08:12	04/25/24 13:11	13127-88-3	
2-Fluorophenol (S)	44	%	10-130		1	04/24/24 08:12	04/25/24 13:11	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: EB-03_20240420 **Lab ID: 40277226003** Collected: 04/20/24 13:59 Received: 04/23/24 09:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV Low Volume	Analytical Method: EPA 8270E Preparation Method: EPA 3510 Pace Analytical Services - Green Bay								
Di-n-butylphthalate	**<1.1**	ug/L	4.6	1.1	1	04/24/24 08:12	04/25/24 13:33	84-74-2	
bis(2-Ethylhexyl)phthalate	**<1.9**	ug/L	4.6	1.9	1	04/24/24 08:12	04/25/24 13:33	117-81-7	
N-Nitrosodimethylamine	**<1.3**	ug/L	4.6	1.3	1	04/24/24 08:12	04/25/24 13:33	62-75-9	
1,4-Dioxane (p-Dioxane)	**<1.9**	ug/L	4.6	1.9	1	04/24/24 08:12	04/25/24 13:33	123-91-1	
N-Nitrodimethylamine	**<5.3**	ug/L	9.2	5.3	1	04/24/24 08:12	04/25/24 13:33	4164-28-7	
Surrogates									
Nitrobenzene-d5 (S)	93	%	38-130		1	04/24/24 08:12	04/25/24 13:33	4165-60-0	
2-Fluorobiphenyl (S)	69	%	23-130		1	04/24/24 08:12	04/25/24 13:33	321-60-8	
Terphenyl-d14 (S)	111	%	52-136		1	04/24/24 08:12	04/25/24 13:33	1718-51-0	
Phenol-d6 (S)	32	%	11-130		1	04/24/24 08:12	04/25/24 13:33	13127-88-3	
2-Fluorophenol (S)	51	%	10-130		1	04/24/24 08:12	04/25/24 13:33	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: EB-04_20240421 **Lab ID: 40277226004** Collected: 04/21/24 10:41 Received: 04/23/24 09:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV Low Volume	Analytical Method: EPA 8270E Preparation Method: EPA 3510 Pace Analytical Services - Green Bay								
Di-n-butylphthalate	**<1.1**	ug/L	4.6	1.1	1	04/24/24 08:12	04/25/24 13:55	84-74-2	
bis(2-Ethylhexyl)phthalate	**<2.0**	ug/L	4.6	2.0	1	04/24/24 08:12	04/25/24 13:55	117-81-7	
N-Nitrosodimethylamine	**<1.4**	ug/L	4.6	1.4	1	04/24/24 08:12	04/25/24 13:55	62-75-9	
1,4-Dioxane (p-Dioxane)	**<1.9**	ug/L	4.6	1.9	1	04/24/24 08:12	04/25/24 13:55	123-91-1	
N-Nitrodimethylamine	**<5.3**	ug/L	9.2	5.3	1	04/24/24 08:12	04/25/24 13:55	4164-28-7	
Surrogates									
Nitrobenzene-d5 (S)	94	%	38-130		1	04/24/24 08:12	04/25/24 13:55	4165-60-0	
2-Fluorobiphenyl (S)	65	%	23-130		1	04/24/24 08:12	04/25/24 13:55	321-60-8	
Terphenyl-d14 (S)	116	%	52-136		1	04/24/24 08:12	04/25/24 13:55	1718-51-0	
Phenol-d6 (S)	33	%	11-130		1	04/24/24 08:12	04/25/24 13:55	13127-88-3	
2-Fluorophenol (S)	51	%	10-130		1	04/24/24 08:12	04/25/24 13:55	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: EB-05_20240422 **Lab ID: 40277226005** Collected: 04/22/24 13:49 Received: 04/23/24 09:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV Low Volume	Analytical Method: EPA 8270E Preparation Method: EPA 3510 Pace Analytical Services - Green Bay								
Di-n-butylphthalate	**<1.1**	ug/L	4.7	1.1	1	04/24/24 08:12	04/25/24 14:17	84-74-2	
bis(2-Ethylhexyl)phthalate	**<2.0**	ug/L	4.7	2.0	1	04/24/24 08:12	04/25/24 14:17	117-81-7	
N-Nitrosodimethylamine	**<1.4**	ug/L	4.7	1.4	1	04/24/24 08:12	04/25/24 14:17	62-75-9	
1,4-Dioxane (p-Dioxane)	**<2.0**	ug/L	4.7	2.0	1	04/24/24 08:12	04/25/24 14:17	123-91-1	
N-Nitrodimethylamine	**<5.4**	ug/L	9.4	5.4	1	04/24/24 08:12	04/25/24 14:17	4164-28-7	
Surrogates									
Nitrobenzene-d5 (S)	91	%	38-130		1	04/24/24 08:12	04/25/24 14:17	4165-60-0	
2-Fluorobiphenyl (S)	62	%	23-130		1	04/24/24 08:12	04/25/24 14:17	321-60-8	
Terphenyl-d14 (S)	109	%	52-136		1	04/24/24 08:12	04/25/24 14:17	1718-51-0	
Phenol-d6 (S)	32	%	11-130		1	04/24/24 08:12	04/25/24 14:17	13127-88-3	
2-Fluorophenol (S)	50	%	10-130		1	04/24/24 08:12	04/25/24 14:17	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-89.4-SVOC_20240417 **Lab ID: 40277226006** Collected: 04/17/24 13:01 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/25/24 13:59	04/26/24 20:23	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/25/24 13:59	04/26/24 20:23	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/25/24 13:59	04/26/24 20:23	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/25/24 13:59	04/26/24 20:23	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/25/24 13:59	04/26/24 20:23	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	89	%	16-120		1	04/25/24 13:59	04/26/24 20:23	4165-60-0	
2-Fluorobiphenyl (S)	96	%	19-120		1	04/25/24 13:59	04/26/24 20:23	321-60-8	
Terphenyl-d14 (S)	104	%	25-127		1	04/25/24 13:59	04/26/24 20:23	1718-51-0	
Phenol-d6 (S)	77	%	10-120		1	04/25/24 13:59	04/26/24 20:23	13127-88-3	
2-Fluorophenol (S)	76	%	10-120		1	04/25/24 13:59	04/26/24 20:23	367-12-4	
2,4,6-Tribromophenol (S)	105	%	10-142		1	04/25/24 13:59	04/26/24 20:23	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-90.17-SVOC20240417 **Lab ID: 40277226007** Collected: 04/17/24 13:01 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	04/25/24 13:59	04/26/24 20:45	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/25/24 13:59	04/26/24 20:45	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/25/24 13:59	04/26/24 20:45	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/25/24 13:59	04/26/24 20:45	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/25/24 13:59	04/26/24 20:45	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	89	%	16-120		1	04/25/24 13:59	04/26/24 20:45	4165-60-0	
2-Fluorobiphenyl (S)	101	%	19-120		1	04/25/24 13:59	04/26/24 20:45	321-60-8	
Terphenyl-d14 (S)	113	%	25-127		1	04/25/24 13:59	04/26/24 20:45	1718-51-0	
Phenol-d6 (S)	87	%	10-120		1	04/25/24 13:59	04/26/24 20:45	13127-88-3	
2-Fluorophenol (S)	85	%	10-120		1	04/25/24 13:59	04/26/24 20:45	367-12-4	
2,4,6-Tribromophenol (S)	123	%	10-142		1	04/25/24 13:59	04/26/24 20:45	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-92.65-SVOC20240417 **Lab ID: 40277226008** Collected: 04/17/24 13:01 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/25/24 13:59	04/26/24 14:00	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/25/24 13:59	04/26/24 14:00	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/25/24 13:59	04/26/24 14:00	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/25/24 13:59	04/26/24 14:00	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/25/24 13:59	04/26/24 14:00	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	68	%	16-120		1	04/25/24 13:59	04/26/24 14:00	4165-60-0	
2-Fluorobiphenyl (S)	80	%	19-120		1	04/25/24 13:59	04/26/24 14:00	321-60-8	
Terphenyl-d14 (S)	101	%	25-127		1	04/25/24 13:59	04/26/24 14:00	1718-51-0	
Phenol-d6 (S)	59	%	10-120		1	04/25/24 13:59	04/26/24 14:00	13127-88-3	
2-Fluorophenol (S)	56	%	10-120		1	04/25/24 13:59	04/26/24 14:00	367-12-4	
2,4,6-Tribromophenol (S)	94	%	10-142		1	04/25/24 13:59	04/26/24 14:00	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-96.8-SVOC_20240417 **Lab ID: 40277226009** Collected: 04/17/24 14:56 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/25/24 13:59	04/26/24 14:22	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/25/24 13:59	04/26/24 14:22	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/25/24 13:59	04/26/24 14:22	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/25/24 13:59	04/26/24 14:22	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/25/24 13:59	04/26/24 14:22	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	71	%	16-120		1	04/25/24 13:59	04/26/24 14:22	4165-60-0	
2-Fluorobiphenyl (S)	79	%	19-120		1	04/25/24 13:59	04/26/24 14:22	321-60-8	
Terphenyl-d14 (S)	88	%	25-127		1	04/25/24 13:59	04/26/24 14:22	1718-51-0	
Phenol-d6 (S)	45	%	10-120		1	04/25/24 13:59	04/26/24 14:22	13127-88-3	
2-Fluorophenol (S)	43	%	10-120		1	04/25/24 13:59	04/26/24 14:22	367-12-4	
2,4,6-Tribromophenol (S)	61	%	10-142		1	04/25/24 13:59	04/26/24 14:22	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-100.8-SVOC20240417 **Lab ID: 40277226010** Collected: 04/17/24 15:33 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	04/25/24 13:59	04/26/24 14:43	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/25/24 13:59	04/26/24 14:43	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/25/24 13:59	04/26/24 14:43	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/25/24 13:59	04/26/24 14:43	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/25/24 13:59	04/26/24 14:43	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	68	%	16-120		1	04/25/24 13:59	04/26/24 14:43	4165-60-0	
2-Fluorobiphenyl (S)	86	%	19-120		1	04/25/24 13:59	04/26/24 14:43	321-60-8	
Terphenyl-d14 (S)	105	%	25-127		1	04/25/24 13:59	04/26/24 14:43	1718-51-0	
Phenol-d6 (S)	63	%	10-120		1	04/25/24 13:59	04/26/24 14:43	13127-88-3	
2-Fluorophenol (S)	59	%	10-120		1	04/25/24 13:59	04/26/24 14:43	367-12-4	
2,4,6-Tribromophenol (S)	103	%	10-142		1	04/25/24 13:59	04/26/24 14:43	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-102.1-SVOC20240417 **Lab ID: 40277226011** Collected: 04/17/24 15:34 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	04/25/24 13:59	04/26/24 15:04	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/25/24 13:59	04/26/24 15:04	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/25/24 13:59	04/26/24 15:04	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/25/24 13:59	04/26/24 15:04	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/25/24 13:59	04/26/24 15:04	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	87	%	16-120		1	04/25/24 13:59	04/26/24 15:04	4165-60-0	
2-Fluorobiphenyl (S)	97	%	19-120		1	04/25/24 13:59	04/26/24 15:04	321-60-8	
Terphenyl-d14 (S)	107	%	25-127		1	04/25/24 13:59	04/26/24 15:04	1718-51-0	
Phenol-d6 (S)	79	%	10-120		1	04/25/24 13:59	04/26/24 15:04	13127-88-3	
2-Fluorophenol (S)	76	%	10-120		1	04/25/24 13:59	04/26/24 15:04	367-12-4	
2,4,6-Tribromophenol (S)	94	%	10-142		1	04/25/24 13:59	04/26/24 15:04	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-104.6-SVOC20240418 **Lab ID: 40277226012** Collected: 04/18/24 09:25 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/25/24 13:59	04/26/24 15:25	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/25/24 13:59	04/26/24 15:25	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/25/24 13:59	04/26/24 15:25	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/25/24 13:59	04/26/24 15:25	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/25/24 13:59	04/26/24 15:25	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	82	%	16-120		1	04/25/24 13:59	04/26/24 15:25	4165-60-0	
2-Fluorobiphenyl (S)	91	%	19-120		1	04/25/24 13:59	04/26/24 15:25	321-60-8	
Terphenyl-d14 (S)	103	%	25-127		1	04/25/24 13:59	04/26/24 15:25	1718-51-0	
Phenol-d6 (S)	76	%	10-120		1	04/25/24 13:59	04/26/24 15:25	13127-88-3	
2-Fluorophenol (S)	73	%	10-120		1	04/25/24 13:59	04/26/24 15:25	367-12-4	
2,4,6-Tribromophenol (S)	97	%	10-142		1	04/25/24 13:59	04/26/24 15:25	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-104.85-SVOC_240418 **Lab ID: 40277226013** Collected: 04/18/24 09:26 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	04/25/24 13:59	04/26/24 15:47	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/25/24 13:59	04/26/24 15:47	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/25/24 13:59	04/26/24 15:47	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/25/24 13:59	04/26/24 15:47	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	04/25/24 13:59	04/26/24 15:47	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	80	%	16-120		1	04/25/24 13:59	04/26/24 15:47	4165-60-0	
2-Fluorobiphenyl (S)	88	%	19-120		1	04/25/24 13:59	04/26/24 15:47	321-60-8	
Terphenyl-d14 (S)	102	%	25-127		1	04/25/24 13:59	04/26/24 15:47	1718-51-0	
Phenol-d6 (S)	73	%	10-120		1	04/25/24 13:59	04/26/24 15:47	13127-88-3	
2-Fluorophenol (S)	71	%	10-120		1	04/25/24 13:59	04/26/24 15:47	367-12-4	
2,4,6-Tribromophenol (S)	97	%	10-142		1	04/25/24 13:59	04/26/24 15:47	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-106.5-SVOC_240418 **Lab ID: 40277226014** Collected: 04/18/24 09:58 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/25/24 13:59	04/26/24 16:08	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/25/24 13:59	04/26/24 16:08	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/25/24 13:59	04/26/24 16:08	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/25/24 13:59	04/26/24 16:08	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/25/24 13:59	04/26/24 16:08	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	79	%	16-120		1	04/25/24 13:59	04/26/24 16:08	4165-60-0	
2-Fluorobiphenyl (S)	90	%	19-120		1	04/25/24 13:59	04/26/24 16:08	321-60-8	
Terphenyl-d14 (S)	104	%	25-127		1	04/25/24 13:59	04/26/24 16:08	1718-51-0	
Phenol-d6 (S)	68	%	10-120		1	04/25/24 13:59	04/26/24 16:08	13127-88-3	
2-Fluorophenol (S)	64	%	10-120		1	04/25/24 13:59	04/26/24 16:08	367-12-4	
2,4,6-Tribromophenol (S)	84	%	10-142		1	04/25/24 13:59	04/26/24 16:08	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-107.3-SVOC_240418 **Lab ID: 40277226015** Collected: 04/18/24 09:59 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/25/24 13:59	04/26/24 16:29	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/25/24 13:59	04/26/24 16:29	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/25/24 13:59	04/26/24 16:29	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/25/24 13:59	04/26/24 16:29	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/25/24 13:59	04/26/24 16:29	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	89	%	16-120		1	04/25/24 13:59	04/26/24 16:29	4165-60-0	
2-Fluorobiphenyl (S)	100	%	19-120		1	04/25/24 13:59	04/26/24 16:29	321-60-8	
Terphenyl-d14 (S)	103	%	25-127		1	04/25/24 13:59	04/26/24 16:29	1718-51-0	
Phenol-d6 (S)	86	%	10-120		1	04/25/24 13:59	04/26/24 16:29	13127-88-3	
2-Fluorophenol (S)	84	%	10-120		1	04/25/24 13:59	04/26/24 16:29	367-12-4	
2,4,6-Tribromophenol (S)	109	%	10-142		1	04/25/24 13:59	04/26/24 16:29	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-112.35-SVOC_240418 **Lab ID: 40277226016** Collected: 04/18/24 13:45 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/25/24 13:59	04/26/24 16:51	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/25/24 13:59	04/26/24 16:51	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/25/24 13:59	04/26/24 16:51	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/25/24 13:59	04/26/24 16:51	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/25/24 13:59	04/26/24 16:51	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	83	%	16-120		1	04/25/24 13:59	04/26/24 16:51	4165-60-0	
2-Fluorobiphenyl (S)	95	%	19-120		1	04/25/24 13:59	04/26/24 16:51	321-60-8	
Terphenyl-d14 (S)	101	%	25-127		1	04/25/24 13:59	04/26/24 16:51	1718-51-0	
Phenol-d6 (S)	79	%	10-120		1	04/25/24 13:59	04/26/24 16:51	13127-88-3	
2-Fluorophenol (S)	75	%	10-120		1	04/25/24 13:59	04/26/24 16:51	367-12-4	
2,4,6-Tribromophenol (S)	113	%	10-142		1	04/25/24 13:59	04/26/24 16:51	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-113.75-SVOC_240419 **Lab ID: 40277226017** Collected: 04/19/24 11:43 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	04/25/24 13:59	04/26/24 17:12	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/25/24 13:59	04/26/24 17:12	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/25/24 13:59	04/26/24 17:12	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/25/24 13:59	04/26/24 17:12	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/25/24 13:59	04/26/24 17:12	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	92	%	16-120		1	04/25/24 13:59	04/26/24 17:12	4165-60-0	
2-Fluorobiphenyl (S)	101	%	19-120		1	04/25/24 13:59	04/26/24 17:12	321-60-8	
Terphenyl-d14 (S)	103	%	25-127		1	04/25/24 13:59	04/26/24 17:12	1718-51-0	
Phenol-d6 (S)	89	%	10-120		1	04/25/24 13:59	04/26/24 17:12	13127-88-3	
2-Fluorophenol (S)	87	%	10-120		1	04/25/24 13:59	04/26/24 17:12	367-12-4	
2,4,6-Tribromophenol (S)	92	%	10-142		1	04/25/24 13:59	04/26/24 17:12	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-114-SVOC_240419 **Lab ID: 40277226018** Collected: 04/19/24 11:44 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/25/24 13:59	04/26/24 17:33	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/25/24 13:59	04/26/24 17:33	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/25/24 13:59	04/26/24 17:33	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/25/24 13:59	04/26/24 17:33	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/25/24 13:59	04/26/24 17:33	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	83	%	16-120		1	04/25/24 13:59	04/26/24 17:33	4165-60-0	
2-Fluorobiphenyl (S)	91	%	19-120		1	04/25/24 13:59	04/26/24 17:33	321-60-8	
Terphenyl-d14 (S)	98	%	25-127		1	04/25/24 13:59	04/26/24 17:33	1718-51-0	
Phenol-d6 (S)	80	%	10-120		1	04/25/24 13:59	04/26/24 17:33	13127-88-3	
2-Fluorophenol (S)	80	%	10-120		1	04/25/24 13:59	04/26/24 17:33	367-12-4	
2,4,6-Tribromophenol (S)	93	%	10-142		1	04/25/24 13:59	04/26/24 17:33	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-118.75-SVOC_240419 **Lab ID: 40277226019** Collected: 04/19/24 12:25 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<181**	ug/kg	334	181	1	04/25/24 13:59	04/26/24 17:55	123-91-1	
Di-n-butylphthalate	**<104**	ug/kg	334	104	1	04/25/24 13:59	04/26/24 17:55	84-74-2	
N-Nitrodimethylamine	**<162**	ug/kg	334	162	1	04/25/24 13:59	04/26/24 17:55	4164-28-7	
N-Nitrosodimethylamine	**<78.5**	ug/kg	334	78.5	1	04/25/24 13:59	04/26/24 17:55	62-75-9	
bis(2-Ethylhexyl)phthalate	**<114**	ug/kg	334	114	1	04/25/24 13:59	04/26/24 17:55	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	101	%	16-120		1	04/25/24 13:59	04/26/24 17:55	4165-60-0	
2-Fluorobiphenyl (S)	111	%	19-120		1	04/25/24 13:59	04/26/24 17:55	321-60-8	
Terphenyl-d14 (S)	122	%	25-127		1	04/25/24 13:59	04/26/24 17:55	1718-51-0	
Phenol-d6 (S)	96	%	10-120		1	04/25/24 13:59	04/26/24 17:55	13127-88-3	
2-Fluorophenol (S)	96	%	10-120		1	04/25/24 13:59	04/26/24 17:55	367-12-4	
2,4,6-Tribromophenol (S)	123	%	10-142		1	04/25/24 13:59	04/26/24 17:55	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-120.25-SVOC_240419 **Lab ID: 40277226020** Collected: 04/19/24 12:26 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/25/24 13:59	04/26/24 18:16	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/25/24 13:59	04/26/24 18:16	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/25/24 13:59	04/26/24 18:16	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/25/24 13:59	04/26/24 18:16	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/25/24 13:59	04/26/24 18:16	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	84	%	16-120		1	04/25/24 13:59	04/26/24 18:16	4165-60-0	
2-Fluorobiphenyl (S)	91	%	19-120		1	04/25/24 13:59	04/26/24 18:16	321-60-8	
Terphenyl-d14 (S)	95	%	25-127		1	04/25/24 13:59	04/26/24 18:16	1718-51-0	
Phenol-d6 (S)	78	%	10-120		1	04/25/24 13:59	04/26/24 18:16	13127-88-3	
2-Fluorophenol (S)	79	%	10-120		1	04/25/24 13:59	04/26/24 18:16	367-12-4	
2,4,6-Tribromophenol (S)	97	%	10-142		1	04/25/24 13:59	04/26/24 18:16	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-124.7-SVOC_240419 **Lab ID: 40277226021** Collected: 04/19/24 13:05 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/25/24 13:59	04/26/24 18:38	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/25/24 13:59	04/26/24 18:38	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/25/24 13:59	04/26/24 18:38	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/25/24 13:59	04/26/24 18:38	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/25/24 13:59	04/26/24 18:38	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	77	%	16-120		1	04/25/24 13:59	04/26/24 18:38	4165-60-0	
2-Fluorobiphenyl (S)	87	%	19-120		1	04/25/24 13:59	04/26/24 18:38	321-60-8	
Terphenyl-d14 (S)	84	%	25-127		1	04/25/24 13:59	04/26/24 18:38	1718-51-0	
Phenol-d6 (S)	57	%	10-120		1	04/25/24 13:59	04/26/24 18:38	13127-88-3	
2-Fluorophenol (S)	64	%	10-120		1	04/25/24 13:59	04/26/24 18:38	367-12-4	
2,4,6-Tribromophenol (S)	78	%	10-142		1	04/25/24 13:59	04/26/24 18:38	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-125.2-SVOC_240419 **Lab ID: 40277226022** Collected: 04/19/24 13:06 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/25/24 13:59	04/26/24 18:59	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/25/24 13:59	04/26/24 18:59	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/25/24 13:59	04/26/24 18:59	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/25/24 13:59	04/26/24 18:59	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/25/24 13:59	04/26/24 18:59	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	86	%	16-120		1	04/25/24 13:59	04/26/24 18:59	4165-60-0	
2-Fluorobiphenyl (S)	97	%	19-120		1	04/25/24 13:59	04/26/24 18:59	321-60-8	
Terphenyl-d14 (S)	104	%	25-127		1	04/25/24 13:59	04/26/24 18:59	1718-51-0	
Phenol-d6 (S)	80	%	10-120		1	04/25/24 13:59	04/26/24 18:59	13127-88-3	
2-Fluorophenol (S)	78	%	10-120		1	04/25/24 13:59	04/26/24 18:59	367-12-4	
2,4,6-Tribromophenol (S)	107	%	10-142		1	04/25/24 13:59	04/26/24 18:59	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-125.5-SVOC_240419 **Lab ID: 40277226023** Collected: 04/19/24 13:07 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/25/24 13:59	04/26/24 19:20	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/25/24 13:59	04/26/24 19:20	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/25/24 13:59	04/26/24 19:20	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/25/24 13:59	04/26/24 19:20	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/25/24 13:59	04/26/24 19:20	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	86	%	16-120		1	04/25/24 13:59	04/26/24 19:20	4165-60-0	
2-Fluorobiphenyl (S)	98	%	19-120		1	04/25/24 13:59	04/26/24 19:20	321-60-8	
Terphenyl-d14 (S)	101	%	25-127		1	04/25/24 13:59	04/26/24 19:20	1718-51-0	
Phenol-d6 (S)	81	%	10-120		1	04/25/24 13:59	04/26/24 19:20	13127-88-3	
2-Fluorophenol (S)	82	%	10-120		1	04/25/24 13:59	04/26/24 19:20	367-12-4	
2,4,6-Tribromophenol (S)	102	%	10-142		1	04/25/24 13:59	04/26/24 19:20	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-130.3-SVOC_240419 **Lab ID: 40277226024** Collected: 04/19/24 13:42 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/25/24 13:59	04/26/24 19:41	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/25/24 13:59	04/26/24 19:41	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/25/24 13:59	04/26/24 19:41	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/25/24 13:59	04/26/24 19:41	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/25/24 13:59	04/26/24 19:41	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	89	%	16-120		1	04/25/24 13:59	04/26/24 19:41	4165-60-0	
2-Fluorobiphenyl (S)	97	%	19-120		1	04/25/24 13:59	04/26/24 19:41	321-60-8	
Terphenyl-d14 (S)	100	%	25-127		1	04/25/24 13:59	04/26/24 19:41	1718-51-0	
Phenol-d6 (S)	75	%	10-120		1	04/25/24 13:59	04/26/24 19:41	13127-88-3	
2-Fluorophenol (S)	78	%	10-120		1	04/25/24 13:59	04/26/24 19:41	367-12-4	
2,4,6-Tribromophenol (S)	98	%	10-142		1	04/25/24 13:59	04/26/24 19:41	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-130.3-SVOC-DUP_419 **Lab ID: 40277226025** Collected: 04/19/24 13:42 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/25/24 13:59	04/26/24 20:02	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/25/24 13:59	04/26/24 20:02	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/25/24 13:59	04/26/24 20:02	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/25/24 13:59	04/26/24 20:02	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/25/24 13:59	04/26/24 20:02	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	82	%	16-120		1	04/25/24 13:59	04/26/24 20:02	4165-60-0	
2-Fluorobiphenyl (S)	91	%	19-120		1	04/25/24 13:59	04/26/24 20:02	321-60-8	
Terphenyl-d14 (S)	91	%	25-127		1	04/25/24 13:59	04/26/24 20:02	1718-51-0	
Phenol-d6 (S)	63	%	10-120		1	04/25/24 13:59	04/26/24 20:02	13127-88-3	
2-Fluorophenol (S)	70	%	10-120		1	04/25/24 13:59	04/26/24 20:02	367-12-4	
2,4,6-Tribromophenol (S)	87	%	10-142		1	04/25/24 13:59	04/26/24 20:02	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-130.43-SVOC_240419 **Lab ID: 40277226026** Collected: 04/19/24 13:43 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/27/24 09:08	04/30/24 11:57	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/27/24 09:08	04/30/24 11:57	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/27/24 09:08	04/30/24 11:57	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/27/24 09:08	04/30/24 11:57	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/27/24 09:08	04/30/24 11:57	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	75	%	16-120		1	04/27/24 09:08	04/30/24 11:57	4165-60-0	
2-Fluorobiphenyl (S)	82	%	19-120		1	04/27/24 09:08	04/30/24 11:57	321-60-8	
Terphenyl-d14 (S)	87	%	25-127		1	04/27/24 09:08	04/30/24 11:57	1718-51-0	
Phenol-d6 (S)	65	%	10-120		1	04/27/24 09:08	04/30/24 11:57	13127-88-3	
2-Fluorophenol (S)	66	%	10-120		1	04/27/24 09:08	04/30/24 11:57	367-12-4	
2,4,6-Tribromophenol (S)	81	%	10-142		1	04/27/24 09:08	04/30/24 11:57	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-134.1-SVOC_240419 **Lab ID: 40277226027** Collected: 04/19/24 15:02 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	04/27/24 09:08	04/30/24 12:18	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/27/24 09:08	04/30/24 12:18	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/27/24 09:08	04/30/24 12:18	4164-28-7	L2
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/27/24 09:08	04/30/24 12:18	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	04/27/24 09:08	04/30/24 12:18	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	77	%	16-120		1	04/27/24 09:08	04/30/24 12:18	4165-60-0	
2-Fluorobiphenyl (S)	90	%	19-120		1	04/27/24 09:08	04/30/24 12:18	321-60-8	
Terphenyl-d14 (S)	95	%	25-127		1	04/27/24 09:08	04/30/24 12:18	1718-51-0	
Phenol-d6 (S)	67	%	10-120		1	04/27/24 09:08	04/30/24 12:18	13127-88-3	
2-Fluorophenol (S)	66	%	10-120		1	04/27/24 09:08	04/30/24 12:18	367-12-4	
2,4,6-Tribromophenol (S)	85	%	10-142		1	04/27/24 09:08	04/30/24 12:18	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-136.5-SVOC_240419 **Lab ID: 40277226028** Collected: 04/19/24 15:03 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	04/27/24 09:08	04/30/24 12:39	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/27/24 09:08	04/30/24 12:39	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/27/24 09:08	04/30/24 12:39	4164-28-7	L2
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/27/24 09:08	04/30/24 12:39	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/27/24 09:08	04/30/24 12:39	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	77	%	16-120		1	04/27/24 09:08	04/30/24 12:39	4165-60-0	
2-Fluorobiphenyl (S)	90	%	19-120		1	04/27/24 09:08	04/30/24 12:39	321-60-8	
Terphenyl-d14 (S)	95	%	25-127		1	04/27/24 09:08	04/30/24 12:39	1718-51-0	
Phenol-d6 (S)	73	%	10-120		1	04/27/24 09:08	04/30/24 12:39	13127-88-3	
2-Fluorophenol (S)	71	%	10-120		1	04/27/24 09:08	04/30/24 12:39	367-12-4	
2,4,6-Tribromophenol (S)	92	%	10-142		1	04/27/24 09:08	04/30/24 12:39	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-140.7-SVOC_240419 **Lab ID: 40277226029** Collected: 04/19/24 15:35 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/27/24 09:08	04/30/24 19:42	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/27/24 09:08	04/30/24 19:42	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/27/24 09:08	04/30/24 19:42	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/27/24 09:08	04/30/24 19:42	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/27/24 09:08	04/30/24 19:42	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	74	%	16-120		1	04/27/24 09:08	04/30/24 19:42	4165-60-0	
2-Fluorobiphenyl (S)	83	%	19-120		1	04/27/24 09:08	04/30/24 19:42	321-60-8	
Terphenyl-d14 (S)	94	%	25-127		1	04/27/24 09:08	04/30/24 19:42	1718-51-0	
Phenol-d6 (S)	61	%	10-120		1	04/27/24 09:08	04/30/24 19:42	13127-88-3	
2-Fluorophenol (S)	57	%	10-120		1	04/27/24 09:08	04/30/24 19:42	367-12-4	
2,4,6-Tribromophenol (S)	75	%	10-142		1	04/27/24 09:08	04/30/24 19:42	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-141.5-SVOC_240419 **Lab ID: 40277226030** Collected: 04/19/24 15:36 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/27/24 09:08	04/30/24 13:21	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/27/24 09:08	04/30/24 13:21	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/27/24 09:08	04/30/24 13:21	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/27/24 09:08	04/30/24 13:21	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/27/24 09:08	04/30/24 13:21	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	76	%	16-120		1	04/27/24 09:08	04/30/24 13:21	4165-60-0	
2-Fluorobiphenyl (S)	86	%	19-120		1	04/27/24 09:08	04/30/24 13:21	321-60-8	
Terphenyl-d14 (S)	94	%	25-127		1	04/27/24 09:08	04/30/24 13:21	1718-51-0	
Phenol-d6 (S)	71	%	10-120		1	04/27/24 09:08	04/30/24 13:21	13127-88-3	
2-Fluorophenol (S)	69	%	10-120		1	04/27/24 09:08	04/30/24 13:21	367-12-4	
2,4,6-Tribromophenol (S)	98	%	10-142		1	04/27/24 09:08	04/30/24 13:21	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-144.37-SVOC_240419 **Lab ID: 40277226031** Collected: 04/19/24 16:18 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/27/24 09:08	04/30/24 13:42	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/27/24 09:08	04/30/24 13:42	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/27/24 09:08	04/30/24 13:42	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/27/24 09:08	04/30/24 13:42	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/27/24 09:08	04/30/24 13:42	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	53	%	16-120		1	04/27/24 09:08	04/30/24 13:42	4165-60-0	
2-Fluorobiphenyl (S)	62	%	19-120		1	04/27/24 09:08	04/30/24 13:42	321-60-8	
Terphenyl-d14 (S)	69	%	25-127		1	04/27/24 09:08	04/30/24 13:42	1718-51-0	
Phenol-d6 (S)	44	%	10-120		1	04/27/24 09:08	04/30/24 13:42	13127-88-3	
2-Fluorophenol (S)	45	%	10-120		1	04/27/24 09:08	04/30/24 13:42	367-12-4	
2,4,6-Tribromophenol (S)	61	%	10-142		1	04/27/24 09:08	04/30/24 13:42	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-145.8-SVOC_240419 **Lab ID: 40277226032** Collected: 04/19/24 16:19 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/27/24 09:08	04/30/24 14:03	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/27/24 09:08	04/30/24 14:03	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/27/24 09:08	04/30/24 14:03	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/27/24 09:08	04/30/24 14:03	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/27/24 09:08	04/30/24 14:03	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	75	%	16-120		1	04/27/24 09:08	04/30/24 14:03	4165-60-0	
2-Fluorobiphenyl (S)	87	%	19-120		1	04/27/24 09:08	04/30/24 14:03	321-60-8	
Terphenyl-d14 (S)	98	%	25-127		1	04/27/24 09:08	04/30/24 14:03	1718-51-0	
Phenol-d6 (S)	68	%	10-120		1	04/27/24 09:08	04/30/24 14:03	13127-88-3	
2-Fluorophenol (S)	66	%	10-120		1	04/27/24 09:08	04/30/24 14:03	367-12-4	
2,4,6-Tribromophenol (S)	93	%	10-142		1	04/27/24 09:08	04/30/24 14:03	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-146.3-SVOC_240419 **Lab ID: 40277226033** Collected: 04/19/24 16:20 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	04/27/24 09:08	04/30/24 14:24	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/27/24 09:08	04/30/24 14:24	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/27/24 09:08	04/30/24 14:24	4164-28-7	L2
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/27/24 09:08	04/30/24 14:24	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/27/24 09:08	04/30/24 14:24	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	81	%	16-120		1	04/27/24 09:08	04/30/24 14:24	4165-60-0	
2-Fluorobiphenyl (S)	92	%	19-120		1	04/27/24 09:08	04/30/24 14:24	321-60-8	
Terphenyl-d14 (S)	103	%	25-127		1	04/27/24 09:08	04/30/24 14:24	1718-51-0	
Phenol-d6 (S)	76	%	10-120		1	04/27/24 09:08	04/30/24 14:24	13127-88-3	
2-Fluorophenol (S)	72	%	10-120		1	04/27/24 09:08	04/30/24 14:24	367-12-4	
2,4,6-Tribromophenol (S)	107	%	10-142		1	04/27/24 09:08	04/30/24 14:24	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-150.35-SVOC_240420 **Lab ID: 40277226034** Collected: 04/20/24 09:52 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/27/24 09:08	04/30/24 14:46	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/27/24 09:08	04/30/24 14:46	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/27/24 09:08	04/30/24 14:46	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/27/24 09:08	04/30/24 14:46	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/27/24 09:08	04/30/24 14:46	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	68	%	16-120		1	04/27/24 09:08	04/30/24 14:46	4165-60-0	
2-Fluorobiphenyl (S)	79	%	19-120		1	04/27/24 09:08	04/30/24 14:46	321-60-8	
Terphenyl-d14 (S)	90	%	25-127		1	04/27/24 09:08	04/30/24 14:46	1718-51-0	
Phenol-d6 (S)	67	%	10-120		1	04/27/24 09:08	04/30/24 14:46	13127-88-3	
2-Fluorophenol (S)	64	%	10-120		1	04/27/24 09:08	04/30/24 14:46	367-12-4	
2,4,6-Tribromophenol (S)	89	%	10-142		1	04/27/24 09:08	04/30/24 14:46	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-152.3-SVOC_240420 **Lab ID: 40277226035** Collected: 04/20/24 09:53 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/27/24 09:08	04/30/24 15:07	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/27/24 09:08	04/30/24 15:07	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/27/24 09:08	04/30/24 15:07	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/27/24 09:08	04/30/24 15:07	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/27/24 09:08	04/30/24 15:07	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	78	%	16-120		1	04/27/24 09:08	04/30/24 15:07	4165-60-0	
2-Fluorobiphenyl (S)	91	%	19-120		1	04/27/24 09:08	04/30/24 15:07	321-60-8	
Terphenyl-d14 (S)	102	%	25-127		1	04/27/24 09:08	04/30/24 15:07	1718-51-0	
Phenol-d6 (S)	77	%	10-120		1	04/27/24 09:08	04/30/24 15:07	13127-88-3	
2-Fluorophenol (S)	71	%	10-120		1	04/27/24 09:08	04/30/24 15:07	367-12-4	
2,4,6-Tribromophenol (S)	106	%	10-142		1	04/27/24 09:08	04/30/24 15:07	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-154.2-SVOC_240420 **Lab ID: 40277226036** Collected: 04/20/24 10:30 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	04/27/24 09:08	04/30/24 15:28	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/27/24 09:08	04/30/24 15:28	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/27/24 09:08	04/30/24 15:28	4164-28-7	L2
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/27/24 09:08	04/30/24 15:28	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	04/27/24 09:08	04/30/24 15:28	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	53	%	16-120		1	04/27/24 09:08	04/30/24 15:28	4165-60-0	
2-Fluorobiphenyl (S)	62	%	19-120		1	04/27/24 09:08	04/30/24 15:28	321-60-8	
Terphenyl-d14 (S)	64	%	25-127		1	04/27/24 09:08	04/30/24 15:28	1718-51-0	
Phenol-d6 (S)	43	%	10-120		1	04/27/24 09:08	04/30/24 15:28	13127-88-3	
2-Fluorophenol (S)	46	%	10-120		1	04/27/24 09:08	04/30/24 15:28	367-12-4	
2,4,6-Tribromophenol (S)	63	%	10-142		1	04/27/24 09:08	04/30/24 15:28	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-154.5-SVOC_240420 **Lab ID: 40277226037** Collected: 04/20/24 10:31 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/27/24 09:08	04/30/24 16:53	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/27/24 09:08	04/30/24 16:53	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/27/24 09:08	04/30/24 16:53	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/27/24 09:08	04/30/24 16:53	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/27/24 09:08	04/30/24 16:53	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	56	%	16-120		1	04/27/24 09:08	04/30/24 16:53	4165-60-0	
2-Fluorobiphenyl (S)	65	%	19-120		1	04/27/24 09:08	04/30/24 16:53	321-60-8	
Terphenyl-d14 (S)	63	%	25-127		1	04/27/24 09:08	04/30/24 16:53	1718-51-0	
Phenol-d6 (S)	47	%	10-120		1	04/27/24 09:08	04/30/24 16:53	13127-88-3	
2-Fluorophenol (S)	50	%	10-120		1	04/27/24 09:08	04/30/24 16:53	367-12-4	
2,4,6-Tribromophenol (S)	65	%	10-142		1	04/27/24 09:08	04/30/24 16:53	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-156.25-SVOC_240420 **Lab ID: 40277226038** Collected: 04/20/24 10:32 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	04/27/24 09:08	04/30/24 20:04	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/27/24 09:08	04/30/24 20:04	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/27/24 09:08	04/30/24 20:04	4164-28-7	L2
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/27/24 09:08	04/30/24 20:04	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	04/27/24 09:08	04/30/24 20:04	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	70	%	16-120		1	04/27/24 09:08	04/30/24 20:04	4165-60-0	
2-Fluorobiphenyl (S)	74	%	19-120		1	04/27/24 09:08	04/30/24 20:04	321-60-8	
Terphenyl-d14 (S)	68	%	25-127		1	04/27/24 09:08	04/30/24 20:04	1718-51-0	
Phenol-d6 (S)	60	%	10-120		1	04/27/24 09:08	04/30/24 20:04	13127-88-3	
2-Fluorophenol (S)	65	%	10-120		1	04/27/24 09:08	04/30/24 20:04	367-12-4	
2,4,6-Tribromophenol (S)	67	%	10-142		1	04/27/24 09:08	04/30/24 20:04	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-161.45-SVOC_240420 **Lab ID: 40277226039** Collected: 04/20/24 11:34 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/27/24 09:08	04/30/24 18:39	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/27/24 09:08	04/30/24 18:39	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/27/24 09:08	04/30/24 18:39	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/27/24 09:08	04/30/24 18:39	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/27/24 09:08	04/30/24 18:39	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	68	%	16-120		1	04/27/24 09:08	04/30/24 18:39	4165-60-0	
2-Fluorobiphenyl (S)	83	%	19-120		1	04/27/24 09:08	04/30/24 18:39	321-60-8	
Terphenyl-d14 (S)	95	%	25-127		1	04/27/24 09:08	04/30/24 18:39	1718-51-0	
Phenol-d6 (S)	66	%	10-120		1	04/27/24 09:08	04/30/24 18:39	13127-88-3	
2-Fluorophenol (S)	63	%	10-120		1	04/27/24 09:08	04/30/24 18:39	367-12-4	
2,4,6-Tribromophenol (S)	96	%	10-142		1	04/27/24 09:08	04/30/24 18:39	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-164.9-SVOC_240420 **Lab ID: 40277226040** Collected: 04/20/24 12:47 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/27/24 09:08	04/30/24 19:00	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/27/24 09:08	04/30/24 19:00	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/27/24 09:08	04/30/24 19:00	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/27/24 09:08	04/30/24 19:00	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/27/24 09:08	04/30/24 19:00	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	70	%	16-120		1	04/27/24 09:08	04/30/24 19:00	4165-60-0	
2-Fluorobiphenyl (S)	73	%	19-120		1	04/27/24 09:08	04/30/24 19:00	321-60-8	
Terphenyl-d14 (S)	68	%	25-127		1	04/27/24 09:08	04/30/24 19:00	1718-51-0	
Phenol-d6 (S)	68	%	10-120		1	04/27/24 09:08	04/30/24 19:00	13127-88-3	
2-Fluorophenol (S)	71	%	10-120		1	04/27/24 09:08	04/30/24 19:00	367-12-4	
2,4,6-Tribromophenol (S)	73	%	10-142		1	04/27/24 09:08	04/30/24 19:00	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-165.8-SVOC_240420 **Lab ID: 40277226041** Collected: 04/20/24 12:48 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	04/27/24 09:08	04/30/24 19:21	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/27/24 09:08	04/30/24 19:21	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/27/24 09:08	04/30/24 19:21	4164-28-7	L2
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/27/24 09:08	04/30/24 19:21	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/27/24 09:08	04/30/24 19:21	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	63	%	16-120		1	04/27/24 09:08	04/30/24 19:21	4165-60-0	
2-Fluorobiphenyl (S)	72	%	19-120		1	04/27/24 09:08	04/30/24 19:21	321-60-8	
Terphenyl-d14 (S)	77	%	25-127		1	04/27/24 09:08	04/30/24 19:21	1718-51-0	
Phenol-d6 (S)	56	%	10-120		1	04/27/24 09:08	04/30/24 19:21	13127-88-3	
2-Fluorophenol (S)	56	%	10-120		1	04/27/24 09:08	04/30/24 19:21	367-12-4	
2,4,6-Tribromophenol (S)	78	%	10-142		1	04/27/24 09:08	04/30/24 19:21	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-167-SVOC_240420 **Lab ID: 40277226042** Collected: 04/20/24 12:49 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<181**	ug/kg	333	181	1	04/27/24 09:08	04/29/24 21:14	123-91-1	
Di-n-butylphthalate	**<104**	ug/kg	333	104	1	04/27/24 09:08	04/29/24 21:14	84-74-2	
N-Nitrodimethylamine	**<162**	ug/kg	333	162	1	04/27/24 09:08	04/29/24 21:14	4164-28-7	L2
N-Nitrosodimethylamine	**<78.3**	ug/kg	333	78.3	1	04/27/24 09:08	04/29/24 21:14	62-75-9	
bis(2-Ethylhexyl)phthalate	**<114**	ug/kg	333	114	1	04/27/24 09:08	04/29/24 21:14	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	49	%	16-120		1	04/27/24 09:08	04/29/24 21:14	4165-60-0	
2-Fluorobiphenyl (S)	58	%	19-120		1	04/27/24 09:08	04/29/24 21:14	321-60-8	
Terphenyl-d14 (S)	69	%	25-127		1	04/27/24 09:08	04/29/24 21:14	1718-51-0	
Phenol-d6 (S)	45	%	10-120		1	04/27/24 09:08	04/29/24 21:14	13127-88-3	
2-Fluorophenol (S)	46	%	10-120		1	04/27/24 09:08	04/29/24 21:14	367-12-4	
2,4,6-Tribromophenol (S)	68	%	10-142		1	04/27/24 09:08	04/29/24 21:14	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-170.6-SVOC_240420 **Lab ID: 40277226043** Collected: 04/20/24 13:45 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/27/24 09:08	04/30/24 17:57	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/27/24 09:08	04/30/24 17:57	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/27/24 09:08	04/30/24 17:57	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/27/24 09:08	04/30/24 17:57	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/27/24 09:08	04/30/24 17:57	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	83	%	16-120		1	04/27/24 09:08	04/30/24 17:57	4165-60-0	
2-Fluorobiphenyl (S)	97	%	19-120		1	04/27/24 09:08	04/30/24 17:57	321-60-8	
Terphenyl-d14 (S)	101	%	25-127		1	04/27/24 09:08	04/30/24 17:57	1718-51-0	
Phenol-d6 (S)	77	%	10-120		1	04/27/24 09:08	04/30/24 17:57	13127-88-3	
2-Fluorophenol (S)	73	%	10-120		1	04/27/24 09:08	04/30/24 17:57	367-12-4	
2,4,6-Tribromophenol (S)	101	%	10-142		1	04/27/24 09:08	04/30/24 17:57	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-171-SVOC_240420 **Lab ID: 40277226044** Collected: 04/20/24 13:46 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/27/24 09:08	04/30/24 18:18	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/27/24 09:08	04/30/24 18:18	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/27/24 09:08	04/30/24 18:18	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/27/24 09:08	04/30/24 18:18	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/27/24 09:08	04/30/24 18:18	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	72	%	16-120		1	04/27/24 09:08	04/30/24 18:18	4165-60-0	
2-Fluorobiphenyl (S)	82	%	19-120		1	04/27/24 09:08	04/30/24 18:18	321-60-8	
Terphenyl-d14 (S)	85	%	25-127		1	04/27/24 09:08	04/30/24 18:18	1718-51-0	
Phenol-d6 (S)	64	%	10-120		1	04/27/24 09:08	04/30/24 18:18	13127-88-3	
2-Fluorophenol (S)	63	%	10-120		1	04/27/24 09:08	04/30/24 18:18	367-12-4	
2,4,6-Tribromophenol (S)	78	%	10-142		1	04/27/24 09:08	04/30/24 18:18	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-171-SVOC-DUP_0420 **Lab ID: 40277226045** Collected: 04/20/24 13:46 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/27/24 09:08	04/30/24 17:35	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/27/24 09:08	04/30/24 17:35	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/27/24 09:08	04/30/24 17:35	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/27/24 09:08	04/30/24 17:35	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/27/24 09:08	04/30/24 17:35	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	82	%	16-120		1	04/27/24 09:08	04/30/24 17:35	4165-60-0	
2-Fluorobiphenyl (S)	92	%	19-120		1	04/27/24 09:08	04/30/24 17:35	321-60-8	
Terphenyl-d14 (S)	101	%	25-127		1	04/27/24 09:08	04/30/24 17:35	1718-51-0	
Phenol-d6 (S)	67	%	10-120		1	04/27/24 09:08	04/30/24 17:35	13127-88-3	
2-Fluorophenol (S)	63	%	10-120		1	04/27/24 09:08	04/30/24 17:35	367-12-4	
2,4,6-Tribromophenol (S)	81	%	10-142		1	04/27/24 09:08	04/30/24 17:35	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-174.8-SVOC_240420 **Lab ID: 40277226046** Collected: 04/20/24 14:17 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/29/24 13:39	04/30/24 20:25	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/29/24 13:39	04/30/24 20:25	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/29/24 13:39	04/30/24 20:25	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/29/24 13:39	04/30/24 20:25	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/29/24 13:39	04/30/24 20:25	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	73	%	16-120		1	04/29/24 13:39	04/30/24 20:25	4165-60-0	
2-Fluorobiphenyl (S)	83	%	19-120		1	04/29/24 13:39	04/30/24 20:25	321-60-8	
Terphenyl-d14 (S)	102	%	25-127		1	04/29/24 13:39	04/30/24 20:25	1718-51-0	
Phenol-d6 (S)	70	%	10-120		1	04/29/24 13:39	04/30/24 20:25	13127-88-3	
2-Fluorophenol (S)	64	%	10-120		1	04/29/24 13:39	04/30/24 20:25	367-12-4	
2,4,6-Tribromophenol (S)	104	%	10-142		1	04/29/24 13:39	04/30/24 20:25	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-176.4-SVOC_240420 **Lab ID: 40277226047** Collected: 04/20/24 14:18 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/29/24 13:39	04/30/24 20:46	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/29/24 13:39	04/30/24 20:46	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/29/24 13:39	04/30/24 20:46	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/29/24 13:39	04/30/24 20:46	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/29/24 13:39	04/30/24 20:46	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	77	%	16-120		1	04/29/24 13:39	04/30/24 20:46	4165-60-0	
2-Fluorobiphenyl (S)	87	%	19-120		1	04/29/24 13:39	04/30/24 20:46	321-60-8	
Terphenyl-d14 (S)	93	%	25-127		1	04/29/24 13:39	04/30/24 20:46	1718-51-0	
Phenol-d6 (S)	76	%	10-120		1	04/29/24 13:39	04/30/24 20:46	13127-88-3	
2-Fluorophenol (S)	74	%	10-120		1	04/29/24 13:39	04/30/24 20:46	367-12-4	
2,4,6-Tribromophenol (S)	102	%	10-142		1	04/29/24 13:39	04/30/24 20:46	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-180.2-SVOC_240420 **Lab ID: 40277226048** Collected: 04/20/24 14:52 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/29/24 13:39	04/30/24 21:07	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/29/24 13:39	04/30/24 21:07	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/29/24 13:39	04/30/24 21:07	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/29/24 13:39	04/30/24 21:07	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/29/24 13:39	04/30/24 21:07	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	87	%	16-120		1	04/29/24 13:39	04/30/24 21:07	4165-60-0	
2-Fluorobiphenyl (S)	98	%	19-120		1	04/29/24 13:39	04/30/24 21:07	321-60-8	
Terphenyl-d14 (S)	105	%	25-127		1	04/29/24 13:39	04/30/24 21:07	1718-51-0	
Phenol-d6 (S)	84	%	10-120		1	04/29/24 13:39	04/30/24 21:07	13127-88-3	
2-Fluorophenol (S)	80	%	10-120		1	04/29/24 13:39	04/30/24 21:07	367-12-4	
2,4,6-Tribromophenol (S)	105	%	10-142		1	04/29/24 13:39	04/30/24 21:07	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-182.5-SVOC_240420 **Lab ID: 40277226049** Collected: 04/20/24 14:53 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	04/29/24 13:39	04/30/24 21:28	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/29/24 13:39	04/30/24 21:28	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/29/24 13:39	04/30/24 21:28	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/29/24 13:39	04/30/24 21:28	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/29/24 13:39	04/30/24 21:28	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	59	%	16-120		1	04/29/24 13:39	04/30/24 21:28	4165-60-0	
2-Fluorobiphenyl (S)	73	%	19-120		1	04/29/24 13:39	04/30/24 21:28	321-60-8	
Terphenyl-d14 (S)	96	%	25-127		1	04/29/24 13:39	04/30/24 21:28	1718-51-0	
Phenol-d6 (S)	58	%	10-120		1	04/29/24 13:39	04/30/24 21:28	13127-88-3	
2-Fluorophenol (S)	56	%	10-120		1	04/29/24 13:39	04/30/24 21:28	367-12-4	
2,4,6-Tribromophenol (S)	97	%	10-142		1	04/29/24 13:39	04/30/24 21:28	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-183.1-SVOC_240420 **Lab ID: 40277226050** Collected: 04/20/24 15:30 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/29/24 13:39	05/01/24 10:35	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/29/24 13:39	05/01/24 10:35	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/29/24 13:39	05/01/24 10:35	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/29/24 13:39	05/01/24 10:35	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/29/24 13:39	05/01/24 10:35	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	61	%	16-120		1	04/29/24 13:39	05/01/24 10:35	4165-60-0	
2-Fluorobiphenyl (S)	74	%	19-120		1	04/29/24 13:39	05/01/24 10:35	321-60-8	
Terphenyl-d14 (S)	91	%	25-127		1	04/29/24 13:39	05/01/24 10:35	1718-51-0	
Phenol-d6 (S)	58	%	10-120		1	04/29/24 13:39	05/01/24 10:35	13127-88-3	
2-Fluorophenol (S)	56	%	10-120		1	04/29/24 13:39	05/01/24 10:35	367-12-4	
2,4,6-Tribromophenol (S)	90	%	10-142		1	04/29/24 13:39	05/01/24 10:35	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-187.5-SVOC_240420 **Lab ID: 40277226051** Collected: 04/20/24 15:31 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/29/24 13:39	05/01/24 10:57	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/29/24 13:39	05/01/24 10:57	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/29/24 13:39	05/01/24 10:57	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/29/24 13:39	05/01/24 10:57	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/29/24 13:39	05/01/24 10:57	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	48	%	16-120		1	04/29/24 13:39	05/01/24 10:57	4165-60-0	
2-Fluorobiphenyl (S)	61	%	19-120		1	04/29/24 13:39	05/01/24 10:57	321-60-8	
Terphenyl-d14 (S)	77	%	25-127		1	04/29/24 13:39	05/01/24 10:57	1718-51-0	
Phenol-d6 (S)	45	%	10-120		1	04/29/24 13:39	05/01/24 10:57	13127-88-3	
2-Fluorophenol (S)	41	%	10-120		1	04/29/24 13:39	05/01/24 10:57	367-12-4	
2,4,6-Tribromophenol (S)	67	%	10-142		1	04/29/24 13:39	05/01/24 10:57	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-188.85-SVOC_240420 **Lab ID: 40277226052** Collected: 04/20/24 16:17 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	04/29/24 13:39	05/01/24 11:18	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/29/24 13:39	05/01/24 11:18	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/29/24 13:39	05/01/24 11:18	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/29/24 13:39	05/01/24 11:18	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/29/24 13:39	05/01/24 11:18	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	63	%	16-120		1	04/29/24 13:39	05/01/24 11:18	4165-60-0	
2-Fluorobiphenyl (S)	85	%	19-120		1	04/29/24 13:39	05/01/24 11:18	321-60-8	
Terphenyl-d14 (S)	103	%	25-127		1	04/29/24 13:39	05/01/24 11:18	1718-51-0	
Phenol-d6 (S)	60	%	10-120		1	04/29/24 13:39	05/01/24 11:18	13127-88-3	
2-Fluorophenol (S)	56	%	10-120		1	04/29/24 13:39	05/01/24 11:18	367-12-4	
2,4,6-Tribromophenol (S)	100	%	10-142		1	04/29/24 13:39	05/01/24 11:18	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-192.8-SVOC_240420 **Lab ID: 40277226053** Collected: 04/20/24 16:18 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/29/24 13:39	05/01/24 11:39	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/29/24 13:39	05/01/24 11:39	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/29/24 13:39	05/01/24 11:39	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/29/24 13:39	05/01/24 11:39	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/29/24 13:39	05/01/24 11:39	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	60	%	16-120		1	04/29/24 13:39	05/01/24 11:39	4165-60-0	
2-Fluorobiphenyl (S)	74	%	19-120		1	04/29/24 13:39	05/01/24 11:39	321-60-8	
Terphenyl-d14 (S)	91	%	25-127		1	04/29/24 13:39	05/01/24 11:39	1718-51-0	
Phenol-d6 (S)	57	%	10-120		1	04/29/24 13:39	05/01/24 11:39	13127-88-3	
2-Fluorophenol (S)	55	%	10-120		1	04/29/24 13:39	05/01/24 11:39	367-12-4	
2,4,6-Tribromophenol (S)	89	%	10-142		1	04/29/24 13:39	05/01/24 11:39	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-194.2-SVOC_240421 **Lab ID: 40277226054** Collected: 04/21/24 08:55 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/29/24 13:39	05/01/24 12:00	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/29/24 13:39	05/01/24 12:00	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/29/24 13:39	05/01/24 12:00	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/29/24 13:39	05/01/24 12:00	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/29/24 13:39	05/01/24 12:00	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	63	%	16-120		1	04/29/24 13:39	05/01/24 12:00	4165-60-0	
2-Fluorobiphenyl (S)	76	%	19-120		1	04/29/24 13:39	05/01/24 12:00	321-60-8	
Terphenyl-d14 (S)	90	%	25-127		1	04/29/24 13:39	05/01/24 12:00	1718-51-0	
Phenol-d6 (S)	60	%	10-120		1	04/29/24 13:39	05/01/24 12:00	13127-88-3	
2-Fluorophenol (S)	55	%	10-120		1	04/29/24 13:39	05/01/24 12:00	367-12-4	
2,4,6-Tribromophenol (S)	95	%	10-142		1	04/29/24 13:39	05/01/24 12:00	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-196.7-SVOC_240421 **Lab ID: 40277226055** Collected: 04/21/24 08:56 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/29/24 13:39	05/01/24 12:22	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/29/24 13:39	05/01/24 12:22	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/29/24 13:39	05/01/24 12:22	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/29/24 13:39	05/01/24 12:22	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/29/24 13:39	05/01/24 12:22	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	69	%	16-120		1	04/29/24 13:39	05/01/24 12:22	4165-60-0	
2-Fluorobiphenyl (S)	85	%	19-120		1	04/29/24 13:39	05/01/24 12:22	321-60-8	
Terphenyl-d14 (S)	96	%	25-127		1	04/29/24 13:39	05/01/24 12:22	1718-51-0	
Phenol-d6 (S)	70	%	10-120		1	04/29/24 13:39	05/01/24 12:22	13127-88-3	
2-Fluorophenol (S)	63	%	10-120		1	04/29/24 13:39	05/01/24 12:22	367-12-4	
2,4,6-Tribromophenol (S)	103	%	10-142		1	04/29/24 13:39	05/01/24 12:22	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-197.1-SVOC_240421 **Lab ID: 40277226056** Collected: 04/21/24 08:57 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/29/24 13:39	05/01/24 12:43	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/29/24 13:39	05/01/24 12:43	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/29/24 13:39	05/01/24 12:43	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/29/24 13:39	05/01/24 12:43	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/29/24 13:39	05/01/24 12:43	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	73	%	16-120		1	04/29/24 13:39	05/01/24 12:43	4165-60-0	
2-Fluorobiphenyl (S)	86	%	19-120		1	04/29/24 13:39	05/01/24 12:43	321-60-8	
Terphenyl-d14 (S)	95	%	25-127		1	04/29/24 13:39	05/01/24 12:43	1718-51-0	
Phenol-d6 (S)	72	%	10-120		1	04/29/24 13:39	05/01/24 12:43	13127-88-3	
2-Fluorophenol (S)	69	%	10-120		1	04/29/24 13:39	05/01/24 12:43	367-12-4	
2,4,6-Tribromophenol (S)	100	%	10-142		1	04/29/24 13:39	05/01/24 12:43	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-200-SVOC_240421 **Lab ID: 40277226057** Collected: 04/21/24 09:30 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	04/29/24 13:39	05/01/24 13:04	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/29/24 13:39	05/01/24 13:04	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/29/24 13:39	05/01/24 13:04	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/29/24 13:39	05/01/24 13:04	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/29/24 13:39	05/01/24 13:04	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	80	%	16-120		1	04/29/24 13:39	05/01/24 13:04	4165-60-0	
2-Fluorobiphenyl (S)	89	%	19-120		1	04/29/24 13:39	05/01/24 13:04	321-60-8	
Terphenyl-d14 (S)	101	%	25-127		1	04/29/24 13:39	05/01/24 13:04	1718-51-0	
Phenol-d6 (S)	78	%	10-120		1	04/29/24 13:39	05/01/24 13:04	13127-88-3	
2-Fluorophenol (S)	74	%	10-120		1	04/29/24 13:39	05/01/24 13:04	367-12-4	
2,4,6-Tribromophenol (S)	103	%	10-142		1	04/29/24 13:39	05/01/24 13:04	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-202-SVOC_240421 **Lab ID: 40277226058** Collected: 04/21/24 09:31 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/29/24 13:39	05/01/24 13:25	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/29/24 13:39	05/01/24 13:25	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/29/24 13:39	05/01/24 13:25	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/29/24 13:39	05/01/24 13:25	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/29/24 13:39	05/01/24 13:25	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	66	%	16-120		1	04/29/24 13:39	05/01/24 13:25	4165-60-0	
2-Fluorobiphenyl (S)	73	%	19-120		1	04/29/24 13:39	05/01/24 13:25	321-60-8	
Terphenyl-d14 (S)	81	%	25-127		1	04/29/24 13:39	05/01/24 13:25	1718-51-0	
Phenol-d6 (S)	62	%	10-120		1	04/29/24 13:39	05/01/24 13:25	13127-88-3	
2-Fluorophenol (S)	58	%	10-120		1	04/29/24 13:39	05/01/24 13:25	367-12-4	
2,4,6-Tribromophenol (S)	77	%	10-142		1	04/29/24 13:39	05/01/24 13:25	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-205.4-SVOC_240421 **Lab ID: 40277226059** Collected: 04/21/24 10:30 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	04/29/24 13:39	05/01/24 13:47	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/29/24 13:39	05/01/24 13:47	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/29/24 13:39	05/01/24 13:47	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/29/24 13:39	05/01/24 13:47	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	04/29/24 13:39	05/01/24 13:47	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	81	%	16-120		1	04/29/24 13:39	05/01/24 13:47	4165-60-0	
2-Fluorobiphenyl (S)	92	%	19-120		1	04/29/24 13:39	05/01/24 13:47	321-60-8	
Terphenyl-d14 (S)	100	%	25-127		1	04/29/24 13:39	05/01/24 13:47	1718-51-0	
Phenol-d6 (S)	76	%	10-120		1	04/29/24 13:39	05/01/24 13:47	13127-88-3	
2-Fluorophenol (S)	72	%	10-120		1	04/29/24 13:39	05/01/24 13:47	367-12-4	
2,4,6-Tribromophenol (S)	46	%	10-142		1	04/29/24 13:39	05/01/24 13:47	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-207.8-SVOC_240421 **Lab ID: 40277226060** Collected: 04/21/24 10:31 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/30/24 14:10	05/01/24 14:08	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/01/24 14:08	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/30/24 14:10	05/01/24 14:08	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/01/24 14:08	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/30/24 14:10	05/01/24 14:08	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	52	%	16-120		1	04/30/24 14:10	05/01/24 14:08	4165-60-0	
2-Fluorobiphenyl (S)	70	%	19-120		1	04/30/24 14:10	05/01/24 14:08	321-60-8	
Terphenyl-d14 (S)	89	%	25-127		1	04/30/24 14:10	05/01/24 14:08	1718-51-0	
Phenol-d6 (S)	50	%	10-120		1	04/30/24 14:10	05/01/24 14:08	13127-88-3	
2-Fluorophenol (S)	46	%	10-120		1	04/30/24 14:10	05/01/24 14:08	367-12-4	
2,4,6-Tribromophenol (S)	82	%	10-142		1	04/30/24 14:10	05/01/24 14:08	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-210.2-SVOC_240421 **Lab ID: 40277226061** Collected: 04/21/24 11:53 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/30/24 14:10	05/01/24 14:29	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/01/24 14:29	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/30/24 14:10	05/01/24 14:29	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/01/24 14:29	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/30/24 14:10	05/01/24 14:29	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	76	%	16-120		1	04/30/24 14:10	05/01/24 14:29	4165-60-0	
2-Fluorobiphenyl (S)	88	%	19-120		1	04/30/24 14:10	05/01/24 14:29	321-60-8	
Terphenyl-d14 (S)	101	%	25-127		1	04/30/24 14:10	05/01/24 14:29	1718-51-0	
Phenol-d6 (S)	75	%	10-120		1	04/30/24 14:10	05/01/24 14:29	13127-88-3	
2-Fluorophenol (S)	69	%	10-120		1	04/30/24 14:10	05/01/24 14:29	367-12-4	
2,4,6-Tribromophenol (S)	74	%	10-142		1	04/30/24 14:10	05/01/24 14:29	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-214.95-SVOC_240421 **Lab ID: 40277226062** Collected: 04/21/24 13:42 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/30/24 14:10	05/01/24 14:50	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/30/24 14:10	05/01/24 14:50	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/30/24 14:10	05/01/24 14:50	4164-28-7	L2
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/30/24 14:10	05/01/24 14:50	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/30/24 14:10	05/01/24 14:50	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	70	%	16-120		1	04/30/24 14:10	05/01/24 14:50	4165-60-0	
2-Fluorobiphenyl (S)	86	%	19-120		1	04/30/24 14:10	05/01/24 14:50	321-60-8	
Terphenyl-d14 (S)	103	%	25-127		1	04/30/24 14:10	05/01/24 14:50	1718-51-0	
Phenol-d6 (S)	69	%	10-120		1	04/30/24 14:10	05/01/24 14:50	13127-88-3	
2-Fluorophenol (S)	62	%	10-120		1	04/30/24 14:10	05/01/24 14:50	367-12-4	
2,4,6-Tribromophenol (S)	91	%	10-142		1	04/30/24 14:10	05/01/24 14:50	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-216.35-SVOC_240421 **Lab ID: 40277226063** Collected: 04/21/24 13:43 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/30/24 14:10	05/01/24 15:11	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/01/24 15:11	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/30/24 14:10	05/01/24 15:11	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/01/24 15:11	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/30/24 14:10	05/01/24 15:11	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	87	%	16-120		1	04/30/24 14:10	05/01/24 15:11	4165-60-0	
2-Fluorobiphenyl (S)	100	%	19-120		1	04/30/24 14:10	05/01/24 15:11	321-60-8	
Terphenyl-d14 (S)	110	%	25-127		1	04/30/24 14:10	05/01/24 15:11	1718-51-0	
Phenol-d6 (S)	72	%	10-120		1	04/30/24 14:10	05/01/24 15:11	13127-88-3	
2-Fluorophenol (S)	66	%	10-120		1	04/30/24 14:10	05/01/24 15:11	367-12-4	
2,4,6-Tribromophenol (S)	64	%	10-142		1	04/30/24 14:10	05/01/24 15:11	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-219.7-SVOC_240421 **Lab ID: 40277226064** Collected: 04/21/24 15:46 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/30/24 14:10	05/01/24 15:33	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/01/24 15:33	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/30/24 14:10	05/01/24 15:33	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/01/24 15:33	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/30/24 14:10	05/01/24 15:33	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	82	%	16-120		1	04/30/24 14:10	05/01/24 15:33	4165-60-0	
2-Fluorobiphenyl (S)	92	%	19-120		1	04/30/24 14:10	05/01/24 15:33	321-60-8	
Terphenyl-d14 (S)	100	%	25-127		1	04/30/24 14:10	05/01/24 15:33	1718-51-0	
Phenol-d6 (S)	81	%	10-120		1	04/30/24 14:10	05/01/24 15:33	13127-88-3	
2-Fluorophenol (S)	79	%	10-120		1	04/30/24 14:10	05/01/24 15:33	367-12-4	
2,4,6-Tribromophenol (S)	97	%	10-142		1	04/30/24 14:10	05/01/24 15:33	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-219.7-SVOC-DUP_421 **Lab ID: 40277226065** Collected: 04/21/24 15:46 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/30/24 14:10	05/01/24 15:54	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/01/24 15:54	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/30/24 14:10	05/01/24 15:54	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/01/24 15:54	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/30/24 14:10	05/01/24 15:54	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	74	%	16-120		1	04/30/24 14:10	05/01/24 15:54	4165-60-0	
2-Fluorobiphenyl (S)	83	%	19-120		1	04/30/24 14:10	05/01/24 15:54	321-60-8	
Terphenyl-d14 (S)	94	%	25-127		1	04/30/24 14:10	05/01/24 15:54	1718-51-0	
Phenol-d6 (S)	70	%	10-120		1	04/30/24 14:10	05/01/24 15:54	13127-88-3	
2-Fluorophenol (S)	66	%	10-120		1	04/30/24 14:10	05/01/24 15:54	367-12-4	
2,4,6-Tribromophenol (S)	65	%	10-142		1	04/30/24 14:10	05/01/24 15:54	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-226.2-SVOC_240421 **Lab ID: 40277226066** Collected: 04/21/24 16:25 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/30/24 14:10	05/01/24 16:15	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/01/24 16:15	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/30/24 14:10	05/01/24 16:15	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/01/24 16:15	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/30/24 14:10	05/01/24 16:15	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	58	%	16-120		1	04/30/24 14:10	05/01/24 16:15	4165-60-0	
2-Fluorobiphenyl (S)	73	%	19-120		1	04/30/24 14:10	05/01/24 16:15	321-60-8	
Terphenyl-d14 (S)	86	%	25-127		1	04/30/24 14:10	05/01/24 16:15	1718-51-0	
Phenol-d6 (S)	54	%	10-120		1	04/30/24 14:10	05/01/24 16:15	13127-88-3	
2-Fluorophenol (S)	48	%	10-120		1	04/30/24 14:10	05/01/24 16:15	367-12-4	
2,4,6-Tribromophenol (S)	56	%	10-142		1	04/30/24 14:10	05/01/24 16:15	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-229.6-SVOC_240422 **Lab ID: 40277226067** Collected: 04/22/24 09:55 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/30/24 14:10	05/01/24 16:37	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/01/24 16:37	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/30/24 14:10	05/01/24 16:37	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/01/24 16:37	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/30/24 14:10	05/01/24 16:37	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	81	%	16-120		1	04/30/24 14:10	05/01/24 16:37	4165-60-0	
2-Fluorobiphenyl (S)	92	%	19-120		1	04/30/24 14:10	05/01/24 16:37	321-60-8	
Terphenyl-d14 (S)	102	%	25-127		1	04/30/24 14:10	05/01/24 16:37	1718-51-0	
Phenol-d6 (S)	80	%	10-120		1	04/30/24 14:10	05/01/24 16:37	13127-88-3	
2-Fluorophenol (S)	76	%	10-120		1	04/30/24 14:10	05/01/24 16:37	367-12-4	
2,4,6-Tribromophenol (S)	99	%	10-142		1	04/30/24 14:10	05/01/24 16:37	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-229.7-SVOC_240422 **Lab ID: 40277226068** Collected: 04/22/24 09:56 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/30/24 14:10	05/01/24 16:58	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/01/24 16:58	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/30/24 14:10	05/01/24 16:58	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/01/24 16:58	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/30/24 14:10	05/01/24 16:58	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	69	%	16-120		1	04/30/24 14:10	05/01/24 16:58	4165-60-0	
2-Fluorobiphenyl (S)	80	%	19-120		1	04/30/24 14:10	05/01/24 16:58	321-60-8	
Terphenyl-d14 (S)	88	%	25-127		1	04/30/24 14:10	05/01/24 16:58	1718-51-0	
Phenol-d6 (S)	66	%	10-120		1	04/30/24 14:10	05/01/24 16:58	13127-88-3	
2-Fluorophenol (S)	63	%	10-120		1	04/30/24 14:10	05/01/24 16:58	367-12-4	
2,4,6-Tribromophenol (S)	60	%	10-142		1	04/30/24 14:10	05/01/24 16:58	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-230.45-SVOC_240422 **Lab ID: 40277226069** Collected: 04/22/24 09:57 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<180**	ug/kg	333	180	1	04/30/24 14:10	05/01/24 17:19	123-91-1	
Di-n-butylphthalate	**<104**	ug/kg	333	104	1	04/30/24 14:10	05/01/24 17:19	84-74-2	
N-Nitrodimethylamine	**<162**	ug/kg	333	162	1	04/30/24 14:10	05/01/24 17:19	4164-28-7	L2
N-Nitrosodimethylamine	**<78.3**	ug/kg	333	78.3	1	04/30/24 14:10	05/01/24 17:19	62-75-9	
bis(2-Ethylhexyl)phthalate	**<114**	ug/kg	333	114	1	04/30/24 14:10	05/01/24 17:19	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	76	%	16-120		1	04/30/24 14:10	05/01/24 17:19	4165-60-0	
2-Fluorobiphenyl (S)	92	%	19-120		1	04/30/24 14:10	05/01/24 17:19	321-60-8	
Terphenyl-d14 (S)	109	%	25-127		1	04/30/24 14:10	05/01/24 17:19	1718-51-0	
Phenol-d6 (S)	73	%	10-120		1	04/30/24 14:10	05/01/24 17:19	13127-88-3	
2-Fluorophenol (S)	67	%	10-120		1	04/30/24 14:10	05/01/24 17:19	367-12-4	
2,4,6-Tribromophenol (S)	101	%	10-142		1	04/30/24 14:10	05/01/24 17:19	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-233.6-SVOC_240422 **Lab ID: 40277226070** Collected: 04/22/24 10:30 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/30/24 14:10	05/01/24 17:41	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/01/24 17:41	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/30/24 14:10	05/01/24 17:41	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/01/24 17:41	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/30/24 14:10	05/01/24 17:41	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	81	%	16-120		1	04/30/24 14:10	05/01/24 17:41	4165-60-0	
2-Fluorobiphenyl (S)	95	%	19-120		1	04/30/24 14:10	05/01/24 17:41	321-60-8	
Terphenyl-d14 (S)	106	%	25-127		1	04/30/24 14:10	05/01/24 17:41	1718-51-0	
Phenol-d6 (S)	84	%	10-120		1	04/30/24 14:10	05/01/24 17:41	13127-88-3	
2-Fluorophenol (S)	79	%	10-120		1	04/30/24 14:10	05/01/24 17:41	367-12-4	
2,4,6-Tribromophenol (S)	99	%	10-142		1	04/30/24 14:10	05/01/24 17:41	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-236.4-SVOC_240422 **Lab ID: 40277226071** Collected: 04/22/24 10:31 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/30/24 14:10	05/01/24 18:02	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/01/24 18:02	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/30/24 14:10	05/01/24 18:02	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/01/24 18:02	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/30/24 14:10	05/01/24 18:02	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	62	%	16-120		1	04/30/24 14:10	05/01/24 18:02	4165-60-0	
2-Fluorobiphenyl (S)	70	%	19-120		1	04/30/24 14:10	05/01/24 18:02	321-60-8	
Terphenyl-d14 (S)	75	%	25-127		1	04/30/24 14:10	05/01/24 18:02	1718-51-0	
Phenol-d6 (S)	57	%	10-120		1	04/30/24 14:10	05/01/24 18:02	13127-88-3	
2-Fluorophenol (S)	55	%	10-120		1	04/30/24 14:10	05/01/24 18:02	367-12-4	
2,4,6-Tribromophenol (S)	59	%	10-142		1	04/30/24 14:10	05/01/24 18:02	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-236.6-SVOC_240422 **Lab ID: 40277226072** Collected: 04/22/24 10:32 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/30/24 14:10	05/01/24 18:23	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/01/24 18:23	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/30/24 14:10	05/01/24 18:23	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/01/24 18:23	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/30/24 14:10	05/01/24 18:23	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	75	%	16-120		1	04/30/24 14:10	05/01/24 18:23	4165-60-0	
2-Fluorobiphenyl (S)	84	%	19-120		1	04/30/24 14:10	05/01/24 18:23	321-60-8	
Terphenyl-d14 (S)	93	%	25-127		1	04/30/24 14:10	05/01/24 18:23	1718-51-0	
Phenol-d6 (S)	61	%	10-120		1	04/30/24 14:10	05/01/24 18:23	13127-88-3	
2-Fluorophenol (S)	56	%	10-120		1	04/30/24 14:10	05/01/24 18:23	367-12-4	
2,4,6-Tribromophenol (S)	65	%	10-142		1	04/30/24 14:10	05/01/24 18:23	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-238.1-SVOC_240422 **Lab ID: 40277226073** Collected: 04/22/24 11:11 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/30/24 14:10	05/01/24 18:45	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/01/24 18:45	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/30/24 14:10	05/01/24 18:45	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/01/24 18:45	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/30/24 14:10	05/01/24 18:45	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	79	%	16-120		1	04/30/24 14:10	05/01/24 18:45	4165-60-0	
2-Fluorobiphenyl (S)	87	%	19-120		1	04/30/24 14:10	05/01/24 18:45	321-60-8	
Terphenyl-d14 (S)	96	%	25-127		1	04/30/24 14:10	05/01/24 18:45	1718-51-0	
Phenol-d6 (S)	76	%	10-120		1	04/30/24 14:10	05/01/24 18:45	13127-88-3	
2-Fluorophenol (S)	73	%	10-120		1	04/30/24 14:10	05/01/24 18:45	367-12-4	
2,4,6-Tribromophenol (S)	87	%	10-142		1	04/30/24 14:10	05/01/24 18:45	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-241.9-SVOC_240422 **Lab ID: 40277226074** Collected: 04/22/24 11:12 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/30/24 14:10	05/01/24 19:06	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/01/24 19:06	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/30/24 14:10	05/01/24 19:06	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/01/24 19:06	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/30/24 14:10	05/01/24 19:06	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	66	%	16-120		1	04/30/24 14:10	05/01/24 19:06	4165-60-0	
2-Fluorobiphenyl (S)	73	%	19-120		1	04/30/24 14:10	05/01/24 19:06	321-60-8	
Terphenyl-d14 (S)	77	%	25-127		1	04/30/24 14:10	05/01/24 19:06	1718-51-0	
Phenol-d6 (S)	63	%	10-120		1	04/30/24 14:10	05/01/24 19:06	13127-88-3	
2-Fluorophenol (S)	61	%	10-120		1	04/30/24 14:10	05/01/24 19:06	367-12-4	
2,4,6-Tribromophenol (S)	62	%	10-142		1	04/30/24 14:10	05/01/24 19:06	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-242.05-SVOC_240422 **Lab ID: 40277226075** Collected: 04/22/24 11:13 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/30/24 14:10	05/01/24 19:27	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	04/30/24 14:10	05/01/24 19:27	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	04/30/24 14:10	05/01/24 19:27	4164-28-7	L2
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	04/30/24 14:10	05/01/24 19:27	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/30/24 14:10	05/01/24 19:27	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	69	%	16-120		1	04/30/24 14:10	05/01/24 19:27	4165-60-0	
2-Fluorobiphenyl (S)	76	%	19-120		1	04/30/24 14:10	05/01/24 19:27	321-60-8	
Terphenyl-d14 (S)	83	%	25-127		1	04/30/24 14:10	05/01/24 19:27	1718-51-0	
Phenol-d6 (S)	62	%	10-120		1	04/30/24 14:10	05/01/24 19:27	13127-88-3	
2-Fluorophenol (S)	63	%	10-120		1	04/30/24 14:10	05/01/24 19:27	367-12-4	
2,4,6-Tribromophenol (S)	76	%	10-142		1	04/30/24 14:10	05/01/24 19:27	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-243.55-SVOC_240422 **Lab ID: 40277226076** Collected: 04/22/24 12:20 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	04/30/24 14:10	05/01/24 19:48	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/01/24 19:48	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	04/30/24 14:10	05/01/24 19:48	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/01/24 19:48	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	04/30/24 14:10	05/01/24 19:48	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	77	%	16-120		1	04/30/24 14:10	05/01/24 19:48	4165-60-0	
2-Fluorobiphenyl (S)	85	%	19-120		1	04/30/24 14:10	05/01/24 19:48	321-60-8	
Terphenyl-d14 (S)	95	%	25-127		1	04/30/24 14:10	05/01/24 19:48	1718-51-0	
Phenol-d6 (S)	73	%	10-120		1	04/30/24 14:10	05/01/24 19:48	13127-88-3	
2-Fluorophenol (S)	71	%	10-120		1	04/30/24 14:10	05/01/24 19:48	367-12-4	
2,4,6-Tribromophenol (S)	88	%	10-142		1	04/30/24 14:10	05/01/24 19:48	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-245.15-SVOC_240422 **Lab ID: 40277226077** Collected: 04/22/24 12:21 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/30/24 14:10	05/01/24 20:10	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/01/24 20:10	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/30/24 14:10	05/01/24 20:10	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/01/24 20:10	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/30/24 14:10	05/01/24 20:10	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	74	%	16-120		1	04/30/24 14:10	05/01/24 20:10	4165-60-0	
2-Fluorobiphenyl (S)	83	%	19-120		1	04/30/24 14:10	05/01/24 20:10	321-60-8	
Terphenyl-d14 (S)	90	%	25-127		1	04/30/24 14:10	05/01/24 20:10	1718-51-0	
Phenol-d6 (S)	64	%	10-120		1	04/30/24 14:10	05/01/24 20:10	13127-88-3	
2-Fluorophenol (S)	60	%	10-120		1	04/30/24 14:10	05/01/24 20:10	367-12-4	
2,4,6-Tribromophenol (S)	68	%	10-142		1	04/30/24 14:10	05/01/24 20:10	118-79-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-247-SVOC_240422 **Lab ID: 40277226078** Collected: 04/22/24 12:22 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/30/24 14:10	05/03/24 11:50	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/03/24 11:50	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/30/24 14:10	05/03/24 11:50	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/03/24 11:50	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/30/24 14:10	05/03/24 11:50	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	79	%	16-120		1	04/30/24 14:10	05/03/24 11:50	4165-60-0	
2-Fluorobiphenyl (S)	88	%	19-120		1	04/30/24 14:10	05/03/24 11:50	321-60-8	
Terphenyl-d14 (S)	96	%	25-127		1	04/30/24 14:10	05/03/24 11:50	1718-51-0	
Phenol-d6 (S)	79	%	10-120		1	04/30/24 14:10	05/03/24 11:50	13127-88-3	
2-Fluorophenol (S)	76	%	10-120		1	04/30/24 14:10	05/03/24 11:50	367-12-4	
2,4,6-Tribromophenol (S)	101	%	10-142		1	04/30/24 14:10	05/03/24 11:50	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-248.65-SVOC_240422 **Lab ID: 40277226079** Collected: 04/22/24 13:36 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	04/30/24 14:10	05/03/24 12:11	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	04/30/24 14:10	05/03/24 12:11	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	04/30/24 14:10	05/03/24 12:11	4164-28-7	L2
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	04/30/24 14:10	05/03/24 12:11	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	04/30/24 14:10	05/03/24 12:11	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	81	%	16-120		1	04/30/24 14:10	05/03/24 12:11	4165-60-0	
2-Fluorobiphenyl (S)	90	%	19-120		1	04/30/24 14:10	05/03/24 12:11	321-60-8	
Terphenyl-d14 (S)	98	%	25-127		1	04/30/24 14:10	05/03/24 12:11	1718-51-0	
Phenol-d6 (S)	79	%	10-120		1	04/30/24 14:10	05/03/24 12:11	13127-88-3	
2-Fluorophenol (S)	76	%	10-120		1	04/30/24 14:10	05/03/24 12:11	367-12-4	
2,4,6-Tribromophenol (S)	93	%	10-142		1	04/30/24 14:10	05/03/24 12:11	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Sample: 300-002-GSV-248.65-SVOC-DUP_22 **Lab ID: 40277226080** Collected: 04/22/24 13:36 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<91.1**	ug/kg	168	91.1	1	05/02/24 12:57	05/03/24 12:32	123-91-1	
Di-n-butylphthalate	**<52.5**	ug/kg	168	52.5	1	05/02/24 12:57	05/03/24 12:32	84-74-2	
N-Nitrodimethylamine	**<81.6**	ug/kg	168	81.6	1	05/02/24 12:57	05/03/24 12:32	4164-28-7	
N-Nitrosodimethylamine	**<39.5**	ug/kg	168	39.5	1	05/02/24 12:57	05/03/24 12:32	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.3**	ug/kg	168	57.3	1	05/02/24 12:57	05/03/24 12:32	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	77	%	16-120		1	05/02/24 12:57	05/03/24 12:32	4165-60-0	
2-Fluorobiphenyl (S)	94	%	19-120		1	05/02/24 12:57	05/03/24 12:32	321-60-8	
Terphenyl-d14 (S)	110	%	25-127		1	05/02/24 12:57	05/03/24 12:32	1718-51-0	
Phenol-d6 (S)	76	%	10-120		1	05/02/24 12:57	05/03/24 12:32	13127-88-3	
2-Fluorophenol (S)	73	%	10-120		1	05/02/24 12:57	05/03/24 12:32	367-12-4	
2,4,6-Tribromophenol (S)	110	%	10-142		1	05/02/24 12:57	05/03/24 12:32	118-79-6	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

QC Batch: 472660
QC Batch Method: EPA 3546
Analysis Method: EPA 8270E
Analysis Description: 8270E Solid MSSV Microwave
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40277226006, 40277226007, 40277226008, 40277226009, 40277226010, 40277226011, 40277226012, 40277226013, 40277226014, 40277226015, 40277226016, 40277226017, 40277226018, 40277226019, 40277226020, 40277226021, 40277226022, 40277226023, 40277226024, 40277226025

METHOD BLANK: 2707088 Matrix: Solid
Associated Lab Samples: 40277226006, 40277226007, 40277226008, 40277226009, 40277226010, 40277226011, 40277226012, 40277226013, 40277226014, 40277226015, 40277226016, 40277226017, 40277226018, 40277226019, 40277226020, 40277226021, 40277226022, 40277226023, 40277226024, 40277226025

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg	<90.4	167	90.4	04/26/24 13:17	
bis(2-Ethylhexyl)phthalate	ug/kg	<56.9	167	56.9	04/26/24 13:17	
Di-n-butylphthalate	ug/kg	<52.1	167	52.1	04/26/24 13:17	
N-Nitrodimethylamine	ug/kg	<81.0	167	81.0	04/26/24 13:17	
N-Nitrosodimethylamine	ug/kg	<39.2	167	39.2	04/26/24 13:17	
2,4,6-Tribromophenol (S)	%	113	10-142		04/26/24 13:17	CH
2-Fluorobiphenyl (S)	%	96	19-120		04/26/24 13:17	
2-Fluorophenol (S)	%	73	10-120		04/26/24 13:17	
Nitrobenzene-d5 (S)	%	83	16-120		04/26/24 13:17	
Phenol-d6 (S)	%	77	10-120		04/26/24 13:17	
Terphenyl-d14 (S)	%	113	25-127		04/26/24 13:17	

LABORATORY CONTROL SAMPLE & LCSD: 2707089 2707090

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg		<90.4	<90.4					20	
bis(2-Ethylhexyl)phthalate	ug/kg	1660	1500	1520	90	91	70-130	1	20	
Di-n-butylphthalate	ug/kg	1660	1790	1850	108	111	69-130	3	20	
N-Nitrodimethylamine	ug/kg	1660	1260	1320	76	79	70-130	5	20	
N-Nitrosodimethylamine	ug/kg	1660	1470	1540	88	93	37-130	5	20	
2,4,6-Tribromophenol (S)	%				119	121	10-142			CH
2-Fluorobiphenyl (S)	%				106	107	19-120			
2-Fluorophenol (S)	%				91	93	10-120			
Nitrobenzene-d5 (S)	%				99	101	16-120			
Phenol-d6 (S)	%				92	94	10-120			
Terphenyl-d14 (S)	%				106	107	25-127			

MATRIX SPIKE SAMPLE: 2707091

Parameter	Units	40277226019 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg	<181		<181			
bis(2-Ethylhexyl)phthalate	ug/kg	<114	3340	2980	89	45-130	
Di-n-butylphthalate	ug/kg	<104	3340	3530	106	46-130	
N-Nitrodimethylamine	ug/kg	<162	3340	2360	71	70-130	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

MATRIX SPIKE SAMPLE: 2707091

Parameter	Units	40277226019 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
N-Nitrosodimethylamine	ug/kg	<78.5	3340	2450	73	14-130	
2,4,6-Tribromophenol (S)	%				117	10-142	CH
2-Fluorobiphenyl (S)	%				102	19-120	
2-Fluorophenol (S)	%				79	10-120	
Nitrobenzene-d5 (S)	%				91	16-120	
Phenol-d6 (S)	%				85	10-120	
Terphenyl-d14 (S)	%				108	25-127	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

QC Batch: 472882
QC Batch Method: EPA 3546
Analysis Method: EPA 8270E
Analysis Description: 8270E Solid MSSV Microwave
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40277226026, 40277226027, 40277226028, 40277226029, 40277226030, 40277226031, 40277226032, 40277226033, 40277226034, 40277226035, 40277226036, 40277226037, 40277226038, 40277226039, 40277226040, 40277226041, 40277226042, 40277226043, 40277226044, 40277226045

METHOD BLANK: 2708620 Matrix: Solid
Associated Lab Samples: 40277226026, 40277226027, 40277226028, 40277226029, 40277226030, 40277226031, 40277226032, 40277226033, 40277226034, 40277226035, 40277226036, 40277226037, 40277226038, 40277226039, 40277226040, 40277226041, 40277226042, 40277226043, 40277226044, 40277226045

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg	<90.5	167	90.5	04/29/24 13:26	
bis(2-Ethylhexyl)phthalate	ug/kg	<57.0	167	57.0	04/29/24 13:26	
Di-n-butylphthalate	ug/kg	<52.1	167	52.1	04/29/24 13:26	
N-Nitrodimethylamine	ug/kg	<81.1	167	81.1	04/29/24 13:26	
N-Nitrosodimethylamine	ug/kg	<39.2	167	39.2	04/29/24 13:26	
2,4,6-Tribromophenol (S)	%	110	10-142		04/29/24 13:26	
2-Fluorobiphenyl (S)	%	88	19-120		04/29/24 13:26	
2-Fluorophenol (S)	%	68	10-120		04/29/24 13:26	
Nitrobenzene-d5 (S)	%	76	16-120		04/29/24 13:26	
Phenol-d6 (S)	%	72	10-120		04/29/24 13:26	
Terphenyl-d14 (S)	%	107	25-127		04/29/24 13:26	

LABORATORY CONTROL SAMPLE & LCSD: 2708621 2708622

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg		<90.6	<90.5					20	
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1460	1580	88	95	70-130	7	20	
Di-n-butylphthalate	ug/kg	1670	1630	1770	98	106	69-130	8	20	
N-Nitrodimethylamine	ug/kg	1670	1090	1280	65	77	70-130	16	20	L2
N-Nitrosodimethylamine	ug/kg	1670	1150	1470	69	88	37-130	24	20	R1
2,4,6-Tribromophenol (S)	%				118	123	10-142			
2-Fluorobiphenyl (S)	%				95	105	19-120			
2-Fluorophenol (S)	%				73	89	10-120			
Nitrobenzene-d5 (S)	%				84	97	16-120			
Phenol-d6 (S)	%				80	91	10-120			
Terphenyl-d14 (S)	%				100	108	25-127			

MATRIX SPIKE SAMPLE: 2708623

Parameter	Units	40277226042 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg	<181		<181			
bis(2-Ethylhexyl)phthalate	ug/kg	<114	3330	3110	93	45-130	
Di-n-butylphthalate	ug/kg	<104	3330	3390	102	46-130	
N-Nitrodimethylamine	ug/kg	<162	3330	2370	71	70-130	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

MATRIX SPIKE SAMPLE: 2708623

Parameter	Units	40277226042 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
N-Nitrosodimethylamine	ug/kg	<78.3	3330	2570	77	14-130	
2,4,6-Tribromophenol (S)	%				119	10-142	
2-Fluorobiphenyl (S)	%				101	19-120	
2-Fluorophenol (S)	%				80	10-120	
Nitrobenzene-d5 (S)	%				90	16-120	
Phenol-d6 (S)	%				82	10-120	
Terphenyl-d14 (S)	%				105	25-127	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

QC Batch: 472917
QC Batch Method: EPA 3546
Analysis Method: EPA 8270E
Analysis Description: 8270E Solid MSSV Microwave
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40277226046, 40277226047, 40277226048, 40277226049, 40277226050, 40277226051, 40277226052, 40277226053, 40277226054, 40277226055, 40277226056, 40277226057, 40277226058, 40277226059

METHOD BLANK: 2708853 Matrix: Solid
Associated Lab Samples: 40277226046, 40277226047, 40277226048, 40277226049, 40277226050, 40277226051, 40277226052, 40277226053, 40277226054, 40277226055, 40277226056, 40277226057, 40277226058, 40277226059

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg	<90.4	167	90.4	04/29/24 15:12	
bis(2-Ethylhexyl)phthalate	ug/kg	<56.9	167	56.9	04/29/24 15:12	
Di-n-butylphthalate	ug/kg	<52.1	167	52.1	04/29/24 15:12	
N-Nitrodimethylamine	ug/kg	<81.0	167	81.0	04/29/24 15:12	
N-Nitrosodimethylamine	ug/kg	<39.2	167	39.2	04/29/24 15:12	
2,4,6-Tribromophenol (S)	%	105	10-142		04/29/24 15:12	
2-Fluorobiphenyl (S)	%	84	19-120		04/29/24 15:12	
2-Fluorophenol (S)	%	62	10-120		04/29/24 15:12	
Nitrobenzene-d5 (S)	%	72	16-120		04/29/24 15:12	
Phenol-d6 (S)	%	69	10-120		04/29/24 15:12	
Terphenyl-d14 (S)	%	99	25-127		04/29/24 15:12	

LABORATORY CONTROL SAMPLE: 2708854

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg		<90.6			
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1550	93	70-130	
Di-n-butylphthalate	ug/kg	1670	1750	105	69-130	
N-Nitrodimethylamine	ug/kg	1670	1240	74	70-130	
N-Nitrosodimethylamine	ug/kg	1670	1410	85	37-130	
2,4,6-Tribromophenol (S)	%			123	10-142	
2-Fluorobiphenyl (S)	%			105	19-120	
2-Fluorophenol (S)	%			87	10-120	
Nitrobenzene-d5 (S)	%			96	16-120	
Phenol-d6 (S)	%			90	10-120	
Terphenyl-d14 (S)	%			110	25-127	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2708855 2708856

Parameter	Units	40277353002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/kg	<278			<556	<556					20	
bis(2-Ethylhexyl)phthalate	ug/kg	<0.18 mg/kg	2050	2050	1670	1600	75	72	45-130	4	27	
Di-n-butylphthalate	ug/kg	<0.16 mg/kg	2050	2050	1630	1690	80	82	46-130	4	26	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2708855 2708856

Parameter	Units	40277353002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
N-Nitrodimethylamine	ug/kg	<0.25 mg/kg	2050	2050	1250	1580	61	77	70-130	24	20	M1,R1
N-Nitrosodimethylamine	ug/kg	<121	2050	2050	1300	1540	63	75	14-130	17	45	
2,4,6-Tribromophenol (S)	%						86	86	10-142			
2-Fluorobiphenyl (S)	%						87	91	19-120			
2-Fluorophenol (S)	%						71	78	10-120			
Nitrobenzene-d5 (S)	%						154	131	16-120			S0
Phenol-d6 (S)	%						82	87	10-120			
Terphenyl-d14 (S)	%						87	92	25-127			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

QC Batch: 473062
QC Batch Method: EPA 3546
Analysis Method: EPA 8270E
Analysis Description: 8270E Solid MSSV Microwave
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40277226060, 40277226061, 40277226062, 40277226063, 40277226064, 40277226065, 40277226066, 40277226067, 40277226068, 40277226069, 40277226070, 40277226071, 40277226072, 40277226073, 40277226074, 40277226075, 40277226076, 40277226077, 40277226078, 40277226079

METHOD BLANK: 2709272 Matrix: Solid
Associated Lab Samples: 40277226060, 40277226061, 40277226062, 40277226063, 40277226064, 40277226065, 40277226066, 40277226067, 40277226068, 40277226069, 40277226070, 40277226071, 40277226072, 40277226073, 40277226074, 40277226075, 40277226076, 40277226077, 40277226078, 40277226079

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg	<90.4	167	90.4	04/30/24 16:10	
bis(2-Ethylhexyl)phthalate	ug/kg	<56.9	167	56.9	04/30/24 16:10	
Di-n-butylphthalate	ug/kg	<52.1	167	52.1	04/30/24 16:10	
N-Nitrodimethylamine	ug/kg	<81.0	167	81.0	04/30/24 16:10	
N-Nitrosodimethylamine	ug/kg	<39.2	167	39.2	04/30/24 16:10	
2,4,6-Tribromophenol (S)	%	97	10-142		04/30/24 16:10	
2-Fluorobiphenyl (S)	%	89	19-120		04/30/24 16:10	
2-Fluorophenol (S)	%	72	10-120		04/30/24 16:10	
Nitrobenzene-d5 (S)	%	79	16-120		04/30/24 16:10	
Phenol-d6 (S)	%	77	10-120		04/30/24 16:10	
Terphenyl-d14 (S)	%	96	25-127		04/30/24 16:10	

LABORATORY CONTROL SAMPLE & LCSD: 2709273 2709274

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg		<90.5	<90.5					20	
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1500	1320	90	79	70-130	13	20	
Di-n-butylphthalate	ug/kg	1670	1760	1540	106	93	69-130	13	20	
N-Nitrodimethylamine	ug/kg	1670	1310	1130	79	68	70-130	15	20	L2
N-Nitrosodimethylamine	ug/kg	1670	1480	1210	89	73	37-130	20	20	
2,4,6-Tribromophenol (S)	%				124	104	10-142			
2-Fluorobiphenyl (S)	%				109	94	19-120			
2-Fluorophenol (S)	%				90	71	10-120			
Nitrobenzene-d5 (S)	%				95	83	16-120			
Phenol-d6 (S)	%				93	78	10-120			
Terphenyl-d14 (S)	%				113	97	25-127			

MATRIX SPIKE SAMPLE: 2709275

Parameter	Units	40277226069 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg	<180		<181			
bis(2-Ethylhexyl)phthalate	ug/kg	<114	3330	2690	81	45-130	
Di-n-butylphthalate	ug/kg	<104	3330	3260	98	46-130	
N-Nitrodimethylamine	ug/kg	<162	3330	2460	74	70-130	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

MATRIX SPIKE SAMPLE: 2709275

Parameter	Units	40277226069 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
N-Nitrosodimethylamine	ug/kg	<78.3	3330	2910	87	14-130	
2,4,6-Tribromophenol (S)	%				104	10-142	
2-Fluorobiphenyl (S)	%				98	19-120	
2-Fluorophenol (S)	%				85	10-120	
Nitrobenzene-d5 (S)	%				90	16-120	
Phenol-d6 (S)	%				85	10-120	
Terphenyl-d14 (S)	%				99	25-127	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

QC Batch: 473342
QC Batch Method: EPA 3546
Analysis Method: EPA 8270E
Analysis Description: 8270E Solid MSSV Microwave
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40277226080

METHOD BLANK: 2710974 Matrix: Solid
Associated Lab Samples: 40277226080

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg	<90.6	167	90.6	05/03/24 11:07	
bis(2-Ethylhexyl)phthalate	ug/kg	<57.1	167	57.1	05/03/24 11:07	
Di-n-butylphthalate	ug/kg	<52.2	167	52.2	05/03/24 11:07	
N-Nitrodimethylamine	ug/kg	<81.2	167	81.2	05/03/24 11:07	
N-Nitrosodimethylamine	ug/kg	<39.3	167	39.3	05/03/24 11:07	
2,4,6-Tribromophenol (S)	%	109	10-142		05/03/24 11:07	
2-Fluorobiphenyl (S)	%	104	19-120		05/03/24 11:07	
2-Fluorophenol (S)	%	85	10-120		05/03/24 11:07	
Nitrobenzene-d5 (S)	%	91	16-120		05/03/24 11:07	
Phenol-d6 (S)	%	88	10-120		05/03/24 11:07	
Terphenyl-d14 (S)	%	113	25-127		05/03/24 11:07	

LABORATORY CONTROL SAMPLE: 2710975

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg		<90.5			
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1530	92	70-130	
Di-n-butylphthalate	ug/kg	1670	1800	108	69-130	
N-Nitrodimethylamine	ug/kg	1670	1430	86	70-130	
N-Nitrosodimethylamine	ug/kg	1670	1650	99	37-130	
2,4,6-Tribromophenol (S)	%			131	10-142	
2-Fluorobiphenyl (S)	%			117	19-120	
2-Fluorophenol (S)	%			100	10-120	
Nitrobenzene-d5 (S)	%			105	16-120	
Phenol-d6 (S)	%			100	10-120	
Terphenyl-d14 (S)	%			114	25-127	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2710976 2710977

Parameter	Units	40277623008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/kg	<104			<312	<311					20	
bis(2-Ethylhexyl)phthalate	ug/kg	<0.066 mg/kg	1920	1920	1550	1470	81	77	45-130	6	27	
Di-n-butylphthalate	ug/kg	<0.060 mg/kg	1920	1920	1640	1580	86	83	46-130	4	26	
N-Nitrodimethylamine	ug/kg	<0.093 mg/kg	1920	1920	1420	1410	74	74	70-130	1	20	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2710976 2710977

Parameter	Units	40277623008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
N-Nitrosodimethylamine	ug/kg	<45.1	1920	1920	1560	1510	82	79	14-130	4	45	
2,4,6-Tribromophenol (S)	%						103	107	10-142			
2-Fluorobiphenyl (S)	%						94	90	19-120			
2-Fluorophenol (S)	%						82	81	10-120			
Nitrobenzene-d5 (S)	%						89	85	16-120			
Phenol-d6 (S)	%						84	80	10-120			
Terphenyl-d14 (S)	%						93	88	25-127			

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

QC Batch: 472533
QC Batch Method: EPA 3510
Analysis Method: EPA 8270E
Analysis Description: 8270E Water MSSV Low Volume
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40277226001, 40277226002, 40277226003, 40277226004, 40277226005

METHOD BLANK: 2706301 Matrix: Water
Associated Lab Samples: 40277226001, 40277226002, 40277226003, 40277226004, 40277226005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	<2.1	5.0	2.1	04/25/24 07:20	
bis(2-Ethylhexyl)phthalate	ug/L	<2.1	5.0	2.1	04/25/24 07:20	
Di-n-butylphthalate	ug/L	<1.2	5.0	1.2	04/25/24 07:20	
N-Nitrodimethylamine	ug/L	<5.8	10.0	5.8	04/25/24 07:20	
N-Nitrosodimethylamine	ug/L	<1.5	5.0	1.5	04/25/24 07:20	
2,4,6-Tribromophenol (S)	%	93	10-141		04/25/24 07:20	
2-Fluorobiphenyl (S)	%	64	23-130		04/25/24 07:20	
2-Fluorophenol (S)	%	53	10-130		04/25/24 07:20	
Nitrobenzene-d5 (S)	%	94	38-130		04/25/24 07:20	
Phenol-d6 (S)	%	36	11-130		04/25/24 07:20	
Terphenyl-d14 (S)	%	115	52-136		04/25/24 07:20	

LABORATORY CONTROL SAMPLE & LCSD: 2706302 2706303

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
bis(2-Ethylhexyl)phthalate	ug/L	50	49.2	48.1	98	96	50-130	2	20	
Di-n-butylphthalate	ug/L	50	53.4	52.2	107	104	60-130	2	20	
N-Nitrosodimethylamine	ug/L	50	38.4	38.3	77	77	30-130	0	20	
2,4,6-Tribromophenol (S)	%				100	101	10-141			
2-Fluorobiphenyl (S)	%				73	76	23-130			
2-Fluorophenol (S)	%				60	62	10-130			
Nitrobenzene-d5 (S)	%				99	98	38-130			
Phenol-d6 (S)	%				41	44	11-130			
Terphenyl-d14 (S)	%				112	112	52-136			

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QUALIFIERS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 472597

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: 472883

[1] The LCS and DUPLICATE failed for N-Nitrodimethylamine. There are insufficient data points for laboratory generated limits so default limits were used. There was insufficient sample amount to re-extract and re-analyze.

Batch: 473158

[1] The LCSD failed for N-Nitrodimethylamine. There are insufficient data points for laboratory generated limits so default limits were used. There was an insufficient sample amount to re-extract and re-analyze.

ANALYTE QUALIFIERS

CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.
S0	Surrogate recovery outside laboratory control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40277226006	300-002-GSV-89.4-SVOC_20240417	EPA 3546	472660	EPA 8270E	472766
40277226007	300-002-GSV-90.17-SVOC20240417	EPA 3546	472660	EPA 8270E	472766
40277226008	300-002-GSV-92.65-SVOC20240417	EPA 3546	472660	EPA 8270E	472766
40277226009	300-002-GSV-96.8-SVOC_20240417	EPA 3546	472660	EPA 8270E	472766
40277226010	300-002-GSV-100.8-SVOC20240417	EPA 3546	472660	EPA 8270E	472766
40277226011	300-002-GSV-102.1-SVOC20240417	EPA 3546	472660	EPA 8270E	472766
40277226012	300-002-GSV-104.6-SVOC20240418	EPA 3546	472660	EPA 8270E	472766
40277226013	300-002-GSV-104.85-SVOC_240418	EPA 3546	472660	EPA 8270E	472766
40277226014	300-002-GSV-106.5-SVOC_240418	EPA 3546	472660	EPA 8270E	472766
40277226015	300-002-GSV-107.3-SVOC_240418	EPA 3546	472660	EPA 8270E	472766
40277226016	300-002-GSV-112.35-SVOC_240418	EPA 3546	472660	EPA 8270E	472766
40277226017	300-002-GSV-113.75-SVOC_240419	EPA 3546	472660	EPA 8270E	472766
40277226018	300-002-GSV-114-SVOC_240419	EPA 3546	472660	EPA 8270E	472766
40277226019	300-002-GSV-118.75-SVOC_240419	EPA 3546	472660	EPA 8270E	472766
40277226020	300-002-GSV-120.25-SVOC_240419	EPA 3546	472660	EPA 8270E	472766
40277226021	300-002-GSV-124.7-SVOC_240419	EPA 3546	472660	EPA 8270E	472766
40277226022	300-002-GSV-125.2-SVOC_240419	EPA 3546	472660	EPA 8270E	472766
40277226023	300-002-GSV-125.5-SVOC_240419	EPA 3546	472660	EPA 8270E	472766
40277226024	300-002-GSV-130.3-SVOC_240419	EPA 3546	472660	EPA 8270E	472766
40277226025	300-002-GSV-130.3-SVOC-DUP_419	EPA 3546	472660	EPA 8270E	472766
40277226026	300-002-GSV-130.43-SVOC_240419	EPA 3546	472882	EPA 8270E	472883
40277226027	300-002-GSV-134.1-SVOC_240419	EPA 3546	472882	EPA 8270E	472883
40277226028	300-002-GSV-136.5-SVOC_240419	EPA 3546	472882	EPA 8270E	472883
40277226029	300-002-GSV-140.7-SVOC_240419	EPA 3546	472882	EPA 8270E	472883
40277226030	300-002-GSV-141.5-SVOC_240419	EPA 3546	472882	EPA 8270E	472883
40277226031	300-002-GSV-144.37-SVOC_240419	EPA 3546	472882	EPA 8270E	472883
40277226032	300-002-GSV-145.8-SVOC_240419	EPA 3546	472882	EPA 8270E	472883
40277226033	300-002-GSV-146.3-SVOC_240419	EPA 3546	472882	EPA 8270E	472883
40277226034	300-002-GSV-150.35-SVOC_240420	EPA 3546	472882	EPA 8270E	472883
40277226035	300-002-GSV-152.3-SVOC_240420	EPA 3546	472882	EPA 8270E	472883
40277226036	300-002-GSV-154.2-SVOC_240420	EPA 3546	472882	EPA 8270E	472883
40277226037	300-002-GSV-154.5-SVOC_240420	EPA 3546	472882	EPA 8270E	472883
40277226038	300-002-GSV-156.25-SVOC_240420	EPA 3546	472882	EPA 8270E	472883
40277226039	300-002-GSV-161.45-SVOC_240420	EPA 3546	472882	EPA 8270E	472883
40277226040	300-002-GSV-164.9-SVOC_240420	EPA 3546	472882	EPA 8270E	472883
40277226041	300-002-GSV-165.8-SVOC_240420	EPA 3546	472882	EPA 8270E	472883

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40277226042	**300-002-GSV-167-SVOC_240420**	EPA 3546	472882	EPA 8270E	472883
40277226043	**300-002-GSV-170.6-SVOC_240420**	EPA 3546	472882	EPA 8270E	472883
40277226044	**300-002-GSV-171-SVOC_240420**	EPA 3546	472882	EPA 8270E	472883
40277226045	**300-002-GSV-171-SVOC-DUP_0420**	EPA 3546	472882	EPA 8270E	472883
40277226046	**300-002-GSV-174.8-SVOC_240420**	EPA 3546	472917	EPA 8270E	473012
40277226047	**300-002-GSV-176.4-SVOC_240420**	EPA 3546	472917	EPA 8270E	473012
40277226048	**300-002-GSV-180.2-SVOC_240420**	EPA 3546	472917	EPA 8270E	473012
40277226049	**300-002-GSV-182.5-SVOC_240420**	EPA 3546	472917	EPA 8270E	473012
40277226050	**300-002-GSV-183.1-SVOC_240420**	EPA 3546	472917	EPA 8270E	473012
40277226051	**300-002-GSV-187.5-SVOC_240420**	EPA 3546	472917	EPA 8270E	473012
40277226052	**300-002-GSV-188.85-SVOC_240420**	EPA 3546	472917	EPA 8270E	473012
40277226053	**300-002-GSV-192.8-SVOC_240420**	EPA 3546	472917	EPA 8270E	473012
40277226054	**300-002-GSV-194.2-SVOC_240421**	EPA 3546	472917	EPA 8270E	473012
40277226055	**300-002-GSV-196.7-SVOC_240421**	EPA 3546	472917	EPA 8270E	473012
40277226056	**300-002-GSV-197.1-SVOC_240421**	EPA 3546	472917	EPA 8270E	473012
40277226057	**300-002-GSV-200-SVOC_240421**	EPA 3546	472917	EPA 8270E	473012
40277226058	**300-002-GSV-202-SVOC_240421**	EPA 3546	472917	EPA 8270E	473012
40277226059	**300-002-GSV-205.4-SVOC_240421**	EPA 3546	472917	EPA 8270E	473012
40277226060	**300-002-GSV-207.8-SVOC_240421**	EPA 3546	473062	EPA 8270E	473158
40277226061	**300-002-GSV-210.2-SVOC_240421**	EPA 3546	473062	EPA 8270E	473158
40277226062	**300-002-GSV-214.95-SVOC_240421**	EPA 3546	473062	EPA 8270E	473158
40277226063	**300-002-GSV-216.35-SVOC_240421**	EPA 3546	473062	EPA 8270E	473158
40277226064	**300-002-GSV-219.7-SVOC_240421**	EPA 3546	473062	EPA 8270E	473158
40277226065	**300-002-GSV-219.7-SVOC-DUP_421**	EPA 3546	473062	EPA 8270E	473158
40277226066	**300-002-GSV-226.2-SVOC_240421**	EPA 3546	473062	EPA 8270E	473158
40277226067	**300-002-GSV-229.6-SVOC_240422**	EPA 3546	473062	EPA 8270E	473158
40277226068	**300-002-GSV-229.7-SVOC_240422**	EPA 3546	473062	EPA 8270E	473158
40277226069	**300-002-GSV-230.45-SVOC_240422**	EPA 3546	473062	EPA 8270E	473158
40277226070	**300-002-GSV-233.6-SVOC_240422**	EPA 3546	473062	EPA 8270E	473158
40277226071	**300-002-GSV-236.4-SVOC_240422**	EPA 3546	473062	EPA 8270E	473158
40277226072	**300-002-GSV-236.6-SVOC_240422**	EPA 3546	473062	EPA 8270E	473158
40277226073	**300-002-GSV-238.1-SVOC_240422**	EPA 3546	473062	EPA 8270E	473158
40277226074	**300-002-GSV-241.9-SVOC_240422**	EPA 3546	473062	EPA 8270E	473158
40277226075	**300-002-GSV-242.05-SVOC_240422**	EPA 3546	473062	EPA 8270E	473158
40277226076	**300-002-GSV-243.55-SVOC_240422**	EPA 3546	473062	EPA 8270E	473158
40277226077	**300-002-GSV-245.15-SVOC_240422**	EPA 3546	473062	EPA 8270E	473158
40277226078	**300-002-GSV-247-SVOC_240422**	EPA 3546	473062	EPA 8270E	473158
40277226079	**300-002-GSV-248.65-SVOC_240422**	EPA 3546	473062	EPA 8270E	473158
40277226080	**300-002-GSV-248.65-SVOC-DUP_22**	EPA 3546	473342	EPA 8270E	473415

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277226

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40277226001	**EB-01_20240417**	EPA 3510	472533	EPA 8270E	472597
40277226002	**EB-02_20240419**	EPA 3510	472533	EPA 8270E	472597
40277226003	**EB-03_20240420**	EPA 3510	472533	EPA 8270E	472597
40277226004	**EB-04_20240421**	EPA 3510	472533	EPA 8270E	472597
40277226005	**EB-05_20240422**	EPA 3510	472533	EPA 8270E	472597

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SANBORN HEAD

CHAIN OF CUSTODY FORM

Client Name/Address:
Sanborn Head & Associates
6 Bedford Farms Drive, Suite 201
Bedford, NH 03110

Project Manager:
Jessica Bulova

Sampler:
P. Pryor

Project ID:
6119.00.020

Phone Number:
+1 802 279 7698

Fax Number:

Lab ID	Sample No.	Sample Description	Sample Matrix	Rock Mass (g)	Container Type	# of Containers	Sample Date/Time	Preservative	Analyses Required: VOCs ECD	SVOCs		Comments
001	SVOC-0002	EB-01_20240417	MeOH	NA	100 mL	1	4/17/2024 12:17	Ice		X		
002	SVOC-0003	EB-02_20240419	MeOH	NA	100 mL	1	4/19/2024 13:32	Ice		X		
003	SVOC-0004	EB-03_20240420	MeOH	NA	100 mL	1	4/20/2024 13:59	Ice		X		
004	SVOC-0005	EB-04_20240421	MeOH	NA	100 mL	1	4/21/2024 10:41	Ice		X		
005	SVOC-0006	EB-05_20240422	MeOH	NA	100 mL	1	4/22/24 13:49	Ice		X		
006	SVOC-0008	300-002-GSV-89.4-SVOC_20240417	Rock	40.42	VOA	1	4/17/24 13:01	Ice		X		
007	SVOC-0009	300-002-GSV-90.17-SVOC_20240417	Rock	52.69	VOA	1	4/17/24 13:01	Ice		X		
008	SVOC-0010	300-002-GSV-92.65-SVOC_20240417	Rock	42.55	VOA	1	4/17/24 13:01	Ice		X		
009	SVOC-0011	300-002-GSV-96.8-SVOC_20240417	Rock	38.61	VOA	1	4/17/24 14:56	Ice		X		
010	SVOC-0012	300-002-GSV-100.8-SVOC_20240417	Rock	39.78	VOA	1	4/17/24 15:33	Ice		X		
011	SVOC-0013	300-002-GSV-102.1-SVOC_20240417	Rock	34.85	VOA	1	4/17/24 15:34	Ice		X		
012	SVOC-0014	300-002-GSV-104.6-SVOC_20240418	Rock	32.59	VOA	1	4/18/24 9:25	Ice		X		
013	SVOC-0015	300-002-GSV-104.85-SVOC_20240418	Rock	35.29	VOA	1	4/18/24 9:26	Ice		X		
014	SVOC-0016	300-002-GSV-106.5-SVOC_20240418	Rock	39.57	VOA	1	4/18/24 9:58	Ice		X		
015	SVOC-0017	300-002-GSV-107.3-SVOC_20240418	Rock	37.64	VOA	1	4/18/24 9:59	Ice		X		
016	SVOC-0018	300-002-GSV-112.35-SVOC_20240418	Rock	44.29	VOA	1	4/18/24 13:45	Ice		X		
017	SVOC-0019	300-002-GSV-113.75-SVOC_20240419	Rock	40.04	VOA	1	4/19/24 11:43	Ice		X		

Relinquished by	Date: 4/22/24 Time: 1644	Received by	Date: Time:
Relinquished by	Date: 4/23/24 Time: 0430	Received by	Date: 4/23/24 Time: 0430
Relinquished by	Date: Time:	Received by:	Date: Time:

SANBORN HEAD

CHAIN OF CUSTODY FORM

Client Name/Address:	Project ID:
Sanborn Head & Associates 6 Bedford Farms Drive, Suite 201 Bedford, NH 03110	6119.00.020
Project Manager:	**Phone Number:**
Jessica Bulova	+1 802 279 7698
Sampler:	**Fax Number:**
P. Pryor	

Lab ID	Sample No.	Sample Description	Sample Matrix	Rock Mass (g)	Container Type	# of Containers	Sample Date/Time	Preservative	Analyses Required: VOCs ECD	SVOCs		Comments
018	SVOC-0020	300-002-GSV-114-SVOC_20240419	Rock	33.22	VOA	1	4/19/24 11:44	Ice		X		
019	SVOC-0021	300-002-GSV-118.75-SVOC_20240419	Rock	51.29	VOA	1	4/19/24 12:25	Ice		X		
020	SVOC-0022	300-002-GSV-120.25-SVOC_20240419	Rock	42.95	VOA	1	4/19/24 12:26	Ice		X		
021	SVOC-0023	300-002-GSV-124.7-SVOC_20240419	Rock	36.43	VOA	1	4/19/24 13:05	Ice		X		
022	SVOC-0024	300-002-GSV-125.2-SVOC_20240419	Rock	43.83	VOA	1	4/19/24 13:06	Ice		X		
023	SVOC-0025	300-002-GSV-125.5-SVOC_20240419	Rock	45.63	VOA	1	4/19/24 13:07	Ice		X		
024	SVOC-0026	300-002-GSV-130.3-SVOC_20240419	Rock	34.98	VOA	1	4/19/24 13:42	Ice		X		
025	SVOC-0027	300-002-GSV-130.3-SVOC-DUP_20240419	Rock	43.73	VOA	1	4/19/24 13:42	Ice		X		
026	SVOC-0030	300-002-GSV-130.43-SVOC_20240419	Rock	39.12	VOA	1	4/19/24 13:43	Ice		X		
027	SVOC-0031	300-002-GSV-134.1-SVOC_20240419	Rock	41.72	VOA	1	4/19/24 15:02	Ice		X		
028	SVOC-0032	300-002-GSV-136.5-SVOC_20240419	Rock	45.54	VOA	1	4/19/24 15:03	Ice		X		
029	SVOC-0033	300-002-GSV-140.7-SVOC_20240419	Rock	46.75	VOA	1	4/19/24 15:35	Ice		X		
030	SVOC-0034	300-002-GSV-141.5-SVOC_20240419	Rock	38.28	VOA	1	4/19/24 15:36	Ice		X		
031	SVOC-0035	300-002-GSV-144.37-SVOC_20240419	Rock	41.23	VOA	1	4/19/24 16:18	Ice		X		
032	SVOC-0036	300-002-GSV-145.8-SVOC_20240419	Rock	37.41	VOA	1	4/19/24 16:19	Ice		X		
033	SVOC-0037	300-002-GSV-146.3-SVOC_20240419	Rock	40.23	VOA	1	4/19/24 16:20	Ice		X		
034	SVOC-0038	300-002-GSV-150.35-SVOC_20240420	Rock	48.18	VOA	1	4/20/24 9:52	Ice		X		
035	SVOC-0039	300-002-GSV-152.3-SVOC_20240420	Rock	44.65	VOA	1	4/20/24 9:53	Ice		X		
036	SVOC-0040	300-002-GSV-154.2-SVOC_20240420	Rock	40.13	VOA	1	4/20/24 10:30	Ice		X		
037	SVOC-0041	300-002-GSV-154.5-SVOC_20240420	Rock	38.88	VOA	1	4/20/24 10:31	Ice		X		
038	SVOC-0042	300-002-GSV-156.25-SVOC_20240420	Rock	41.20	VOA	1	4/20/24 10:32	Ice		X		
039	SVOC-0043	300-002-GSV-161.45-SVOC_20240420	Rock	42.25	VOA	1	4/20/24 11:34	Ice		X		
040	SVOC-0044	300-002-GSV-164.9-SVOC_20240420	Rock	30.57	VOA	1	4/20/24 12:47	Ice		X		
041	SVOC-0045	300-002-GSV-165.8-SVOC_20240420	Rock	38.32	VOA	1	4/20/24 12:48	Ice		X		
042	SVOC-0046	300-002-GSV-167-SVOC_20240420	Rock	49.04	VOA	1	4/20/24 12:49	Ice		X		

Relinquished by:	Date: 4/22/24	Time: 1644	Received by:	Date:	Time:
Relinquished by: Fedex	Date: 4/23/24	Time: 0930	Received by:	Date: 4/23/24	Time: 09:30
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

402772266

SANBORN HEAD

CHAIN OF CUSTODY FORM

Client Name/Address:
Sanborn Head & Associates
6 Bedford Farms Drive, Suite 201
Bedford, NH 03110

Project ID:
6119.00.020

Project Manager:
Jessica Bulova

Phone Number:
+1 802 279 7698

Sampler:
P. Pryor

Fax Number:

Lab ID	Sample No.	Sample Description	Sample Matrix	Rock Mass (g)	Container Type	# of Containers	Sample Date/Time	Preservative	Analyses Required: VOCs ECD	SVOCs		Comments
043	SVOC-0047	300-002-GSV-170.6-SVOC_20240420	Rock	42.55	VOA	1	4/20/24 13:45	Ice		X		
044	SVOC-0048	300-002-GSV-171-SVOC_20240420	Rock	39.30	VOA	1	4/20/24 13:46	Ice		X		
045	SVOC-0049	300-002-GSV-171-SVOC-DUP_20240420	Rock	40.77	VOA	1	4/20/24 13:46	Ice		X		
046	SVOC-0052	300-002-GSV-174.8-SVOC_20240420	Rock	37.25	VOA	1	4/20/24 14:17	Ice		X		
047	SVOC-0053	300-002-GSV-176.4-SVOC_20240420	Rock	41.00	VOA	1	4/20/24 14:18	Ice		X		
048	SVOC-0054	300-002-GSV-180.2-SVOC_20240420	Rock	36.90	VOA	1	4/20/24 14:52	Ice		X		
049	SVOC-0055	300-002-GSV-182.5-SVOC_20240420	Rock	45.58	VOA	1	4/20/24 14:53	Ice		X		
050	SVOC-0056	300-002-GSV-183.1-SVOC_20240420	Rock	40.61	VOA	1	4/20/24 15:30	Ice		X		
051	SVOC-0057	300-002-GSV-187.5-SVOC_20240420	Rock	37.88	VOA	1	4/20/24 15:31	Ice		X		
052	SVOC-0058	300-002-GSV-188.85-SVOC_20240420	Rock	45.45	VOA	1	4/20/24 16:17	Ice		X		
053	SVOC-0059	300-002-GSV-192.8-SVOC_20240420	Rock	42.94	VOA	1	4/20/24 16:18	Ice		X		
054	SVOC-0060	300-002-GSV-194.2-SVOC_20240421	Rock	39.79	VOA	1	4/21/24 8:55	Ice		X		
055	SVOC-0061	300-002-GSV-196.7-SVOC_20240421	Rock	39.64	VOA	1	4/21/24 8:56	Ice		X		
056	SVOC-0062	300-002-GSV-197.1-SVOC_20240421	Rock	40.19	VOA	1	4/21/24 8:57	Ice		X		
057	SVOC-0063	300-002-GSV-200-SVOC_20240421	Rock	34.84	VOA	1	4/21/24 9:30	Ice		X		
058	SVOC-0064	300-002-GSV-202-SVOC_20240421	Rock	33.98	VOA	1	4/21/24 9:31	Ice		X		
059	SVOC-0065	300-002-GSV-205.4-SVOC_20240421	Rock	40.00	VOA	1	4/21/24 10:30	Ice		X		
060	SVOC-0066	300-002-GSV-207.8-SVOC_20240421	Rock	42.65	VOA	1	4/21/24 10:31	Ice		X		
061	SVOC-0067	300-002-GSV-210.2-SVOC_20240421	Rock	42.14	VOA	1	4/21/24 11:53	Ice		X		
062	SVOC-0068	300-002-GSV-214.95-SVOC_20240421	Rock	47.71	VOA	1	4/21/24 13:42	Ice		X		
063	SVOC-0069	300-002-GSV-216.35-SVOC_20240421	Rock	44.38	VOA	1	4/21/24 13:43	Ice		X		
064	SVOC-0071	300-002-GSV-219.7-SVOC_20240421	Rock	34.91	VOA	1	4/21/24 15:46	Ice		X		
065	SVOC-0072	300-002-GSV-219.7-SVOC-DUP_20240421	Rock	39.98	VOA	1	4/21/24 15:46	Ice		X		
066	SVOC-0075	300-002-GSV-226.2-SVOC_20240421	Rock	40.39	VOA	1	4/21/24 16:25	Ice		X		

Relinquished by: [signature]	Date: 4/22/24 Time: 1644	Received by:	Date: Time:
Relinquished by: Fedex	Date: 4/23/24 Time: 0930	Received by: [signature]	Date: 4/23/24 Time: 0930
Relinquished by:	Date: Time:	Received by:	Date: Time:

402777226

SANBORN HEAD						CHAIN OF CUSTODY FORM						
Client Name/Address:						**Project ID:**			**Analyses Required**			
Sanborn Head & Associates 6 Bedford Farms Drive, Suite 201 Bedford, NH 03110						6119.00.020						
Project Manager:						**Phone Number:**						
Jessica Bulova						+1 802 279 7698						
Sampler:						**Fax Number:**						
P. Pryor												
Lab ID	**Sample No.**	**Sample Description**	**Sample Matrix**	**Rock Mass (g)**	**Container Type**	**# of Containers**	**Sample Date/Time**	**Preservative**	**VOCs ECD**	**SVOCs**		**Comments**
067	SVOC-0076	300-002-GSV-229.6-SVOC_20240422	Rock	36.17	VOA	1	4/22/24 9:55	Ice		X		
068	SVOC-0077	300-002-GSV-229.7-SVOC_20240422	Rock	41.86	VOA	1	4/22/24 9:56	Ice		X		
069	SVOC-0078	300-002-GSV-230.45-SVOC_20240422	Rock	41.91	VOA	1	4/22/24 9:57	Ice		X		
070	SVOC-0079	300-002-GSV-233.6-SVOC_20240422	Rock	46.24	VOA	1	4/22/24 10:30	Ice		X		
071	SVOC-0080	300-002-GSV-236.4-SVOC_20240422	Rock	41.46	VOA	1	4/22/24 10:31	Ice		X		
072	SVOC-0081	300-002-GSV-236.6-SVOC_20240422	Rock	39.23	VOA	1	4/22/24 10:32	Ice		X		
073	SVOC-0082	300-002-GSV-238.1-SVOC_20240422	Rock	35.65	VOA	1	4/22/24 11:11	Ice		X		
074	SVOC-0083	300-002-GSV-241.9-SVOC_20240422	Rock	43.34	VOA	1	4/22/24 11:12	Ice		X		
075	SVOC-0084	300-002-GSV-242.05-SVOC_20240422	Rock	39.67	VOA	1	4/22/24 11:13	Ice		X		
076	SVOC-0085	300-002-GSV-243.55-SVOC_20240422	Rock	38.97	VOA	1	4/22/24 12:20	Ice		X		
077	SVOC-0086	300-002-GSV-245.15-SVOC_20240422	Rock	37.71	VOA	1	4/22/24 12:21	Ice		X		
078	SVOC-0087	300-002-GSV-247-SVOC_20240422	Rock	46.68	VOA	1	4/22/24 12:22	Ice		X		
079	SVOC-0088	300-002-GSV-248.65-SVOC_20240422	Rock	34.27	VOA	1	4/22/24 13:36	Ice		X		
080	SVOC-0089	300-002-GSV-248.65-SVOC-DUP_20240422	Rock	33.88	VOA	1	4/22/24 13:36	Ice		X		

Relinquished by: Dan Rec	Date: 4/22/24	Time: 1644	Received by:	Date:	Time:
Relinquished by: Fedex	Date: 4/23/24	Time: 0930	Received by:	Date: 4/23/24	Time: 0930
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

Sample Preservation Receipt Form

Client Name: Sonora Project # 40277226

All containers needing preservation have been checked and noted below. ☐Yes ☐No ☒N/A Initial when completed Date/ Time

Lab Lot# of pH paper. Lab Std #ID of preservation (if pH adjusted).

Pace Lab #	Glass: AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	Plastic: BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	Vials: VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	Jars: JGFU	JG9U	WGFU	WPFU	General: SP5T	ZPLC	GN 1	GN 2	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
001																																		2.5 / 5
002																																		2.5 / 5
003																																		2.5 / 5
004																																		2.5 / 5
005																																		2.5 / 5
006																																		2.5 / 5
007																																		2.5 / 5
008																																		2.5 / 5
009																																		2.5 / 5
010																																		2.5 / 5
011																																		2.5 / 5
012																																		2.5 / 5
013																																		2.5 / 5
014																																		2.5 / 5
015																																		2.5 / 5
016																																		2.5 / 5
017																																		2.5 / 5
018																																		2.5 / 5
019																																		2.5 / 5
020																																		2.5 / 5

Exceptions to preservation check VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other_____ Headspace in VOA Vials (>6mm). ☐Yes ☐No ☒N/A ***If yes look in headspace column**

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	VG9C	40 mL clear ascorbic w/ HCl	JGFU	4 oz amber jar unpres
BG1U	1 liter clear glass	BP3U	250 mL plastic unpres	DG9T	40 mL amber Na Thio	JG9U	9 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP3B	250 mL plastic NaOH	VG9U	40 mL clear vial unpres	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9H	40 mL clear vial HCL	WPFU	4 oz plastic jar unpres
AG5U	100 mL amber glass unpres	BP3S	250 mL plastic H2SO4	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG2S	500 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH + Zn	VG9D	40 mL clear vial DI	ZPLC	ziploc bag
BG3U	250 mL clear glass unpres					GN 1	4Oz amber glass unpres
						GN 2	

Client Name: Sonbern

Sample Preservation Receipt Form

Project #: 40277226

Pace Lab #	Glass							Plastic						Vials						Jars				General				VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2							
021																																		2.5 / 5
022																																		2.5 / 5
023																																		2.5 / 5
024																																		2.5 / 5
025																																		2.5 / 5
026																																		2.5 / 5
027																																		2.5 / 5
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037																																		2.5 / 5
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041																																		2.5 / 5
042																																		2.5 / 5
043																																		2.5 / 5
044																																		2.5 / 5
045																																		2.5 / 5
046																																		2.5 / 5
047																																		2.5 / 5
048																																		2.5 / 5

Sample Preservation Receipt Form

Client Name: Sanborn Project #: 40277226

Pace Lab #	Glass							Plastic						Vials						Jars				General				VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2							
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076																																		2.5 / 5

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Sample Preservation Receipt Form

Client Name: Sanborn Project #: 402772264

Pace Lab #	Glass							Plastic						Vials						Jars				General				VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2							
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4/23/24 SC

Sample Condition Upon Receipt Form (SCUR)

Project #:

WO# : 40277226

40277226

Client Name: Sanborn

Courier: ☐ CS Logistics ☑ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco ☐ Client ☐ Pace Other:

Tracking #: 2737 4007 9805

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Thermometer Used SR - 139 **Type of Ice:** Wet Blue Dry None ☐ Meltwater Only

Cooler Temperature Uncorr 2.0 /Corr. 2.0

Temp Blank Present: ☐ yes ☑ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Person examining contents:
Date: 4/23/24 /Initials: SC

Labeled By Initials: NK

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☐Yes ☑No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No	5.
- DI VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time
Short Hold Time Analysis (<72hr):	☐Yes ☑No	6.
Rush Turn Around Time Requested:	☐Yes ☑No	7.
Sufficient Volume: For Analysis: ☑Yes ☐No MS/MSD: ☐Yes ☑No ☐N/A		8. ~~Nodry weight volume~~ 4/23/24 SC
Correct Containers Used: Correct Type: Pace Green Bay, Pace IR, Non-Pace	☑Yes ☐No	9.
Containers Intact:	☑Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: SL, WT	☐Yes ☑No ☐N/A	12. no dates or times 4/23/24 SC
Trip Blank Present:	☐Yes ☐No ☑N/A	13.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: Date/Time:

Comments/ Resolution:

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample logi

Page 5 of 5

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

May 10, 2024

Jessica Bulova
Sanborn, Head & Associates
20 Foundry Street
Concord, NH 03301

RE: Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Dear Jessica Bulova:

Enclosed are the analytical results for sample(s) received by the laboratory on April 23, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses were subcontracted outside of the Pace Network. The test report from the external subcontractor is attached to this report in its entirety.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Green Bay

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tod Noltemeyer

Tod Noltemeyer
tod.noltemeyer@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Jeff Austin, NASA
Goeff Giles, NASA-WSTF-Navarro

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Pace Analytical Services Green Bay
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
Texas Certification #: T104704529-21-8
Virginia VELAP Certification ID: 11873
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-21-00008
Federal Fish & Wildlife Permit #: 51774A

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40277236001	MB-01_20240416	Solid	04/16/24 12:35	04/23/24 09:30
40277236002	EB-01_20240417	Solid	04/17/24 12:17	04/23/24 09:30
40277236003	EB-02_20240419	Solid	04/19/24 13:32	04/23/24 09:30
40277236004	EB-03_20240420	Solid	04/20/24 13:59	04/23/24 09:30
40277236005	EB-04_20240421	Solid	04/21/24 10:41	04/23/24 09:30
40277236006	EB-05_20240422	Solid	04/22/24 13:49	04/23/24 09:30
40277236007	300-002-GSV-89.4-VOC_20240417	Solid	04/17/24 13:01	04/23/24 09:30
40277236008	300-002-GSV-90.17-VOC_20240417	Solid	04/17/24 13:01	04/23/24 09:30
40277236009	300-002-GSV-92.65-VOC_20240417	Solid	04/17/24 13:01	04/23/24 09:30
40277236010	300-002-GSV-96.8-VOC_20240417	Solid	04/17/24 14:56	04/23/24 09:30
40277236011	300-002-GSV-100.8-VOC_20240417	Solid	04/17/24 15:33	04/23/24 09:30
40277236012	300-002-GSV-102.1-VOC_20240417	Solid	04/17/24 15:34	04/23/24 09:30
40277236013	300-002-GSV-104.6-VOC_20240418	Solid	04/18/24 09:25	04/23/24 09:30
40277236014	300-002-GSV-104.85-VOC_240418	Solid	04/18/24 09:26	04/23/24 09:30
40277236015	300-002-GSV-106.5-VOC_20240418	Solid	04/18/24 09:58	04/23/24 09:30
40277236016	300-002-GSV-107.3-VOC_20240418	Solid	04/18/24 09:59	04/23/24 09:30
40277236017	300-002-GSV-112.35-VOC_240418	Solid	04/18/24 13:45	04/23/24 09:30
40277236018	300-002-GSV-113.75-VOC_240419	Solid	04/19/24 11:43	04/23/24 09:30
40277236019	300-002-GSV-114-VOC_20240419	Solid	04/19/24 11:44	04/23/24 09:30
40277236020	300-002-GSV-118.75-VOC_240419	Solid	04/19/24 12:25	04/23/24 09:30
40277236021	300-002-GSV-120.25-VOC_240419	Solid	04/19/24 12:26	04/23/24 09:30
40277236022	300-002-GSV-124.7-VOC_20240419	Solid	04/19/24 13:05	04/23/24 09:30
40277236023	300-002-GSV-125.2-VOC_20240419	Solid	04/19/24 13:06	04/23/24 09:30
40277236024	300-002-GSV-125.5-VOC_20240419	Solid	04/19/24 13:07	04/23/24 09:30
40277236025	300-002-GSV-130.3-VOC_20240419	Solid	04/19/24 13:42	04/23/24 09:30
40277236026	300-002-GSV-130.3-VOC-DUP_0419	Solid	04/19/24 13:42	04/23/24 09:30
40277236027	300-002-GSV-130.43-VOC_240419	Solid	04/19/24 13:43	04/23/24 09:30
40277236028	300-002-GSV-134.1-VOC_240419	Solid	04/19/24 15:02	04/23/24 09:30
40277236029	300-002-GSV-136.5-VOC_240419	Solid	04/19/24 15:03	04/23/24 09:30
40277236030	300-002-GSV-140.7-VOC_240419	Solid	04/19/24 15:35	04/23/24 09:30
40277236031	TB-01_20240422	Solid	04/22/24 15:30	04/23/24 09:30
40277236032	300-002-GSV-141.5-VOC_20240419	Solid	04/19/24 15:36	04/23/24 09:30
40277236033	300-002-GSV-144.37-VOC_240419	Solid	04/19/24 16:18	04/23/24 09:30

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40277236034	300-002-GSV-145.8-VOC_20240419	Solid	04/19/24 16:19	04/23/24 09:30
40277236035	300-002-GSV-146.3-VOC_20240419	Solid	04/19/24 16:20	04/23/24 09:30
40277236036	300-002-GSV-150.35-VOC_240420	Solid	04/20/24 09:52	04/23/24 09:30
40277236037	300-002-GSV-152.3-VOC_20240420	Solid	04/20/24 09:53	04/23/24 09:30
40277236038	300-002-GSV-154.2-VOC_20240420	Solid	04/20/24 10:30	04/23/24 09:30
40277236039	300-002-GSV-154.5-VOC_20240420	Solid	04/20/24 10:31	04/23/24 09:30
40277236040	300-002-GSV-156.25-VOC_240420	Solid	04/20/24 10:32	04/23/24 09:30
40277236041	300-002-GSV-161.45-VOC_240420	Solid	04/20/24 11:34	04/23/24 09:30
40277236042	300-002-GSV-164.9-VOC_20240420	Solid	04/20/24 12:47	04/23/24 09:30
40277236043	300-002-GSV-165.8-VOC_20240420	Solid	04/20/24 12:48	04/23/24 09:30
40277236044	300-002-GSV-167-VOC_20240420	Solid	04/20/24 12:49	04/23/24 09:30
40277236045	300-002-GSV-170.6-VOC_20240420	Solid	04/20/24 13:45	04/23/24 09:30
40277236046	300-002-GSV-171-VOC_20240420	Solid	04/20/24 13:46	04/23/24 09:30
40277236047	300-002-GSV-171-VOC-DUP_240420	Solid	04/20/24 13:46	04/23/24 09:30
40277236048	300-002-GSV-174.8-VOC_20240420	Solid	04/20/24 14:17	04/23/24 09:30
40277236049	300-002-GSV-176.4-VOC_20240420	Solid	04/20/24 14:18	04/23/24 09:30
40277236050	300-002-GSV-180.2-VOC_20240420	Solid	04/20/24 14:52	04/23/24 09:30
40277236051	300-002-GSV-182.5-VOC_20240420	Solid	04/20/24 14:53	04/23/24 09:30
40277236052	300-002-GSV-183.1-VOC_20240420	Solid	04/20/24 15:30	04/23/24 09:30
40277236053	300-002-GSV-187.5-VOC_20240420	Solid	04/20/24 15:31	04/23/24 09:30
40277236054	300-002-GSV-188.85-VOC_240420	Solid	04/20/24 16:17	04/23/24 09:30
40277236055	300-002-GSV-192.8-VOC_20240420	Solid	04/20/24 16:18	04/23/24 09:30
40277236056	300-002-GSV-194.2-VOC_20240421	Solid	04/21/24 08:55	04/23/24 09:30
40277236057	300-002-GSV-196.7-VOC_20240421	Solid	04/21/24 08:56	04/23/24 09:30
40277236058	300-002-GSV-197.1-VOC_20240421	Solid	04/21/24 08:57	04/23/24 09:30
40277236059	300-002-GSV-200-VOC_20240421	Solid	04/21/24 09:30	04/23/24 09:30
40277236060	300-002-GSV-202-VOC_20240421	Solid	04/21/24 09:31	04/23/24 09:30
40277236061	300-002-GSV-205.4-VOC_20240421	Solid	04/21/24 10:30	04/23/24 09:30
40277236062	TB-02_20240422	Solid	04/22/24 15:30	04/23/24 09:30
40277236063	300-002-GSV-207.8-VOC_20240421	Solid	04/21/24 10:31	04/23/24 09:30
40277236064	300-002-GSV-210.2-VOC_20240421	Solid	04/21/24 11:53	04/23/24 09:30

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40277236065	**300-002-GSV-214.95-VOC_240421**	Solid	04/21/24 13:42	04/23/24 09:30
40277236066	**300-002-GSV-216.35-VOC_240421**	Solid	04/21/24 13:43	04/23/24 09:30
40277236067	**300-002-GSV-219.7-VOC_20240421**	Solid	04/21/24 15:46	04/23/24 09:30
40277236068	**300-002-GSV-219.7-VOC-DUP_0421**	Solid	04/21/24 15:46	04/23/24 09:30
40277236069	**300-002-GSV-226.2-VOC_20240421**	Solid	04/21/24 16:25	04/23/24 09:30
40277236070	**300-002-GSV-229.6-VOC_20240422**	Solid	04/22/24 09:55	04/23/24 09:30
40277236071	**300-002-GSV-229.7-VOC_20240422**	Solid	04/22/24 09:56	04/23/24 09:30
40277236072	**300-002-GSV-230.45-VOC_240422**	Solid	04/22/24 09:57	04/23/24 09:30
40277236073	**300-002-GSV-233.6-VOC_20240422**	Solid	04/22/24 10:30	04/23/24 09:30
40277236074	**300-002-GSV-236.4-VOC_20240422**	Solid	04/22/24 10:31	04/23/24 09:30
40277236075	**300-002-GSV-236.6-VOC_20240422**	Solid	04/22/24 10:32	04/23/24 09:30
40277236076	**300-002-GSV-238.1-VOC_20240422**	Solid	04/22/24 11:11	04/23/24 09:30
40277236077	**300-002-GSV-241.9-VOC_20240422**	Solid	04/22/24 11:12	04/23/24 09:30
40277236078	**300-002-GSV-242.05-VOC_240422**	Solid	04/22/24 11:13	04/23/24 09:30
40277236079	**300-002-GSV-243.55-VOC_240422**	Solid	04/22/24 12:20	04/23/24 09:30
40277236080	**300-002-GSV-245.15-VOC_240422**	Solid	04/22/24 12:21	04/23/24 09:30
40277236081	**300-002-GSV-247-VOC_20240422**	Solid	04/22/24 12:22	04/23/24 09:30
40277236082	**300-002-GSV-248.65-VOC_240422**	Solid	04/22/24 13:36	04/23/24 09:30
40277236083	**300-002-GSV-248.65-VOC-DUP_422**	Solid	04/22/24 13:36	04/23/24 09:30
40277236084	**TB-03_20240422**	Solid	04/22/24 15:30	04/23/24 09:30

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE ANALYTE COUNT

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40277236001	MB-01_20240416	EPA 8260	ALD	27
40277236002	EB-01_20240417	EPA 8260	ALD	27
40277236003	EB-02_20240419	EPA 8260	ALD	27
40277236004	EB-03_20240420	EPA 8260	ALD	27
40277236005	EB-04_20240421	EPA 8260	ALD	27
40277236006	EB-05_20240422	EPA 8260	ALD	27
40277236007	300-002-GSV-89.4-VOC_20240417	EPA 8260	ALD	27
40277236008	300-002-GSV-90.17-VOC_20240417	EPA 8260	ALD	27
40277236009	300-002-GSV-92.65-VOC_20240417	EPA 8260	ALD	27
40277236010	300-002-GSV-96.8-VOC_20240417	EPA 8260	ALD	27
40277236011	300-002-GSV-100.8-VOC_20240417	EPA 8260	ALD	27
40277236012	300-002-GSV-102.1-VOC_20240417	EPA 8260	ALD	27
40277236013	300-002-GSV-104.6-VOC_20240418	EPA 8260	ALD	27
40277236014	300-002-GSV-104.85-VOC_240418	EPA 8260	ALD	27
40277236015	300-002-GSV-106.5-VOC_20240418	EPA 8260	ALD	27
40277236016	300-002-GSV-107.3-VOC_20240418	EPA 8260	ALD	27
40277236017	300-002-GSV-112.35-VOC_240418	EPA 8260	ALD	27
40277236018	300-002-GSV-113.75-VOC_240419	EPA 8260	ALD	27
40277236019	300-002-GSV-114-VOC_20240419	EPA 8260	ALD	27
40277236020	300-002-GSV-118.75-VOC_240419	EPA 8260	ALD	27
40277236021	300-002-GSV-120.25-VOC_240419	EPA 8260	ALD	27
40277236022	300-002-GSV-124.7-VOC_20240419	EPA 8260	ALD	27
40277236023	300-002-GSV-125.2-VOC_20240419	EPA 8260	ALD	27
40277236024	300-002-GSV-125.5-VOC_20240419	EPA 8260	ALD	27
40277236025	300-002-GSV-130.3-VOC_20240419	EPA 8260	ALD	27
40277236026	300-002-GSV-130.3-VOC-DUP_0419	EPA 8260	ALD	27
40277236027	300-002-GSV-130.43-VOC_240419	EPA 8260	ALD	27
40277236028	300-002-GSV-134.1-VOC_240419	EPA 8260	ALD	27
40277236029	300-002-GSV-136.5-VOC_240419	EPA 8260	ALD	27
40277236030	300-002-GSV-140.7-VOC_240419	EPA 8260	ALD	27
40277236031	TB-01_20240422	EPA 8260	ALD	27
40277236032	300-002-GSV-141.5-VOC_20240419	EPA 8260	ALD	27
40277236033	300-002-GSV-144.37-VOC_240419	EPA 8260	ALD	27
40277236034	300-002-GSV-145.8-VOC_20240419	EPA 8260	ALD	27
40277236035	300-002-GSV-146.3-VOC_20240419	EPA 8260	ALD	27
40277236036	300-002-GSV-150.35-VOC_240420	EPA 8260	ALD	27
40277236037	300-002-GSV-152.3-VOC_20240420	EPA 8260	ALD	27

REPORT OF LABORATORY ANALYSIS

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE ANALYTE COUNT

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40277236038	300-002-GSV-154.2-VOC_20240420	EPA 8260	ALD	27
40277236039	300-002-GSV-154.5-VOC_20240420	EPA 8260	ALD	27
40277236040	300-002-GSV-156.25-VOC_240420	EPA 8260	ALD	27
40277236041	300-002-GSV-161.45-VOC_240420	EPA 8260	ALD	27
40277236042	300-002-GSV-164.9-VOC_20240420	EPA 8260	ALD	27
40277236043	300-002-GSV-165.8-VOC_20240420	EPA 8260	ALD	27
40277236044	300-002-GSV-167-VOC_20240420	EPA 8260	ALD	27
40277236045	300-002-GSV-170.6-VOC_20240420	EPA 8260	ALD	27
40277236046	300-002-GSV-171-VOC_20240420	EPA 8260	ALD	27
40277236047	300-002-GSV-171-VOC-DUP_240420	EPA 8260	ALD	27
40277236048	300-002-GSV-174.8-VOC_20240420	EPA 8260	ALD	27
40277236049	300-002-GSV-176.4-VOC_20240420	EPA 8260	ALD	27
40277236050	300-002-GSV-180.2-VOC_20240420	EPA 8260	ALD	27
40277236051	300-002-GSV-182.5-VOC_20240420	EPA 8260	ALD	27
40277236052	300-002-GSV-183.1-VOC_20240420	EPA 8260	ALD	27
40277236053	300-002-GSV-187.5-VOC_20240420	EPA 8260	ALD	27
40277236054	300-002-GSV-188.85-VOC_240420	EPA 8260	ALD	27
40277236055	300-002-GSV-192.8-VOC_20240420	EPA 8260	ALD	27
40277236056	300-002-GSV-194.2-VOC_20240421	EPA 8260	ALD	27
40277236057	300-002-GSV-196.7-VOC_20240421	EPA 8260	ALD	27
40277236058	300-002-GSV-197.1-VOC_20240421	EPA 8260	ALD	27
40277236059	300-002-GSV-200-VOC_20240421	EPA 8260	ALD	27
40277236060	300-002-GSV-202-VOC_20240421	EPA 8260	ALD	27
40277236061	300-002-GSV-205.4-VOC_20240421	EPA 8260	ALD	27
40277236062	TB-02_20240422	EPA 8260	ALD	27
40277236063	300-002-GSV-207.8-VOC_20240421	EPA 8260	ALD	27
40277236064	300-002-GSV-210.2-VOC_20240421	EPA 8260	ALD	27
40277236065	300-002-GSV-214.95-VOC_240421	EPA 8260	ALD	27
40277236066	300-002-GSV-216.35-VOC_240421	EPA 8260	ALD	27
40277236067	300-002-GSV-219.7-VOC_20240421	EPA 8260	ALD	27
40277236068	300-002-GSV-219.7-VOC-DUP_0421	EPA 8260	ALD	27
40277236069	300-002-GSV-226.2-VOC_20240421	EPA 8260	ALD	27
40277236070	300-002-GSV-229.6-VOC_20240422	EPA 8260	ALD	27
40277236071	300-002-GSV-229.7-VOC_20240422	EPA 8260	ALD	27
40277236072	300-002-GSV-230.45-VOC_240422	EPA 8260	ALD	27
40277236073	300-002-GSV-233.6-VOC_20240422	EPA 8260	ALD	27
40277236074	300-002-GSV-236.4-VOC_20240422	EPA 8260	ALD	27

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40277236075	**300-002-GSV-236.6-VOC_20240422**	EPA 8260	ALD	27
40277236076	**300-002-GSV-238.1-VOC_20240422**	EPA 8260	ALD	27
40277236077	**300-002-GSV-241.9-VOC_20240422**	EPA 8260	ALD	27
40277236078	**300-002-GSV-242.05-VOC_240422**	EPA 8260	ALD	27
40277236079	**300-002-GSV-243.55-VOC_240422**	EPA 8260	ALD	27
40277236080	**300-002-GSV-245.15-VOC_240422**	EPA 8260	ALD	27
40277236081	**300-002-GSV-247-VOC_20240422**	EPA 8260	ALD	27
40277236082	**300-002-GSV-248.65-VOC_240422**	EPA 8260	ALD	27
40277236083	**300-002-GSV-248.65-VOC-DUP_422**	EPA 8260	ALD	27
40277236084	**TB-03_20240422**	EPA 8260	ALD	27

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Method: **EPA 8260**
Description: 8260 MSV Med Level MAE
Client: Sanborn, Head & Associates
Date: May 10, 2024

General Information:
84 samples were analyzed for EPA 8260 by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 472531

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- 300-002-GSV-100.8-VOC_20240417 (Lab ID: 40277236011)
  - 2-Butanone (MEK)
  - Acetone
- 300-002-GSV-102.1-VOC_20240417 (Lab ID: 40277236012)
  - 2-Butanone (MEK)
  - Acetone
- 300-002-GSV-104.6-VOC_20240418 (Lab ID: 40277236013)
  - 2-Butanone (MEK)
  - Acetone
- 300-002-GSV-104.85-VOC_240418 (Lab ID: 40277236014)
  - 2-Butanone (MEK)
  - Acetone
- 300-002-GSV-106.5-VOC_20240418 (Lab ID: 40277236015)
  - 2-Butanone (MEK)
  - Acetone
- 300-002-GSV-107.3-VOC_20240418 (Lab ID: 40277236016)
  - 2-Butanone (MEK)
  - Acetone
- 300-002-GSV-112.35-VOC_240418 (Lab ID: 40277236017)
  - 2-Butanone (MEK)
  - Acetone
- 300-002-GSV-113.75-VOC_240419 (Lab ID: 40277236018)
  - 2-Butanone (MEK)
  - Acetone
- 300-002-GSV-114-VOC_20240419 (Lab ID: 40277236019)

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Method: **EPA 8260**
Description: 8260 MSV Med Level MAE
Client: Sanborn, Head & Associates
Date: May 10, 2024

QC Batch: 472531

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- 2-Butanone (MEK)
- Acetone

- 300-002-GSV-130.3-VOC_20240419 (Lab ID: 40277236025)
  - 2-Butanone (MEK)
  - Acetone
- 300-002-GSV-89.4-VOC_20240417 (Lab ID: 40277236007)
  - 2-Butanone (MEK)
  - Acetone
- 300-002-GSV-90.17-VOC_20240417 (Lab ID: 40277236008)
  - 2-Butanone (MEK)
  - Acetone
- 300-002-GSV-92.65-VOC_20240417 (Lab ID: 40277236009)
  - 2-Butanone (MEK)
  - Acetone
- 300-002-GSV-96.8-VOC_20240417 (Lab ID: 40277236010)
  - 2-Butanone (MEK)
  - Acetone
- BLANK (Lab ID: 2706291)
  - 2-Butanone (MEK)
  - Acetone
- EB-01_20240417 (Lab ID: 40277236002)
  - 2-Butanone (MEK)
  - Acetone
- EB-02_20240419 (Lab ID: 40277236003)
  - 2-Butanone (MEK)
  - Acetone
- EB-03_20240420 (Lab ID: 40277236004)
  - 2-Butanone (MEK)
  - Acetone
- EB-04_20240421 (Lab ID: 40277236005)
  - 2-Butanone (MEK)
  - Acetone
- EB-05_20240422 (Lab ID: 40277236006)
  - 2-Butanone (MEK)
  - Acetone
- MB-01_20240416 (Lab ID: 40277236001)
  - 2-Butanone (MEK)
  - Acetone

QC Batch: 472541

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- 300-002-GSV-118.75-VOC_240419 (Lab ID: 40277236020)
  - 2-Hexanone

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Method: **EPA 8260**
Description: 8260 MSV Med Level MAE
Client: Sanborn, Head & Associates
Date: May 10, 2024

QC Batch: 472541

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- Acetone
- 300-002-GSV-120.25-VOC_240419 (Lab ID: 40277236021)
  - 2-Hexanone
  - Acetone
- 300-002-GSV-124.7-VOC_20240419 (Lab ID: 40277236022)
  - 2-Hexanone
  - Acetone
- 300-002-GSV-125.2-VOC_20240419 (Lab ID: 40277236023)
  - 2-Hexanone
  - Acetone
- 300-002-GSV-125.5-VOC_20240419 (Lab ID: 40277236024)
  - 2-Hexanone
  - Acetone
- 300-002-GSV-130.3-VOC-DUP_0419 (Lab ID: 40277236026)
  - 2-Hexanone
  - Acetone
- 300-002-GSV-130.43-VOC_240419 (Lab ID: 40277236027)
  - 2-Hexanone
  - Acetone
- 300-002-GSV-134.1-VOC_240419 (Lab ID: 40277236028)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-136.5-VOC_240419 (Lab ID: 40277236029)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-140.7-VOC_240419 (Lab ID: 40277236030)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-141.5-VOC_20240419 (Lab ID: 40277236032)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-144.37-VOC_240419 (Lab ID: 40277236033)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-145.8-VOC_20240419 (Lab ID: 40277236034)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Method: **EPA 8260**
Description: 8260 MSV Med Level MAE
Client: Sanborn, Head & Associates
Date: May 10, 2024

QC Batch: 472541

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- 300-002-GSV-146.3-VOC_20240419 (Lab ID: 40277236035)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-150.35-VOC_240420 (Lab ID: 40277236036)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-152.3-VOC_20240420 (Lab ID: 40277236037)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-154.2-VOC_20240420 (Lab ID: 40277236038)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-154.5-VOC_20240420 (Lab ID: 40277236039)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-171-VOC_20240420 (Lab ID: 40277236046)
  - 2-Hexanone
  - Acetone
- BLANK (Lab ID: 2706326)
  - 2-Hexanone
  - Acetone
- TB-01_20240422 (Lab ID: 40277236031)
  - 2-Hexanone
  - Acetone

v2: The continuing calibration verification was below the method acceptance limit. The analyte was not detected in the associated samples and the sensitivity of the instrument was verified with a reporting limit check standard.

- 300-002-GSV-134.1-VOC_240419 (Lab ID: 40277236028)
  - 2-Propanol
- 300-002-GSV-136.5-VOC_240419 (Lab ID: 40277236029)
  - 2-Propanol
- 300-002-GSV-140.7-VOC_240419 (Lab ID: 40277236030)
  - 2-Propanol
- 300-002-GSV-141.5-VOC_20240419 (Lab ID: 40277236032)
  - 2-Propanol
- 300-002-GSV-144.37-VOC_240419 (Lab ID: 40277236033)
  - 2-Propanol
- 300-002-GSV-145.8-VOC_20240419 (Lab ID: 40277236034)
  - 2-Propanol

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Method: **EPA 8260**
Description: 8260 MSV Med Level MAE
Client: Sanborn, Head & Associates
Date: May 10, 2024

QC Batch: 472541

v2: The continuing calibration verification was below the method acceptance limit. The analyte was not detected in the associated samples and the sensitivity of the instrument was verified with a reporting limit check standard.

- 300-002-GSV-146.3-VOC_20240419 (Lab ID: 40277236035)
  - 2-Propanol
- 300-002-GSV-150.35-VOC_240420 (Lab ID: 40277236036)
  - 2-Propanol
- 300-002-GSV-152.3-VOC_20240420 (Lab ID: 40277236037)
  - 2-Propanol
- 300-002-GSV-154.2-VOC_20240420 (Lab ID: 40277236038)
  - 2-Propanol
- 300-002-GSV-154.5-VOC_20240420 (Lab ID: 40277236039)
  - 2-Propanol

QC Batch: 472668

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- 300-002-GSV-156.25-VOC_240420 (Lab ID: 40277236040)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-161.45-VOC_240420 (Lab ID: 40277236041)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-164.9-VOC_20240420 (Lab ID: 40277236042)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-165.8-VOC_20240420 (Lab ID: 40277236043)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-167-VOC_20240420 (Lab ID: 40277236044)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-170.6-VOC_20240420 (Lab ID: 40277236045)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-171-VOC-DUP_240420 (Lab ID: 40277236047)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-174.8-VOC_20240420 (Lab ID: 40277236048)
  - 1,1,2-Trichlorotrifluoroethane

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Method: **EPA 8260**
Description: 8260 MSV Med Level MAE
Client: Sanborn, Head & Associates
Date: May 10, 2024

QC Batch: 472668

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- 2-Hexanone
- Acetone
- 300-002-GSV-176.4-VOC_20240420 (Lab ID: 40277236049)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-180.2-VOC_20240420 (Lab ID: 40277236050)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-182.5-VOC_20240420 (Lab ID: 40277236051)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-183.1-VOC_20240420 (Lab ID: 40277236052)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-187.5-VOC_20240420 (Lab ID: 40277236053)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-188.85-VOC_240420 (Lab ID: 40277236054)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- 300-002-GSV-219.7-VOC_20240421 (Lab ID: 40277236067)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- BLANK (Lab ID: 2707096)
  - 1,1,2-Trichlorotrifluoroethane
  - 2-Hexanone
  - Acetone
- LCS (Lab ID: 2707097)
  - 1,1,2-Trichlorotrifluoroethane
- MS (Lab ID: 2707098)
  - 1,1,2-Trichlorotrifluoroethane
- MSD (Lab ID: 2707099)
  - 1,1,2-Trichlorotrifluoroethane

v2: The continuing calibration verification was below the method acceptance limit. The analyte was not detected in the associated samples and the sensitivity of the instrument was verified with a reporting limit check standard.

- 300-002-GSV-156.25-VOC_240420 (Lab ID: 40277236040)

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Method: **EPA 8260**
Description: 8260 MSV Med Level MAE
Client: Sanborn, Head & Associates
Date: May 10, 2024

QC Batch: 472668

v2: The continuing calibration verification was below the method acceptance limit. The analyte was not detected in the associated samples and the sensitivity of the instrument was verified with a reporting limit check standard.

- 2-Propanol
- 300-002-GSV-161.45-VOC_240420 (Lab ID: 40277236041)
  - 2-Propanol
- 300-002-GSV-164.9-VOC_20240420 (Lab ID: 40277236042)
  - 2-Propanol
- 300-002-GSV-165.8-VOC_20240420 (Lab ID: 40277236043)
  - 2-Propanol
- 300-002-GSV-167-VOC_20240420 (Lab ID: 40277236044)
  - 2-Propanol
- 300-002-GSV-170.6-VOC_20240420 (Lab ID: 40277236045)
  - 2-Propanol
- 300-002-GSV-171-VOC-DUP_240420 (Lab ID: 40277236047)
  - 2-Propanol
- 300-002-GSV-174.8-VOC_20240420 (Lab ID: 40277236048)
  - 2-Propanol
- 300-002-GSV-176.4-VOC_20240420 (Lab ID: 40277236049)
  - 2-Propanol
- 300-002-GSV-180.2-VOC_20240420 (Lab ID: 40277236050)
  - 2-Propanol
- 300-002-GSV-182.5-VOC_20240420 (Lab ID: 40277236051)
  - 2-Propanol
- 300-002-GSV-183.1-VOC_20240420 (Lab ID: 40277236052)
  - 2-Propanol
- 300-002-GSV-187.5-VOC_20240420 (Lab ID: 40277236053)
  - 2-Propanol
- 300-002-GSV-188.85-VOC_240420 (Lab ID: 40277236054)
  - 2-Propanol
- 300-002-GSV-219.7-VOC_20240421 (Lab ID: 40277236067)
  - 2-Propanol
- BLANK (Lab ID: 2707096)
  - 2-Propanol

QC Batch: 472669

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- 300-002-GSV-192.8-VOC_20240420 (Lab ID: 40277236055)
  - Acetone
- 300-002-GSV-194.2-VOC_20240421 (Lab ID: 40277236056)
  - Acetone
- 300-002-GSV-196.7-VOC_20240421 (Lab ID: 40277236057)
  - Acetone
- 300-002-GSV-197.1-VOC_20240421 (Lab ID: 40277236058)
  - Acetone
- 300-002-GSV-200-VOC_20240421 (Lab ID: 40277236059)

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Method: **EPA 8260**
Description: 8260 MSV Med Level MAE
Client: Sanborn, Head & Associates
Date: May 10, 2024

QC Batch: 472669

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- Acetone
- 300-002-GSV-202-VOC_20240421 (Lab ID: 40277236060)
  - Acetone
- 300-002-GSV-205.4-VOC_20240421 (Lab ID: 40277236061)
  - Acetone
- 300-002-GSV-207.8-VOC_20240421 (Lab ID: 40277236063)
  - Acetone
- 300-002-GSV-210.2-VOC_20240421 (Lab ID: 40277236064)
  - Acetone
- 300-002-GSV-214.95-VOC_240421 (Lab ID: 40277236065)
  - Acetone
- 300-002-GSV-216.35-VOC_240421 (Lab ID: 40277236066)
  - Acetone
- 300-002-GSV-219.7-VOC-DUP_0421 (Lab ID: 40277236068)
  - Acetone
- 300-002-GSV-248.65-VOC_240422 (Lab ID: 40277236082)
  - Acetone
- BLANK (Lab ID: 2707100)
  - Acetone
- TB-02_20240422 (Lab ID: 40277236062)
  - Acetone

QC Batch: 472812

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- 300-002-GSV-226.2-VOC_20240421 (Lab ID: 40277236069)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - Acetone
- 300-002-GSV-229.6-VOC_20240422 (Lab ID: 40277236070)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - Acetone
- 300-002-GSV-229.7-VOC_20240422 (Lab ID: 40277236071)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - Acetone
- 300-002-GSV-230.45-VOC_240422 (Lab ID: 40277236072)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - Acetone
- 300-002-GSV-233.6-VOC_20240422 (Lab ID: 40277236073)
  - 2-Butanone (MEK)
  - 2-Hexanone

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Method: **EPA 8260**
Description: 8260 MSV Med Level MAE
Client: Sanborn, Head & Associates
Date: May 10, 2024

QC Batch: 472812

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- Acetone
- 300-002-GSV-236.4-VOC_20240422 (Lab ID: 40277236074)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - Acetone
- 300-002-GSV-236.6-VOC_20240422 (Lab ID: 40277236075)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - Acetone
- 300-002-GSV-238.1-VOC_20240422 (Lab ID: 40277236076)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - Acetone
- 300-002-GSV-241.9-VOC_20240422 (Lab ID: 40277236077)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - Acetone
- 300-002-GSV-242.05-VOC_240422 (Lab ID: 40277236078)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - Acetone
- 300-002-GSV-243.55-VOC_240422 (Lab ID: 40277236079)
  - 2-Butanone (MEK)
  - Acetone
- 300-002-GSV-245.15-VOC_240422 (Lab ID: 40277236080)
  - 2-Butanone (MEK)
  - Acetone
- 300-002-GSV-247-VOC_20240422 (Lab ID: 40277236081)
  - 2-Butanone (MEK)
  - Acetone
- 300-002-GSV-248.65-VOC-DUP_422 (Lab ID: 40277236083)
  - 2-Butanone (MEK)
  - Acetone
- BLANK (Lab ID: 2707774)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - Acetone
- TB-03_20240422 (Lab ID: 40277236084)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - Acetone

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Method: **EPA 8260**
Description: 8260 MSV Med Level MAE
Client: Sanborn, Head & Associates
Date: May 10, 2024

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 472531

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
- LCS (Lab ID: 2706292)
  - Chloromethane

QC Batch: 472541

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
- LCS (Lab ID: 2706327)
  - Chloromethane

QC Batch: 472668

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
- LCS (Lab ID: 2707097)
  - Chloroform

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 472531

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40277236025

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
- MS (Lab ID: 2706293)
  - Chloromethane
- MSD (Lab ID: 2706294)
  - Chloromethane

QC Batch: 472541

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40277236046

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
- MS (Lab ID: 2706328)
  - Chloromethane
- MSD (Lab ID: 2706329)
  - Chloromethane

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Method: **EPA 8260**
Description: 8260 MSV Med Level MAE
Client: Sanborn, Head & Associates
Date: May 10, 2024

QC Batch: 472541

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40277236046

R1: RPD value was outside control limits.

- MSD (Lab ID: 2706329)
  - 1,1,2-Trichlorotrifluoroethane
  - Trichlorofluoromethane

QC Batch: 472668

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40277236067

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2707098)
  - Trichloroethene

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: MB-01_20240416 **Lab ID: 40277236001** Collected: 04/16/24 12:35 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	04/24/24 08:00	04/25/24 19:31	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	04/24/24 08:00	04/25/24 19:31	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	04/24/24 08:00	04/25/24 19:31	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	04/24/24 08:00	04/25/24 19:31	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	04/24/24 08:00	04/25/24 19:31	78-93-3	v1
2-Hexanone	**<496**	ug/kg	1250	496	1	04/24/24 08:00	04/25/24 19:31	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	04/24/24 08:00	04/25/24 19:31	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	04/24/24 08:00	04/25/24 19:31	67-64-1	v1
Benzene	**<11.9**	ug/kg	20.0	11.9	1	04/24/24 08:00	04/25/24 19:31	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	04/24/24 08:00	04/25/24 19:31	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	04/24/24 08:00	04/25/24 19:31	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	04/24/24 08:00	04/25/24 19:31	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	04/24/24 08:00	04/25/24 19:31	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	04/24/24 08:00	04/25/24 19:31	74-87-3	L2
Dibromochloromethane	**<171**	ug/kg	250	171	1	04/24/24 08:00	04/25/24 19:31	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	04/24/24 08:00	04/25/24 19:31	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	04/24/24 08:00	04/25/24 19:31	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	04/24/24 08:00	04/25/24 19:31	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	04/24/24 08:00	04/25/24 19:31	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	04/24/24 08:00	04/25/24 19:31	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	04/24/24 08:00	04/25/24 19:31	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	04/24/24 08:00	04/25/24 19:31	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	04/24/24 08:00	04/25/24 19:31	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	04/24/24 08:00	04/25/24 19:31	156-60-5	
Surrogates									
Toluene-d8 (S)	99	%	60-140		1	04/24/24 08:00	04/25/24 19:31	2037-26-5	
4-Bromofluorobenzene (S)	105	%	66-143		1	04/24/24 08:00	04/25/24 19:31	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	60-140		1	04/24/24 08:00	04/25/24 19:31	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: EB-01_20240417 **Lab ID: 40277236002** Collected: 04/17/24 12:17 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	04/24/24 08:00	04/25/24 13:09	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	04/24/24 08:00	04/25/24 13:09	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	04/24/24 08:00	04/25/24 13:09	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	04/24/24 08:00	04/25/24 13:09	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	04/24/24 08:00	04/25/24 13:09	78-93-3	v1
2-Hexanone	**<496**	ug/kg	1250	496	1	04/24/24 08:00	04/25/24 13:09	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	04/24/24 08:00	04/25/24 13:09	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	04/24/24 08:00	04/25/24 13:09	67-64-1	v1
Benzene	**<11.9**	ug/kg	20.0	11.9	1	04/24/24 08:00	04/25/24 13:09	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	04/24/24 08:00	04/25/24 13:09	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	04/24/24 08:00	04/25/24 13:09	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	04/24/24 08:00	04/25/24 13:09	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	04/24/24 08:00	04/25/24 13:09	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	04/24/24 08:00	04/25/24 13:09	74-87-3	L2
Dibromochloromethane	**<171**	ug/kg	250	171	1	04/24/24 08:00	04/25/24 13:09	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	04/24/24 08:00	04/25/24 13:09	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	04/24/24 08:00	04/25/24 13:09	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	04/24/24 08:00	04/25/24 13:09	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	04/24/24 08:00	04/25/24 13:09	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	04/24/24 08:00	04/25/24 13:09	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	04/24/24 08:00	04/25/24 13:09	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	04/24/24 08:00	04/25/24 13:09	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	04/24/24 08:00	04/25/24 13:09	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	04/24/24 08:00	04/25/24 13:09	156-60-5	
Surrogates									
Toluene-d8 (S)	100	%	60-140		1	04/24/24 08:00	04/25/24 13:09	2037-26-5	
4-Bromofluorobenzene (S)	103	%	66-143		1	04/24/24 08:00	04/25/24 13:09	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	60-140		1	04/24/24 08:00	04/25/24 13:09	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: EB-02_20240419 **Lab ID: 40277236003** Collected: 04/19/24 13:32 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	04/24/24 08:00	04/25/24 13:29	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	04/24/24 08:00	04/25/24 13:29	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	04/24/24 08:00	04/25/24 13:29	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	04/24/24 08:00	04/25/24 13:29	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	04/24/24 08:00	04/25/24 13:29	78-93-3	v1
2-Hexanone	**<496**	ug/kg	1250	496	1	04/24/24 08:00	04/25/24 13:29	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	04/24/24 08:00	04/25/24 13:29	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	04/24/24 08:00	04/25/24 13:29	67-64-1	v1
Benzene	**<11.9**	ug/kg	20.0	11.9	1	04/24/24 08:00	04/25/24 13:29	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	04/24/24 08:00	04/25/24 13:29	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	04/24/24 08:00	04/25/24 13:29	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	04/24/24 08:00	04/25/24 13:29	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	04/24/24 08:00	04/25/24 13:29	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	04/24/24 08:00	04/25/24 13:29	74-87-3	L2
Dibromochloromethane	**<171**	ug/kg	250	171	1	04/24/24 08:00	04/25/24 13:29	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	04/24/24 08:00	04/25/24 13:29	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	04/24/24 08:00	04/25/24 13:29	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	04/24/24 08:00	04/25/24 13:29	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	04/24/24 08:00	04/25/24 13:29	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	04/24/24 08:00	04/25/24 13:29	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	04/24/24 08:00	04/25/24 13:29	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	04/24/24 08:00	04/25/24 13:29	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	04/24/24 08:00	04/25/24 13:29	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	04/24/24 08:00	04/25/24 13:29	156-60-5	
Surrogates									
Toluene-d8 (S)	104	%	60-140		1	04/24/24 08:00	04/25/24 13:29	2037-26-5	
4-Bromofluorobenzene (S)	107	%	66-143		1	04/24/24 08:00	04/25/24 13:29	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	60-140		1	04/24/24 08:00	04/25/24 13:29	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: EB-03_20240420 **Lab ID: 40277236004** Collected: 04/20/24 13:59 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	04/24/24 08:00	04/25/24 13:49	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	04/24/24 08:00	04/25/24 13:49	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	04/24/24 08:00	04/25/24 13:49	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	04/24/24 08:00	04/25/24 13:49	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	04/24/24 08:00	04/25/24 13:49	78-93-3	v1
2-Hexanone	**<496**	ug/kg	1250	496	1	04/24/24 08:00	04/25/24 13:49	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	04/24/24 08:00	04/25/24 13:49	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	04/24/24 08:00	04/25/24 13:49	67-64-1	v1
Benzene	**<11.9**	ug/kg	20.0	11.9	1	04/24/24 08:00	04/25/24 13:49	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	04/24/24 08:00	04/25/24 13:49	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	04/24/24 08:00	04/25/24 13:49	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	04/24/24 08:00	04/25/24 13:49	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	04/24/24 08:00	04/25/24 13:49	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	04/24/24 08:00	04/25/24 13:49	74-87-3	L2
Dibromochloromethane	**<171**	ug/kg	250	171	1	04/24/24 08:00	04/25/24 13:49	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	04/24/24 08:00	04/25/24 13:49	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	04/24/24 08:00	04/25/24 13:49	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	04/24/24 08:00	04/25/24 13:49	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	04/24/24 08:00	04/25/24 13:49	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	04/24/24 08:00	04/25/24 13:49	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	04/24/24 08:00	04/25/24 13:49	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	04/24/24 08:00	04/25/24 13:49	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	04/24/24 08:00	04/25/24 13:49	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	04/24/24 08:00	04/25/24 13:49	156-60-5	
Surrogates									
Toluene-d8 (S)	96	%	60-140		1	04/24/24 08:00	04/25/24 13:49	2037-26-5	
4-Bromofluorobenzene (S)	106	%	66-143		1	04/24/24 08:00	04/25/24 13:49	460-00-4	
1,2-Dichlorobenzene-d4 (S)	115	%	60-140		1	04/24/24 08:00	04/25/24 13:49	2199-69-1	

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(920)469-2436

ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: EB-04_20240421 **Lab ID: 40277236005** Collected: 04/21/24 10:41 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	04/24/24 08:00	04/25/24 14:10	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	04/24/24 08:00	04/25/24 14:10	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	04/24/24 08:00	04/25/24 14:10	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	04/24/24 08:00	04/25/24 14:10	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	04/24/24 08:00	04/25/24 14:10	78-93-3	v1
2-Hexanone	**<496**	ug/kg	1250	496	1	04/24/24 08:00	04/25/24 14:10	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	04/24/24 08:00	04/25/24 14:10	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	04/24/24 08:00	04/25/24 14:10	67-64-1	v1
Benzene	**<11.9**	ug/kg	20.0	11.9	1	04/24/24 08:00	04/25/24 14:10	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	04/24/24 08:00	04/25/24 14:10	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	04/24/24 08:00	04/25/24 14:10	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	04/24/24 08:00	04/25/24 14:10	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	04/24/24 08:00	04/25/24 14:10	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	04/24/24 08:00	04/25/24 14:10	74-87-3	L2
Dibromochloromethane	**<171**	ug/kg	250	171	1	04/24/24 08:00	04/25/24 14:10	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	04/24/24 08:00	04/25/24 14:10	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	04/24/24 08:00	04/25/24 14:10	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	04/24/24 08:00	04/25/24 14:10	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	04/24/24 08:00	04/25/24 14:10	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	04/24/24 08:00	04/25/24 14:10	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	04/24/24 08:00	04/25/24 14:10	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	04/24/24 08:00	04/25/24 14:10	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	04/24/24 08:00	04/25/24 14:10	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	04/24/24 08:00	04/25/24 14:10	156-60-5	
Surrogates									
Toluene-d8 (S)	101	%	60-140		1	04/24/24 08:00	04/25/24 14:10	2037-26-5	
4-Bromofluorobenzene (S)	102	%	66-143		1	04/24/24 08:00	04/25/24 14:10	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	60-140		1	04/24/24 08:00	04/25/24 14:10	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: EB-05_20240422 **Lab ID: 40277236006** Collected: 04/22/24 13:49 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	04/24/24 08:00	04/25/24 14:30	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	04/24/24 08:00	04/25/24 14:30	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	04/24/24 08:00	04/25/24 14:30	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	04/24/24 08:00	04/25/24 14:30	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	04/24/24 08:00	04/25/24 14:30	78-93-3	v1
2-Hexanone	**<496**	ug/kg	1250	496	1	04/24/24 08:00	04/25/24 14:30	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	04/24/24 08:00	04/25/24 14:30	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	04/24/24 08:00	04/25/24 14:30	67-64-1	v1
Benzene	**<11.9**	ug/kg	20.0	11.9	1	04/24/24 08:00	04/25/24 14:30	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	04/24/24 08:00	04/25/24 14:30	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	04/24/24 08:00	04/25/24 14:30	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	04/24/24 08:00	04/25/24 14:30	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	04/24/24 08:00	04/25/24 14:30	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	04/24/24 08:00	04/25/24 14:30	74-87-3	L2
Dibromochloromethane	**<171**	ug/kg	250	171	1	04/24/24 08:00	04/25/24 14:30	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	04/24/24 08:00	04/25/24 14:30	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	04/24/24 08:00	04/25/24 14:30	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	04/24/24 08:00	04/25/24 14:30	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	04/24/24 08:00	04/25/24 14:30	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	04/24/24 08:00	04/25/24 14:30	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	04/24/24 08:00	04/25/24 14:30	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	04/24/24 08:00	04/25/24 14:30	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	04/24/24 08:00	04/25/24 14:30	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	04/24/24 08:00	04/25/24 14:30	156-60-5	
Surrogates									
Toluene-d8 (S)	103	%	60-140		1	04/24/24 08:00	04/25/24 14:30	2037-26-5	
4-Bromofluorobenzene (S)	109	%	66-143		1	04/24/24 08:00	04/25/24 14:30	460-00-4	
1,2-Dichlorobenzene-d4 (S)	117	%	60-140		1	04/24/24 08:00	04/25/24 14:30	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-89.4-VOC_20240417 **Lab ID: 40277236007** Collected: 04/17/24 13:01 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.6**	ug/kg	33.4	8.6	1	04/24/24 08:00	04/25/24 15:10	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.9**	ug/kg	33.4	10.9	1	04/24/24 08:00	04/25/24 15:10	76-13-1	
1,1-Dichloroethene	**<11.1**	ug/kg	33.4	11.1	1	04/24/24 08:00	04/25/24 15:10	75-35-4	
1,2-Dichloroethane	**<7.7**	ug/kg	33.4	7.7	1	04/24/24 08:00	04/25/24 15:10	107-06-2	
2-Butanone (MEK)	**<106**	ug/kg	836	106	1	04/24/24 08:00	04/25/24 15:10	78-93-3	v1
2-Hexanone	**<332**	ug/kg	836	332	1	04/24/24 08:00	04/25/24 15:10	591-78-6	
2-Propanol	**<1070**	ug/kg	3340	1070	1	04/24/24 08:00	04/25/24 15:10	67-63-0	
Acetone	**<203**	ug/kg	836	203	1	04/24/24 08:00	04/25/24 15:10	67-64-1	v1
Benzene	**<8.0**	ug/kg	13.4	8.0	1	04/24/24 08:00	04/25/24 15:10	71-43-2	
Bromodichloromethane	**<8.0**	ug/kg	33.4	8.0	1	04/24/24 08:00	04/25/24 15:10	75-27-4	
Bromoform	**<147**	ug/kg	167	147	1	04/24/24 08:00	04/25/24 15:10	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.4	4.0	1	04/24/24 08:00	04/25/24 15:10	108-90-7	
Chloroform	**<23.9**	ug/kg	167	23.9	1	04/24/24 08:00	04/25/24 15:10	67-66-3	
Chloromethane	**<12.7**	ug/kg	33.4	12.7	1	04/24/24 08:00	04/25/24 15:10	74-87-3	L2
Dibromochloromethane	**<114**	ug/kg	167	114	1	04/24/24 08:00	04/25/24 15:10	124-48-1	
Dichlorofluoromethane	**<9.4**	ug/kg	33.4	9.4	1	04/24/24 08:00	04/25/24 15:10	75-43-4	
Methyl-tert-butyl ether	**<9.8**	ug/kg	33.4	9.8	1	04/24/24 08:00	04/25/24 15:10	1634-04-4	
Methylene Chloride	**<9.3**	ug/kg	33.4	9.3	1	04/24/24 08:00	04/25/24 15:10	75-09-2	
Tetrachloroethene	**<13.0**	ug/kg	33.4	13.0	1	04/24/24 08:00	04/25/24 15:10	127-18-4	
Toluene	**<8.4**	ug/kg	33.4	8.4	1	04/24/24 08:00	04/25/24 15:10	108-88-3	
Trichloroethene	**<12.5**	ug/kg	33.4	12.5	1	04/24/24 08:00	04/25/24 15:10	79-01-6	
Trichlorofluoromethane	**<9.7**	ug/kg	33.4	9.7	1	04/24/24 08:00	04/25/24 15:10	75-69-4	
m&p-Xylene	**<14.1**	ug/kg	66.8	14.1	1	04/24/24 08:00	04/25/24 15:10	179601-23-1	
trans-1,2-Dichloroethene	**<7.3**	ug/kg	33.4	7.3	1	04/24/24 08:00	04/25/24 15:10	156-60-5	
Surrogates									
Toluene-d8 (S)	103	%	60-140		1	04/24/24 08:00	04/25/24 15:10	2037-26-5	
4-Bromofluorobenzene (S)	106	%	66-143		1	04/24/24 08:00	04/25/24 15:10	460-00-4	
1,2-Dichlorobenzene-d4 (S)	111	%	60-140		1	04/24/24 08:00	04/25/24 15:10	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-90.17-VOC_20240417 **Lab ID: 40277236008** Collected: 04/17/24 13:01 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.8**	ug/kg	34.4	8.8	1	04/24/24 08:00	04/25/24 15:30	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.2**	ug/kg	34.4	11.2	1	04/24/24 08:00	04/25/24 15:30	76-13-1	
1,1-Dichloroethene	**<11.4**	ug/kg	34.4	11.4	1	04/24/24 08:00	04/25/24 15:30	75-35-4	
1,2-Dichloroethane	**<7.9**	ug/kg	34.4	7.9	1	04/24/24 08:00	04/25/24 15:30	107-06-2	
2-Butanone (MEK)	**<109**	ug/kg	860	109	1	04/24/24 08:00	04/25/24 15:30	78-93-3	v1
2-Hexanone	**<342**	ug/kg	860	342	1	04/24/24 08:00	04/25/24 15:30	591-78-6	
2-Propanol	**<1100**	ug/kg	3440	1100	1	04/24/24 08:00	04/25/24 15:30	67-63-0	
Acetone	**<209**	ug/kg	860	209	1	04/24/24 08:00	04/25/24 15:30	67-64-1	v1
Benzene	**<8.2**	ug/kg	13.8	8.2	1	04/24/24 08:00	04/25/24 15:30	71-43-2	
Bromodichloromethane	**<8.2**	ug/kg	34.4	8.2	1	04/24/24 08:00	04/25/24 15:30	75-27-4	
Bromoform	**<151**	ug/kg	172	151	1	04/24/24 08:00	04/25/24 15:30	75-25-2	
Chlorobenzene	**<4.1**	ug/kg	34.4	4.1	1	04/24/24 08:00	04/25/24 15:30	108-90-7	
Chloroform	**<24.6**	ug/kg	172	24.6	1	04/24/24 08:00	04/25/24 15:30	67-66-3	
Chloromethane	**<13.1**	ug/kg	34.4	13.1	1	04/24/24 08:00	04/25/24 15:30	74-87-3	L2
Dibromochloromethane	**<118**	ug/kg	172	118	1	04/24/24 08:00	04/25/24 15:30	124-48-1	
Dichlorofluoromethane	**<9.7**	ug/kg	34.4	9.7	1	04/24/24 08:00	04/25/24 15:30	75-43-4	
Methyl-tert-butyl ether	**<10.1**	ug/kg	34.4	10.1	1	04/24/24 08:00	04/25/24 15:30	1634-04-4	
Methylene Chloride	**<9.6**	ug/kg	34.4	9.6	1	04/24/24 08:00	04/25/24 15:30	75-09-2	
Tetrachloroethene	**<13.3**	ug/kg	34.4	13.3	1	04/24/24 08:00	04/25/24 15:30	127-18-4	
Toluene	**<8.7**	ug/kg	34.4	8.7	1	04/24/24 08:00	04/25/24 15:30	108-88-3	
Trichloroethene	**<12.9**	ug/kg	34.4	12.9	1	04/24/24 08:00	04/25/24 15:30	79-01-6	
Trichlorofluoromethane	**<10**	ug/kg	34.4	10	1	04/24/24 08:00	04/25/24 15:30	75-69-4	
m&p-Xylene	**<14.5**	ug/kg	68.8	14.5	1	04/24/24 08:00	04/25/24 15:30	179601-23-1	
trans-1,2-Dichloroethene	**<7.5**	ug/kg	34.4	7.5	1	04/24/24 08:00	04/25/24 15:30	156-60-5	
Surrogates									
Toluene-d8 (S)	112	%	60-140		1	04/24/24 08:00	04/25/24 15:30	2037-26-5	
4-Bromofluorobenzene (S)	106	%	66-143		1	04/24/24 08:00	04/25/24 15:30	460-00-4	
1,2-Dichlorobenzene-d4 (S)	118	%	60-140		1	04/24/24 08:00	04/25/24 15:30	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-92.65-VOC_20240417 **Lab ID: 40277236009** Collected: 04/17/24 13:01 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.3**	ug/kg	32.3	8.3	1	04/24/24 08:00	04/25/24 15:50	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.5**	ug/kg	32.3	10.5	1	04/24/24 08:00	04/25/24 15:50	76-13-1	
1,1-Dichloroethene	**<10.7**	ug/kg	32.3	10.7	1	04/24/24 08:00	04/25/24 15:50	75-35-4	
1,2-Dichloroethane	**<7.4**	ug/kg	32.3	7.4	1	04/24/24 08:00	04/25/24 15:50	107-06-2	
2-Butanone (MEK)	**<102**	ug/kg	807	102	1	04/24/24 08:00	04/25/24 15:50	78-93-3	v1
2-Hexanone	**<320**	ug/kg	807	320	1	04/24/24 08:00	04/25/24 15:50	591-78-6	
2-Propanol	**<1030**	ug/kg	3230	1030	1	04/24/24 08:00	04/25/24 15:50	67-63-0	
Acetone	**<196**	ug/kg	807	196	1	04/24/24 08:00	04/25/24 15:50	67-64-1	v1
Benzene	**<7.7**	ug/kg	12.9	7.7	1	04/24/24 08:00	04/25/24 15:50	71-43-2	
Bromodichloromethane	**<7.7**	ug/kg	32.3	7.7	1	04/24/24 08:00	04/25/24 15:50	75-27-4	
Bromoform	**<142**	ug/kg	161	142	1	04/24/24 08:00	04/25/24 15:50	75-25-2	
Chlorobenzene	**<3.9**	ug/kg	32.3	3.9	1	04/24/24 08:00	04/25/24 15:50	108-90-7	
Chloroform	**<23.1**	ug/kg	161	23.1	1	04/24/24 08:00	04/25/24 15:50	67-66-3	
Chloromethane	**<12.3**	ug/kg	32.3	12.3	1	04/24/24 08:00	04/25/24 15:50	74-87-3	L2
Dibromochloromethane	**<110**	ug/kg	161	110	1	04/24/24 08:00	04/25/24 15:50	124-48-1	
Dichlorofluoromethane	**<9.1**	ug/kg	32.3	9.1	1	04/24/24 08:00	04/25/24 15:50	75-43-4	
Methyl-tert-butyl ether	**<9.5**	ug/kg	32.3	9.5	1	04/24/24 08:00	04/25/24 15:50	1634-04-4	
Methylene Chloride	**<9.0**	ug/kg	32.3	9.0	1	04/24/24 08:00	04/25/24 15:50	75-09-2	
Tetrachloroethene	**<12.5**	ug/kg	32.3	12.5	1	04/24/24 08:00	04/25/24 15:50	127-18-4	
Toluene	**<8.1**	ug/kg	32.3	8.1	1	04/24/24 08:00	04/25/24 15:50	108-88-3	
Trichloroethene	**<12.1**	ug/kg	32.3	12.1	1	04/24/24 08:00	04/25/24 15:50	79-01-6	
Trichlorofluoromethane	**<9.4**	ug/kg	32.3	9.4	1	04/24/24 08:00	04/25/24 15:50	75-69-4	
m&p-Xylene	**<13.6**	ug/kg	64.6	13.6	1	04/24/24 08:00	04/25/24 15:50	179601-23-1	
trans-1,2-Dichloroethene	**<7.1**	ug/kg	32.3	7.1	1	04/24/24 08:00	04/25/24 15:50	156-60-5	
Surrogates									
Toluene-d8 (S)	108	%	60-140		1	04/24/24 08:00	04/25/24 15:50	2037-26-5	
4-Bromofluorobenzene (S)	109	%	66-143		1	04/24/24 08:00	04/25/24 15:50	460-00-4	
1,2-Dichlorobenzene-d4 (S)	114	%	60-140		1	04/24/24 08:00	04/25/24 15:50	2199-69-1	

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(920)469-2436

ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-96.8-VOC_20240417 **Lab ID: 40277236010** Collected: 04/17/24 14:56 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<6.2**	ug/kg	24.2	6.2	1	04/24/24 08:00	04/25/24 16:10	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<7.9**	ug/kg	24.2	7.9	1	04/24/24 08:00	04/25/24 16:10	76-13-1	
1,1-Dichloroethene	**<8.0**	ug/kg	24.2	8.0	1	04/24/24 08:00	04/25/24 16:10	75-35-4	
1,2-Dichloroethane	**<5.6**	ug/kg	24.2	5.6	1	04/24/24 08:00	04/25/24 16:10	107-06-2	
2-Butanone (MEK)	**<76.5**	ug/kg	605	76.5	1	04/24/24 08:00	04/25/24 16:10	78-93-3	v1
2-Hexanone	**<240**	ug/kg	605	240	1	04/24/24 08:00	04/25/24 16:10	591-78-6	
2-Propanol	**<772**	ug/kg	2420	772	1	04/24/24 08:00	04/25/24 16:10	67-63-0	
Acetone	**<147**	ug/kg	605	147	1	04/24/24 08:00	04/25/24 16:10	67-64-1	v1
Benzene	**<5.8**	ug/kg	9.7	5.8	1	04/24/24 08:00	04/25/24 16:10	71-43-2	
Bromodichloromethane	**<5.8**	ug/kg	24.2	5.8	1	04/24/24 08:00	04/25/24 16:10	75-27-4	
Bromoform	**<107**	ug/kg	121	107	1	04/24/24 08:00	04/25/24 16:10	75-25-2	
Chlorobenzene	**<2.9**	ug/kg	24.2	2.9	1	04/24/24 08:00	04/25/24 16:10	108-90-7	
Chloroform	**<17.3**	ug/kg	121	17.3	1	04/24/24 08:00	04/25/24 16:10	67-66-3	
Chloromethane	**<9.2**	ug/kg	24.2	9.2	1	04/24/24 08:00	04/25/24 16:10	74-87-3	L2
Dibromochloromethane	**<82.8**	ug/kg	121	82.8	1	04/24/24 08:00	04/25/24 16:10	124-48-1	
Dichlorofluoromethane	**<6.8**	ug/kg	24.2	6.8	1	04/24/24 08:00	04/25/24 16:10	75-43-4	
Methyl-tert-butyl ether	**<7.1**	ug/kg	24.2	7.1	1	04/24/24 08:00	04/25/24 16:10	1634-04-4	
Methylene Chloride	**<6.7**	ug/kg	24.2	6.7	1	04/24/24 08:00	04/25/24 16:10	75-09-2	
Tetrachloroethene	**<9.4**	ug/kg	24.2	9.4	1	04/24/24 08:00	04/25/24 16:10	127-18-4	
Toluene	**<6.1**	ug/kg	24.2	6.1	1	04/24/24 08:00	04/25/24 16:10	108-88-3	
Trichloroethene	**<9.1**	ug/kg	24.2	9.1	1	04/24/24 08:00	04/25/24 16:10	79-01-6	
Trichlorofluoromethane	**<7.0**	ug/kg	24.2	7.0	1	04/24/24 08:00	04/25/24 16:10	75-69-4	
m&p-Xylene	**<10.2**	ug/kg	48.4	10.2	1	04/24/24 08:00	04/25/24 16:10	179601-23-1	
trans-1,2-Dichloroethene	**<5.3**	ug/kg	24.2	5.3	1	04/24/24 08:00	04/25/24 16:10	156-60-5	
Surrogates									
Toluene-d8 (S)	124	%	60-140		1	04/24/24 08:00	04/25/24 16:10	2037-26-5	
4-Bromofluorobenzene (S)	113	%	66-143		1	04/24/24 08:00	04/25/24 16:10	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	60-140		1	04/24/24 08:00	04/25/24 16:10	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-100.8-VOC_20240417 **Lab ID: 40277236011** Collected: 04/17/24 15:33 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.5**	ug/kg	33.2	8.5	1	04/24/24 08:00	04/25/24 16:30	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.8**	ug/kg	33.2	10.8	1	04/24/24 08:00	04/25/24 16:30	76-13-1	
1,1-Dichloroethene	**<11.0**	ug/kg	33.2	11.0	1	04/24/24 08:00	04/25/24 16:30	75-35-4	
1,2-Dichloroethane	**<7.6**	ug/kg	33.2	7.6	1	04/24/24 08:00	04/25/24 16:30	107-06-2	
2-Butanone (MEK)	**<105**	ug/kg	829	105	1	04/24/24 08:00	04/25/24 16:30	78-93-3	v1
2-Hexanone	**<329**	ug/kg	829	329	1	04/24/24 08:00	04/25/24 16:30	591-78-6	
2-Propanol	**<1060**	ug/kg	3320	1060	1	04/24/24 08:00	04/25/24 16:30	67-63-0	
Acetone	**<202**	ug/kg	829	202	1	04/24/24 08:00	04/25/24 16:30	67-64-1	v1
Benzene	**<7.9**	ug/kg	13.3	7.9	1	04/24/24 08:00	04/25/24 16:30	71-43-2	
Bromodichloromethane	**<7.9**	ug/kg	33.2	7.9	1	04/24/24 08:00	04/25/24 16:30	75-27-4	
Bromoform	**<146**	ug/kg	166	146	1	04/24/24 08:00	04/25/24 16:30	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.2	4.0	1	04/24/24 08:00	04/25/24 16:30	108-90-7	
Chloroform	**<23.7**	ug/kg	166	23.7	1	04/24/24 08:00	04/25/24 16:30	67-66-3	
Chloromethane	**<12.6**	ug/kg	33.2	12.6	1	04/24/24 08:00	04/25/24 16:30	74-87-3	L2
Dibromochloromethane	**<113**	ug/kg	166	113	1	04/24/24 08:00	04/25/24 16:30	124-48-1	
Dichlorofluoromethane	**<9.4**	ug/kg	33.2	9.4	1	04/24/24 08:00	04/25/24 16:30	75-43-4	
Methyl-tert-butyl ether	**<9.7**	ug/kg	33.2	9.7	1	04/24/24 08:00	04/25/24 16:30	1634-04-4	
Methylene Chloride	**<9.2**	ug/kg	33.2	9.2	1	04/24/24 08:00	04/25/24 16:30	75-09-2	
Tetrachloroethene	**<12.9**	ug/kg	33.2	12.9	1	04/24/24 08:00	04/25/24 16:30	127-18-4	
Toluene	**<8.4**	ug/kg	33.2	8.4	1	04/24/24 08:00	04/25/24 16:30	108-88-3	
Trichloroethene	**<12.4**	ug/kg	33.2	12.4	1	04/24/24 08:00	04/25/24 16:30	79-01-6	
Trichlorofluoromethane	**<9.6**	ug/kg	33.2	9.6	1	04/24/24 08:00	04/25/24 16:30	75-69-4	
m&p-Xylene	**<14.0**	ug/kg	66.3	14.0	1	04/24/24 08:00	04/25/24 16:30	179601-23-1	
trans-1,2-Dichloroethene	**<7.2**	ug/kg	33.2	7.2	1	04/24/24 08:00	04/25/24 16:30	156-60-5	
Surrogates									
Toluene-d8 (S)	107	%	60-140		1	04/24/24 08:00	04/25/24 16:30	2037-26-5	
4-Bromofluorobenzene (S)	108	%	66-143		1	04/24/24 08:00	04/25/24 16:30	460-00-4	
1,2-Dichlorobenzene-d4 (S)	118	%	60-140		1	04/24/24 08:00	04/25/24 16:30	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-102.1-VOC_20240417 **Lab ID: 40277236012** Collected: 04/17/24 15:34 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.2**	ug/kg	31.9	8.2	1	04/24/24 08:00	04/25/24 16:50	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.4**	ug/kg	31.9	10.4	1	04/24/24 08:00	04/25/24 16:50	76-13-1	
1,1-Dichloroethene	**<10.6**	ug/kg	31.9	10.6	1	04/24/24 08:00	04/25/24 16:50	75-35-4	
1,2-Dichloroethane	**<7.3**	ug/kg	31.9	7.3	1	04/24/24 08:00	04/25/24 16:50	107-06-2	
2-Butanone (MEK)	**<101**	ug/kg	799	101	1	04/24/24 08:00	04/25/24 16:50	78-93-3	v1
2-Hexanone	**<317**	ug/kg	799	317	1	04/24/24 08:00	04/25/24 16:50	591-78-6	
2-Propanol	**<1020**	ug/kg	3190	1020	1	04/24/24 08:00	04/25/24 16:50	67-63-0	
Acetone	**<194**	ug/kg	799	194	1	04/24/24 08:00	04/25/24 16:50	67-64-1	v1
Benzene	**<7.6**	ug/kg	12.8	7.6	1	04/24/24 08:00	04/25/24 16:50	71-43-2	
Bromodichloromethane	**<7.6**	ug/kg	31.9	7.6	1	04/24/24 08:00	04/25/24 16:50	75-27-4	
Bromoform	**<141**	ug/kg	160	141	1	04/24/24 08:00	04/25/24 16:50	75-25-2	
Chlorobenzene	**<3.8**	ug/kg	31.9	3.8	1	04/24/24 08:00	04/25/24 16:50	108-90-7	
Chloroform	**<22.9**	ug/kg	160	22.9	1	04/24/24 08:00	04/25/24 16:50	67-66-3	
Chloromethane	**<12.1**	ug/kg	31.9	12.1	1	04/24/24 08:00	04/25/24 16:50	74-87-3	L2
Dibromochloromethane	**<109**	ug/kg	160	109	1	04/24/24 08:00	04/25/24 16:50	124-48-1	
Dichlorofluoromethane	**<9.0**	ug/kg	31.9	9.0	1	04/24/24 08:00	04/25/24 16:50	75-43-4	
Methyl-tert-butyl ether	**<9.4**	ug/kg	31.9	9.4	1	04/24/24 08:00	04/25/24 16:50	1634-04-4	
Methylene Chloride	**<8.9**	ug/kg	31.9	8.9	1	04/24/24 08:00	04/25/24 16:50	75-09-2	
Tetrachloroethene	**<12.4**	ug/kg	31.9	12.4	1	04/24/24 08:00	04/25/24 16:50	127-18-4	
Toluene	**<8.1**	ug/kg	31.9	8.1	1	04/24/24 08:00	04/25/24 16:50	108-88-3	
Trichloroethene	**<11.9**	ug/kg	31.9	11.9	1	04/24/24 08:00	04/25/24 16:50	79-01-6	
Trichlorofluoromethane	**<9.3**	ug/kg	31.9	9.3	1	04/24/24 08:00	04/25/24 16:50	75-69-4	
m&p-Xylene	**<13.5**	ug/kg	63.9	13.5	1	04/24/24 08:00	04/25/24 16:50	179601-23-1	
trans-1,2-Dichloroethene	**<7.0**	ug/kg	31.9	7.0	1	04/24/24 08:00	04/25/24 16:50	156-60-5	
Surrogates									
Toluene-d8 (S)	101	%	60-140		1	04/24/24 08:00	04/25/24 16:50	2037-26-5	
4-Bromofluorobenzene (S)	98	%	66-143		1	04/24/24 08:00	04/25/24 16:50	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	60-140		1	04/24/24 08:00	04/25/24 16:50	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-104.6-VOC_20240418 **Lab ID: 40277236013** Collected: 04/18/24 09:25 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.6**	ug/kg	37.7	9.6	1	04/24/24 08:00	04/25/24 17:11	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.3**	ug/kg	37.7	12.3	1	04/24/24 08:00	04/25/24 17:11	76-13-1	
1,1-Dichloroethene	**<12.5**	ug/kg	37.7	12.5	1	04/24/24 08:00	04/25/24 17:11	75-35-4	
1,2-Dichloroethane	**<8.7**	ug/kg	37.7	8.7	1	04/24/24 08:00	04/25/24 17:11	107-06-2	
2-Butanone (MEK)	**<119**	ug/kg	942	119	1	04/24/24 08:00	04/25/24 17:11	78-93-3	v1
2-Hexanone	**<374**	ug/kg	942	374	1	04/24/24 08:00	04/25/24 17:11	591-78-6	
2-Propanol	**<1200**	ug/kg	3770	1200	1	04/24/24 08:00	04/25/24 17:11	67-63-0	
Acetone	**<229**	ug/kg	942	229	1	04/24/24 08:00	04/25/24 17:11	67-64-1	v1
Benzene	**<9.0**	ug/kg	15.1	9.0	1	04/24/24 08:00	04/25/24 17:11	71-43-2	
Bromodichloromethane	**<9.0**	ug/kg	37.7	9.0	1	04/24/24 08:00	04/25/24 17:11	75-27-4	
Bromoform	**<166**	ug/kg	188	166	1	04/24/24 08:00	04/25/24 17:11	75-25-2	
Chlorobenzene	**<4.5**	ug/kg	37.7	4.5	1	04/24/24 08:00	04/25/24 17:11	108-90-7	
Chloroform	**<27.0**	ug/kg	188	27.0	1	04/24/24 08:00	04/25/24 17:11	67-66-3	
Chloromethane	**<14.3**	ug/kg	37.7	14.3	1	04/24/24 08:00	04/25/24 17:11	74-87-3	L2
Dibromochloromethane	**<129**	ug/kg	188	129	1	04/24/24 08:00	04/25/24 17:11	124-48-1	
Dichlorofluoromethane	**<10.6**	ug/kg	37.7	10.6	1	04/24/24 08:00	04/25/24 17:11	75-43-4	
Methyl-tert-butyl ether	**<11.1**	ug/kg	37.7	11.1	1	04/24/24 08:00	04/25/24 17:11	1634-04-4	
Methylene Chloride	**<10.5**	ug/kg	37.7	10.5	1	04/24/24 08:00	04/25/24 17:11	75-09-2	
Tetrachloroethene	**<14.6**	ug/kg	37.7	14.6	1	04/24/24 08:00	04/25/24 17:11	127-18-4	
Toluene	**<9.5**	ug/kg	37.7	9.5	1	04/24/24 08:00	04/25/24 17:11	108-88-3	
Trichloroethene	**<14.1**	ug/kg	37.7	14.1	1	04/24/24 08:00	04/25/24 17:11	79-01-6	
Trichlorofluoromethane	**<10.9**	ug/kg	37.7	10.9	1	04/24/24 08:00	04/25/24 17:11	75-69-4	
m&p-Xylene	**<15.9**	ug/kg	75.4	15.9	1	04/24/24 08:00	04/25/24 17:11	179601-23-1	
trans-1,2-Dichloroethene	**<8.2**	ug/kg	37.7	8.2	1	04/24/24 08:00	04/25/24 17:11	156-60-5	
Surrogates									
Toluene-d8 (S)	112	%	60-140		1	04/24/24 08:00	04/25/24 17:11	2037-26-5	
4-Bromofluorobenzene (S)	110	%	66-143		1	04/24/24 08:00	04/25/24 17:11	460-00-4	
1,2-Dichlorobenzene-d4 (S)	114	%	60-140		1	04/24/24 08:00	04/25/24 17:11	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-104.85-VOC_240418 **Lab ID: 40277236014** Collected: 04/18/24 09:26 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<6.7**	ug/kg	26.3	6.7	1	04/24/24 08:00	04/25/24 17:31	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<8.6**	ug/kg	26.3	8.6	1	04/24/24 08:00	04/25/24 17:31	76-13-1	
1,1-Dichloroethene	**<8.7**	ug/kg	26.3	8.7	1	04/24/24 08:00	04/25/24 17:31	75-35-4	
1,2-Dichloroethane	**<6.1**	ug/kg	26.3	6.1	1	04/24/24 08:00	04/25/24 17:31	107-06-2	
2-Butanone (MEK)	**<83.1**	ug/kg	658	83.1	1	04/24/24 08:00	04/25/24 17:31	78-93-3	v1
2-Hexanone	**<261**	ug/kg	658	261	1	04/24/24 08:00	04/25/24 17:31	591-78-6	
2-Propanol	**<838**	ug/kg	2630	838	1	04/24/24 08:00	04/25/24 17:31	67-63-0	
Acetone	**<160**	ug/kg	658	160	1	04/24/24 08:00	04/25/24 17:31	67-64-1	v1
Benzene	**<6.3**	ug/kg	10.5	6.3	1	04/24/24 08:00	04/25/24 17:31	71-43-2	
Bromodichloromethane	**<6.3**	ug/kg	26.3	6.3	1	04/24/24 08:00	04/25/24 17:31	75-27-4	
Bromoform	**<116**	ug/kg	132	116	1	04/24/24 08:00	04/25/24 17:31	75-25-2	
Chlorobenzene	**<3.2**	ug/kg	26.3	3.2	1	04/24/24 08:00	04/25/24 17:31	108-90-7	
Chloroform	**<18.8**	ug/kg	132	18.8	1	04/24/24 08:00	04/25/24 17:31	67-66-3	
Chloromethane	**<10**	ug/kg	26.3	10	1	04/24/24 08:00	04/25/24 17:31	74-87-3	L2
Dibromochloromethane	**<89.9**	ug/kg	132	89.9	1	04/24/24 08:00	04/25/24 17:31	124-48-1	
Dichlorofluoromethane	**<7.4**	ug/kg	26.3	7.4	1	04/24/24 08:00	04/25/24 17:31	75-43-4	
Methyl-tert-butyl ether	**<7.7**	ug/kg	26.3	7.7	1	04/24/24 08:00	04/25/24 17:31	1634-04-4	
Methylene Chloride	**<7.3**	ug/kg	26.3	7.3	1	04/24/24 08:00	04/25/24 17:31	75-09-2	
Tetrachloroethene	**<10.2**	ug/kg	26.3	10.2	1	04/24/24 08:00	04/25/24 17:31	127-18-4	
Toluene	**<6.6**	ug/kg	26.3	6.6	1	04/24/24 08:00	04/25/24 17:31	108-88-3	
Trichloroethene	**<9.8**	ug/kg	26.3	9.8	1	04/24/24 08:00	04/25/24 17:31	79-01-6	
Trichlorofluoromethane	**<7.6**	ug/kg	26.3	7.6	1	04/24/24 08:00	04/25/24 17:31	75-69-4	
m&p-Xylene	**<11.1**	ug/kg	52.6	11.1	1	04/24/24 08:00	04/25/24 17:31	179601-23-1	
trans-1,2-Dichloroethene	**<5.8**	ug/kg	26.3	5.8	1	04/24/24 08:00	04/25/24 17:31	156-60-5	
Surrogates									
Toluene-d8 (S)	124	%	60-140		1	04/24/24 08:00	04/25/24 17:31	2037-26-5	
4-Bromofluorobenzene (S)	110	%	66-143		1	04/24/24 08:00	04/25/24 17:31	460-00-4	
1,2-Dichlorobenzene-d4 (S)	117	%	60-140		1	04/24/24 08:00	04/25/24 17:31	2199-69-1	

REPORT OF LABORATORY ANALYSIS

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-106.5-VOC_20240418 **Lab ID: 40277236015** Collected: 04/18/24 09:58 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10**	ug/kg	39.0	10	1	04/24/24 08:00	04/25/24 17:51	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.7**	ug/kg	39.0	12.7	1	04/24/24 08:00	04/25/24 17:51	76-13-1	
1,1-Dichloroethene	**<12.9**	ug/kg	39.0	12.9	1	04/24/24 08:00	04/25/24 17:51	75-35-4	
1,2-Dichloroethane	**<9.0**	ug/kg	39.0	9.0	1	04/24/24 08:00	04/25/24 17:51	107-06-2	
2-Butanone (MEK)	**<123**	ug/kg	974	123	1	04/24/24 08:00	04/25/24 17:51	78-93-3	v1
2-Hexanone	**<387**	ug/kg	974	387	1	04/24/24 08:00	04/25/24 17:51	591-78-6	
2-Propanol	**<1240**	ug/kg	3900	1240	1	04/24/24 08:00	04/25/24 17:51	67-63-0	
Acetone	**<237**	ug/kg	974	237	1	04/24/24 08:00	04/25/24 17:51	67-64-1	v1
Benzene	**<9.3**	ug/kg	15.6	9.3	1	04/24/24 08:00	04/25/24 17:51	71-43-2	
Bromodichloromethane	**<9.3**	ug/kg	39.0	9.3	1	04/24/24 08:00	04/25/24 17:51	75-27-4	
Bromoform	**<171**	ug/kg	195	171	1	04/24/24 08:00	04/25/24 17:51	75-25-2	
Chlorobenzene	**<4.7**	ug/kg	39.0	4.7	1	04/24/24 08:00	04/25/24 17:51	108-90-7	
Chloroform	**<27.9**	ug/kg	195	27.9	1	04/24/24 08:00	04/25/24 17:51	67-66-3	
Chloromethane	**<14.8**	ug/kg	39.0	14.8	1	04/24/24 08:00	04/25/24 17:51	74-87-3	L2
Dibromochloromethane	**<133**	ug/kg	195	133	1	04/24/24 08:00	04/25/24 17:51	124-48-1	
Dichlorofluoromethane	**<11.0**	ug/kg	39.0	11.0	1	04/24/24 08:00	04/25/24 17:51	75-43-4	
Methyl-tert-butyl ether	**<11.5**	ug/kg	39.0	11.5	1	04/24/24 08:00	04/25/24 17:51	1634-04-4	
Methylene Chloride	**<10.8**	ug/kg	39.0	10.8	1	04/24/24 08:00	04/25/24 17:51	75-09-2	
Tetrachloroethene	**<15.1**	ug/kg	39.0	15.1	1	04/24/24 08:00	04/25/24 17:51	127-18-4	
Toluene	**<9.8**	ug/kg	39.0	9.8	1	04/24/24 08:00	04/25/24 17:51	108-88-3	
Trichloroethene	**<14.6**	ug/kg	39.0	14.6	1	04/24/24 08:00	04/25/24 17:51	79-01-6	
Trichlorofluoromethane	**<11.3**	ug/kg	39.0	11.3	1	04/24/24 08:00	04/25/24 17:51	75-69-4	
m&p-Xylene	**<16.4**	ug/kg	77.9	16.4	1	04/24/24 08:00	04/25/24 17:51	179601-23-1	
trans-1,2-Dichloroethene	**<8.5**	ug/kg	39.0	8.5	1	04/24/24 08:00	04/25/24 17:51	156-60-5	
Surrogates									
Toluene-d8 (S)	107	%	60-140		1	04/24/24 08:00	04/25/24 17:51	2037-26-5	
4-Bromofluorobenzene (S)	107	%	66-143		1	04/24/24 08:00	04/25/24 17:51	460-00-4	
1,2-Dichlorobenzene-d4 (S)	116	%	60-140		1	04/24/24 08:00	04/25/24 17:51	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-107.3-VOC_20240418 **Lab ID: 40277236016** Collected: 04/18/24 09:59 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.7**	ug/kg	34.1	8.7	1	04/24/24 08:00	04/25/24 18:11	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.1**	ug/kg	34.1	11.1	1	04/24/24 08:00	04/25/24 18:11	76-13-1	
1,1-Dichloroethene	**<11.3**	ug/kg	34.1	11.3	1	04/24/24 08:00	04/25/24 18:11	75-35-4	
1,2-Dichloroethane	**<7.8**	ug/kg	34.1	7.8	1	04/24/24 08:00	04/25/24 18:11	107-06-2	
2-Butanone (MEK)	**<108**	ug/kg	853	108	1	04/24/24 08:00	04/25/24 18:11	78-93-3	v1
2-Hexanone	**<339**	ug/kg	853	339	1	04/24/24 08:00	04/25/24 18:11	591-78-6	
2-Propanol	**<1090**	ug/kg	3410	1090	1	04/24/24 08:00	04/25/24 18:11	67-63-0	
Acetone	**<208**	ug/kg	853	208	1	04/24/24 08:00	04/25/24 18:11	67-64-1	v1
Benzene	**<8.1**	ug/kg	13.6	8.1	1	04/24/24 08:00	04/25/24 18:11	71-43-2	
Bromodichloromethane	**<8.1**	ug/kg	34.1	8.1	1	04/24/24 08:00	04/25/24 18:11	75-27-4	
Bromoform	**<150**	ug/kg	171	150	1	04/24/24 08:00	04/25/24 18:11	75-25-2	
Chlorobenzene	**<4.1**	ug/kg	34.1	4.1	1	04/24/24 08:00	04/25/24 18:11	108-90-7	
Chloroform	**<24.4**	ug/kg	171	24.4	1	04/24/24 08:00	04/25/24 18:11	67-66-3	
Chloromethane	**<13.0**	ug/kg	34.1	13.0	1	04/24/24 08:00	04/25/24 18:11	74-87-3	L2
Dibromochloromethane	**<117**	ug/kg	171	117	1	04/24/24 08:00	04/25/24 18:11	124-48-1	
Dichlorofluoromethane	**<9.6**	ug/kg	34.1	9.6	1	04/24/24 08:00	04/25/24 18:11	75-43-4	
Methyl-tert-butyl ether	**<10.0**	ug/kg	34.1	10.0	1	04/24/24 08:00	04/25/24 18:11	1634-04-4	
Methylene Chloride	**<9.5**	ug/kg	34.1	9.5	1	04/24/24 08:00	04/25/24 18:11	75-09-2	
Tetrachloroethene	**<13.2**	ug/kg	34.1	13.2	1	04/24/24 08:00	04/25/24 18:11	127-18-4	
Toluene	**<8.6**	ug/kg	34.1	8.6	1	04/24/24 08:00	04/25/24 18:11	108-88-3	
Trichloroethene	**<12.8**	ug/kg	34.1	12.8	1	04/24/24 08:00	04/25/24 18:11	79-01-6	
Trichlorofluoromethane	**<9.9**	ug/kg	34.1	9.9	1	04/24/24 08:00	04/25/24 18:11	75-69-4	
m&p-Xylene	**<14.4**	ug/kg	68.2	14.4	1	04/24/24 08:00	04/25/24 18:11	179601-23-1	
trans-1,2-Dichloroethene	**<7.5**	ug/kg	34.1	7.5	1	04/24/24 08:00	04/25/24 18:11	156-60-5	
Surrogates									
Toluene-d8 (S)	101	%	60-140		1	04/24/24 08:00	04/25/24 18:11	2037-26-5	
4-Bromofluorobenzene (S)	101	%	66-143		1	04/24/24 08:00	04/25/24 18:11	460-00-4	
1,2-Dichlorobenzene-d4 (S)	109	%	60-140		1	04/24/24 08:00	04/25/24 18:11	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-112.35-VOC_240418 **Lab ID: 40277236017** Collected: 04/18/24 13:45 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.2**	ug/kg	35.8	9.2	1	04/24/24 08:00	04/25/24 18:31	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.7**	ug/kg	35.8	11.7	1	04/24/24 08:00	04/25/24 18:31	76-13-1	
1,1-Dichloroethene	**<11.9**	ug/kg	35.8	11.9	1	04/24/24 08:00	04/25/24 18:31	75-35-4	
1,2-Dichloroethane	**<8.2**	ug/kg	35.8	8.2	1	04/24/24 08:00	04/25/24 18:31	107-06-2	
2-Butanone (MEK)	**<113**	ug/kg	895	113	1	04/24/24 08:00	04/25/24 18:31	78-93-3	v1
2-Hexanone	**<356**	ug/kg	895	356	1	04/24/24 08:00	04/25/24 18:31	591-78-6	
2-Propanol	**<1140**	ug/kg	3580	1140	1	04/24/24 08:00	04/25/24 18:31	67-63-0	
Acetone	**<218**	ug/kg	895	218	1	04/24/24 08:00	04/25/24 18:31	67-64-1	v1
Benzene	**<8.5**	ug/kg	14.3	8.5	1	04/24/24 08:00	04/25/24 18:31	71-43-2	
Bromodichloromethane	**<8.5**	ug/kg	35.8	8.5	1	04/24/24 08:00	04/25/24 18:31	75-27-4	
Bromoform	**<158**	ug/kg	179	158	1	04/24/24 08:00	04/25/24 18:31	75-25-2	
Chlorobenzene	**<4.3**	ug/kg	35.8	4.3	1	04/24/24 08:00	04/25/24 18:31	108-90-7	
Chloroform	**<25.6**	ug/kg	179	25.6	1	04/24/24 08:00	04/25/24 18:31	67-66-3	
Chloromethane	**<13.6**	ug/kg	35.8	13.6	1	04/24/24 08:00	04/25/24 18:31	74-87-3	L2
Dibromochloromethane	**<122**	ug/kg	179	122	1	04/24/24 08:00	04/25/24 18:31	124-48-1	
Dichlorofluoromethane	**<10.1**	ug/kg	35.8	10.1	1	04/24/24 08:00	04/25/24 18:31	75-43-4	
Methyl-tert-butyl ether	**<10.5**	ug/kg	35.8	10.5	1	04/24/24 08:00	04/25/24 18:31	1634-04-4	
Methylene Chloride	**<10**	ug/kg	35.8	10	1	04/24/24 08:00	04/25/24 18:31	75-09-2	
Tetrachloroethene	**<13.9**	ug/kg	35.8	13.9	1	04/24/24 08:00	04/25/24 18:31	127-18-4	
Toluene	**<9.0**	ug/kg	35.8	9.0	1	04/24/24 08:00	04/25/24 18:31	108-88-3	
Trichloroethene	**<13.4**	ug/kg	35.8	13.4	1	04/24/24 08:00	04/25/24 18:31	79-01-6	
Trichlorofluoromethane	**<10.4**	ug/kg	35.8	10.4	1	04/24/24 08:00	04/25/24 18:31	75-69-4	
m&p-Xylene	**<15.1**	ug/kg	71.6	15.1	1	04/24/24 08:00	04/25/24 18:31	179601-23-1	
trans-1,2-Dichloroethene	**<7.8**	ug/kg	35.8	7.8	1	04/24/24 08:00	04/25/24 18:31	156-60-5	
Surrogates									
Toluene-d8 (S)	105	%	60-140		1	04/24/24 08:00	04/25/24 18:31	2037-26-5	
4-Bromofluorobenzene (S)	108	%	66-143		1	04/24/24 08:00	04/25/24 18:31	460-00-4	
1,2-Dichlorobenzene-d4 (S)	115	%	60-140		1	04/24/24 08:00	04/25/24 18:31	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-113.75-VOC_240419 **Lab ID: 40277236018** Collected: 04/19/24 11:43 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.5**	ug/kg	33.0	8.5	1	04/24/24 08:00	04/25/24 18:51	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.8**	ug/kg	33.0	10.8	1	04/24/24 08:00	04/25/24 18:51	76-13-1	
1,1-Dichloroethene	**<11.0**	ug/kg	33.0	11.0	1	04/24/24 08:00	04/25/24 18:51	75-35-4	
1,2-Dichloroethane	**<7.6**	ug/kg	33.0	7.6	1	04/24/24 08:00	04/25/24 18:51	107-06-2	
2-Butanone (MEK)	**<104**	ug/kg	826	104	1	04/24/24 08:00	04/25/24 18:51	78-93-3	v1
2-Hexanone	**<328**	ug/kg	826	328	1	04/24/24 08:00	04/25/24 18:51	591-78-6	
2-Propanol	**<1050**	ug/kg	3300	1050	1	04/24/24 08:00	04/25/24 18:51	67-63-0	
Acetone	**<201**	ug/kg	826	201	1	04/24/24 08:00	04/25/24 18:51	67-64-1	v1
Benzene	**<7.9**	ug/kg	13.2	7.9	1	04/24/24 08:00	04/25/24 18:51	71-43-2	
Bromodichloromethane	**<7.9**	ug/kg	33.0	7.9	1	04/24/24 08:00	04/25/24 18:51	75-27-4	
Bromoform	**<145**	ug/kg	165	145	1	04/24/24 08:00	04/25/24 18:51	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.0	4.0	1	04/24/24 08:00	04/25/24 18:51	108-90-7	
Chloroform	**<23.6**	ug/kg	165	23.6	1	04/24/24 08:00	04/25/24 18:51	67-66-3	
Chloromethane	**<12.5**	ug/kg	33.0	12.5	1	04/24/24 08:00	04/25/24 18:51	74-87-3	L2
Dibromochloromethane	**<113**	ug/kg	165	113	1	04/24/24 08:00	04/25/24 18:51	124-48-1	
Dichlorofluoromethane	**<9.3**	ug/kg	33.0	9.3	1	04/24/24 08:00	04/25/24 18:51	75-43-4	
Methyl-tert-butyl ether	**<9.7**	ug/kg	33.0	9.7	1	04/24/24 08:00	04/25/24 18:51	1634-04-4	
Methylene Chloride	**<9.2**	ug/kg	33.0	9.2	1	04/24/24 08:00	04/25/24 18:51	75-09-2	
Tetrachloroethene	**<12.8**	ug/kg	33.0	12.8	1	04/24/24 08:00	04/25/24 18:51	127-18-4	
Toluene	**<8.3**	ug/kg	33.0	8.3	1	04/24/24 08:00	04/25/24 18:51	108-88-3	
Trichloroethene	**<12.4**	ug/kg	33.0	12.4	1	04/24/24 08:00	04/25/24 18:51	79-01-6	
Trichlorofluoromethane	**<9.6**	ug/kg	33.0	9.6	1	04/24/24 08:00	04/25/24 18:51	75-69-4	
m&p-Xylene	**<13.9**	ug/kg	66.1	13.9	1	04/24/24 08:00	04/25/24 18:51	179601-23-1	
trans-1,2-Dichloroethene	**<7.2**	ug/kg	33.0	7.2	1	04/24/24 08:00	04/25/24 18:51	156-60-5	
Surrogates									
Toluene-d8 (S)	110	%	60-140		1	04/24/24 08:00	04/25/24 18:51	2037-26-5	
4-Bromofluorobenzene (S)	105	%	66-143		1	04/24/24 08:00	04/25/24 18:51	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	60-140		1	04/24/24 08:00	04/25/24 18:51	2199-69-1	

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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-114-VOC_20240419 **Lab ID: 40277236019** Collected: 04/19/24 11:44 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.7**	ug/kg	34.1	8.7	1	04/24/24 08:00	04/25/24 19:11	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.1**	ug/kg	34.1	11.1	1	04/24/24 08:00	04/25/24 19:11	76-13-1	
1,1-Dichloroethene	**<11.3**	ug/kg	34.1	11.3	1	04/24/24 08:00	04/25/24 19:11	75-35-4	
1,2-Dichloroethane	**<7.8**	ug/kg	34.1	7.8	1	04/24/24 08:00	04/25/24 19:11	107-06-2	
2-Butanone (MEK)	**<108**	ug/kg	852	108	1	04/24/24 08:00	04/25/24 19:11	78-93-3	v1
2-Hexanone	**<338**	ug/kg	852	338	1	04/24/24 08:00	04/25/24 19:11	591-78-6	
2-Propanol	**<1090**	ug/kg	3410	1090	1	04/24/24 08:00	04/25/24 19:11	67-63-0	
Acetone	**<207**	ug/kg	852	207	1	04/24/24 08:00	04/25/24 19:11	67-64-1	v1
Benzene	**<8.1**	ug/kg	13.6	8.1	1	04/24/24 08:00	04/25/24 19:11	71-43-2	
Bromodichloromethane	**<8.1**	ug/kg	34.1	8.1	1	04/24/24 08:00	04/25/24 19:11	75-27-4	
Bromoform	**<150**	ug/kg	170	150	1	04/24/24 08:00	04/25/24 19:11	75-25-2	
Chlorobenzene	**<4.1**	ug/kg	34.1	4.1	1	04/24/24 08:00	04/25/24 19:11	108-90-7	
Chloroform	**<24.4**	ug/kg	170	24.4	1	04/24/24 08:00	04/25/24 19:11	67-66-3	
Chloromethane	**<12.9**	ug/kg	34.1	12.9	1	04/24/24 08:00	04/25/24 19:11	74-87-3	L2
Dibromochloromethane	**<116**	ug/kg	170	116	1	04/24/24 08:00	04/25/24 19:11	124-48-1	
Dichlorofluoromethane	**<9.6**	ug/kg	34.1	9.6	1	04/24/24 08:00	04/25/24 19:11	75-43-4	
Methyl-tert-butyl ether	**<10.0**	ug/kg	34.1	10.0	1	04/24/24 08:00	04/25/24 19:11	1634-04-4	
Methylene Chloride	**<9.5**	ug/kg	34.1	9.5	1	04/24/24 08:00	04/25/24 19:11	75-09-2	
Tetrachloroethene	**<13.2**	ug/kg	34.1	13.2	1	04/24/24 08:00	04/25/24 19:11	127-18-4	
Toluene	**<8.6**	ug/kg	34.1	8.6	1	04/24/24 08:00	04/25/24 19:11	108-88-3	
Trichloroethene	**<12.7**	ug/kg	34.1	12.7	1	04/24/24 08:00	04/25/24 19:11	79-01-6	
Trichlorofluoromethane	**<9.9**	ug/kg	34.1	9.9	1	04/24/24 08:00	04/25/24 19:11	75-69-4	
m&p-Xylene	**<14.4**	ug/kg	68.1	14.4	1	04/24/24 08:00	04/25/24 19:11	179601-23-1	
trans-1,2-Dichloroethene	**<7.4**	ug/kg	34.1	7.4	1	04/24/24 08:00	04/25/24 19:11	156-60-5	
Surrogates									
Toluene-d8 (S)	103	%	60-140		1	04/24/24 08:00	04/25/24 19:11	2037-26-5	
4-Bromofluorobenzene (S)	104	%	66-143		1	04/24/24 08:00	04/25/24 19:11	460-00-4	
1,2-Dichlorobenzene-d4 (S)	114	%	60-140		1	04/24/24 08:00	04/25/24 19:11	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-118.75-VOC_240419 **Lab ID: 40277236020** Collected: 04/19/24 12:25 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.1**	ug/kg	31.7	8.1	1	04/24/24 10:00	04/26/24 13:05	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.3**	ug/kg	31.7	10.3	1	04/24/24 10:00	04/26/24 13:05	76-13-1	
1,1-Dichloroethene	**<10.5**	ug/kg	31.7	10.5	1	04/24/24 10:00	04/26/24 13:05	75-35-4	
1,2-Dichloroethane	**<7.3**	ug/kg	31.7	7.3	1	04/24/24 10:00	04/26/24 13:05	107-06-2	
2-Butanone (MEK)	**<100**	ug/kg	792	100	1	04/24/24 10:00	04/26/24 13:05	78-93-3	
2-Hexanone	**<314**	ug/kg	792	314	1	04/24/24 10:00	04/26/24 13:05	591-78-6	v1
2-Propanol	**<1010**	ug/kg	3170	1010	1	04/24/24 10:00	04/26/24 13:05	67-63-0	
Acetone	**<193**	ug/kg	792	193	1	04/24/24 10:00	04/26/24 13:05	67-64-1	v1
Benzene	**<7.5**	ug/kg	12.7	7.5	1	04/24/24 10:00	04/26/24 13:05	71-43-2	
Bromodichloromethane	**<7.5**	ug/kg	31.7	7.5	1	04/24/24 10:00	04/26/24 13:05	75-27-4	
Bromoform	**<139**	ug/kg	158	139	1	04/24/24 10:00	04/26/24 13:05	75-25-2	
Chlorobenzene	**<3.8**	ug/kg	31.7	3.8	1	04/24/24 10:00	04/26/24 13:05	108-90-7	
Chloroform	**<22.7**	ug/kg	158	22.7	1	04/24/24 10:00	04/26/24 13:05	67-66-3	
Chloromethane	**<12.0**	ug/kg	31.7	12.0	1	04/24/24 10:00	04/26/24 13:05	74-87-3	L2
Dibromochloromethane	**<108**	ug/kg	158	108	1	04/24/24 10:00	04/26/24 13:05	124-48-1	
Dichlorofluoromethane	**<8.9**	ug/kg	31.7	8.9	1	04/24/24 10:00	04/26/24 13:05	75-43-4	
Methyl-tert-butyl ether	**<9.3**	ug/kg	31.7	9.3	1	04/24/24 10:00	04/26/24 13:05	1634-04-4	
Methylene Chloride	**<8.8**	ug/kg	31.7	8.8	1	04/24/24 10:00	04/26/24 13:05	75-09-2	
Tetrachloroethene	**<12.3**	ug/kg	31.7	12.3	1	04/24/24 10:00	04/26/24 13:05	127-18-4	
Toluene	**<8.0**	ug/kg	31.7	8.0	1	04/24/24 10:00	04/26/24 13:05	108-88-3	
Trichloroethene	**<11.8**	ug/kg	31.7	11.8	1	04/24/24 10:00	04/26/24 13:05	79-01-6	
Trichlorofluoromethane	**<9.2**	ug/kg	31.7	9.2	1	04/24/24 10:00	04/26/24 13:05	75-69-4	
m&p-Xylene	**<13.4**	ug/kg	63.3	13.4	1	04/24/24 10:00	04/26/24 13:05	179601-23-1	
trans-1,2-Dichloroethene	**<6.9**	ug/kg	31.7	6.9	1	04/24/24 10:00	04/26/24 13:05	156-60-5	
Surrogates									
Toluene-d8 (S)	102	%	60-140		1	04/24/24 10:00	04/26/24 13:05	2037-26-5	
4-Bromofluorobenzene (S)	102	%	66-143		1	04/24/24 10:00	04/26/24 13:05	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	60-140		1	04/24/24 10:00	04/26/24 13:05	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-120.25-VOC_240419 **Lab ID: 40277236021** Collected: 04/19/24 12:26 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.0**	ug/kg	31.3	8.0	1	04/24/24 10:00	04/26/24 13:25	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.2**	ug/kg	31.3	10.2	1	04/24/24 10:00	04/26/24 13:25	76-13-1	
1,1-Dichloroethene	**<10.4**	ug/kg	31.3	10.4	1	04/24/24 10:00	04/26/24 13:25	75-35-4	
1,2-Dichloroethane	**<7.2**	ug/kg	31.3	7.2	1	04/24/24 10:00	04/26/24 13:25	107-06-2	
2-Butanone (MEK)	**<99.0**	ug/kg	783	99.0	1	04/24/24 10:00	04/26/24 13:25	78-93-3	
2-Hexanone	**<311**	ug/kg	783	311	1	04/24/24 10:00	04/26/24 13:25	591-78-6	v1
2-Propanol	**<999**	ug/kg	3130	999	1	04/24/24 10:00	04/26/24 13:25	67-63-0	
Acetone	**<191**	ug/kg	783	191	1	04/24/24 10:00	04/26/24 13:25	67-64-1	v1
Benzene	**<7.5**	ug/kg	12.5	7.5	1	04/24/24 10:00	04/26/24 13:25	71-43-2	
Bromodichloromethane	**<7.5**	ug/kg	31.3	7.5	1	04/24/24 10:00	04/26/24 13:25	75-27-4	
Bromoform	**<138**	ug/kg	157	138	1	04/24/24 10:00	04/26/24 13:25	75-25-2	
Chlorobenzene	**<3.8**	ug/kg	31.3	3.8	1	04/24/24 10:00	04/26/24 13:25	108-90-7	
Chloroform	**<22.4**	ug/kg	157	22.4	1	04/24/24 10:00	04/26/24 13:25	67-66-3	
Chloromethane	**<11.9**	ug/kg	31.3	11.9	1	04/24/24 10:00	04/26/24 13:25	74-87-3	L2
Dibromochloromethane	**<107**	ug/kg	157	107	1	04/24/24 10:00	04/26/24 13:25	124-48-1	
Dichlorofluoromethane	**<8.8**	ug/kg	31.3	8.8	1	04/24/24 10:00	04/26/24 13:25	75-43-4	
Methyl-tert-butyl ether	**<9.2**	ug/kg	31.3	9.2	1	04/24/24 10:00	04/26/24 13:25	1634-04-4	
Methylene Chloride	**<8.7**	ug/kg	31.3	8.7	1	04/24/24 10:00	04/26/24 13:25	75-09-2	
Tetrachloroethene	**<12.2**	ug/kg	31.3	12.2	1	04/24/24 10:00	04/26/24 13:25	127-18-4	
Toluene	**<7.9**	ug/kg	31.3	7.9	1	04/24/24 10:00	04/26/24 13:25	108-88-3	
Trichloroethene	**<11.7**	ug/kg	31.3	11.7	1	04/24/24 10:00	04/26/24 13:25	79-01-6	
Trichlorofluoromethane	**<9.1**	ug/kg	31.3	9.1	1	04/24/24 10:00	04/26/24 13:25	75-69-4	
m&p-Xylene	**<13.2**	ug/kg	62.7	13.2	1	04/24/24 10:00	04/26/24 13:25	179601-23-1	
trans-1,2-Dichloroethene	**<6.9**	ug/kg	31.3	6.9	1	04/24/24 10:00	04/26/24 13:25	156-60-5	
Surrogates									
Toluene-d8 (S)	100	%	60-140		1	04/24/24 10:00	04/26/24 13:25	2037-26-5	
4-Bromofluorobenzene (S)	100	%	66-143		1	04/24/24 10:00	04/26/24 13:25	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	60-140		1	04/24/24 10:00	04/26/24 13:25	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-124.7-VOC_20240419 **Lab ID: 40277236022** Collected: 04/19/24 13:05 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.0**	ug/kg	39.1	10.0	1	04/24/24 10:00	04/26/24 13:45	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.7**	ug/kg	39.1	12.7	1	04/24/24 10:00	04/26/24 13:45	76-13-1	
1,1-Dichloroethene	**<13.0**	ug/kg	39.1	13.0	1	04/24/24 10:00	04/26/24 13:45	75-35-4	
1,2-Dichloroethane	**<9.0**	ug/kg	39.1	9.0	1	04/24/24 10:00	04/26/24 13:45	107-06-2	
2-Butanone (MEK)	**<123**	ug/kg	977	123	1	04/24/24 10:00	04/26/24 13:45	78-93-3	
2-Hexanone	**<388**	ug/kg	977	388	1	04/24/24 10:00	04/26/24 13:45	591-78-6	v1
2-Propanol	**<1250**	ug/kg	3910	1250	1	04/24/24 10:00	04/26/24 13:45	67-63-0	
Acetone	**<238**	ug/kg	977	238	1	04/24/24 10:00	04/26/24 13:45	67-64-1	v1
Benzene	**<9.3**	ug/kg	15.6	9.3	1	04/24/24 10:00	04/26/24 13:45	71-43-2	
Bromodichloromethane	**<9.3**	ug/kg	39.1	9.3	1	04/24/24 10:00	04/26/24 13:45	75-27-4	
Bromoform	**<172**	ug/kg	195	172	1	04/24/24 10:00	04/26/24 13:45	75-25-2	
Chlorobenzene	**<4.7**	ug/kg	39.1	4.7	1	04/24/24 10:00	04/26/24 13:45	108-90-7	
Chloroform	**<28.0**	ug/kg	195	28.0	1	04/24/24 10:00	04/26/24 13:45	67-66-3	
Chloromethane	**<14.8**	ug/kg	39.1	14.8	1	04/24/24 10:00	04/26/24 13:45	74-87-3	L2
Dibromochloromethane	**<134**	ug/kg	195	134	1	04/24/24 10:00	04/26/24 13:45	124-48-1	
Dichlorofluoromethane	**<11.0**	ug/kg	39.1	11.0	1	04/24/24 10:00	04/26/24 13:45	75-43-4	
Methyl-tert-butyl ether	**<11.5**	ug/kg	39.1	11.5	1	04/24/24 10:00	04/26/24 13:45	1634-04-4	
Methylene Chloride	**<10.9**	ug/kg	39.1	10.9	1	04/24/24 10:00	04/26/24 13:45	75-09-2	
Tetrachloroethene	**<15.2**	ug/kg	39.1	15.2	1	04/24/24 10:00	04/26/24 13:45	127-18-4	
Toluene	**<9.8**	ug/kg	39.1	9.8	1	04/24/24 10:00	04/26/24 13:45	108-88-3	
Trichloroethene	**<14.6**	ug/kg	39.1	14.6	1	04/24/24 10:00	04/26/24 13:45	79-01-6	
Trichlorofluoromethane	**<11.3**	ug/kg	39.1	11.3	1	04/24/24 10:00	04/26/24 13:45	75-69-4	
m&p-Xylene	**<16.5**	ug/kg	78.2	16.5	1	04/24/24 10:00	04/26/24 13:45	179601-23-1	
trans-1,2-Dichloroethene	**<8.5**	ug/kg	39.1	8.5	1	04/24/24 10:00	04/26/24 13:45	156-60-5	
Surrogates									
Toluene-d8 (S)	105	%	60-140		1	04/24/24 10:00	04/26/24 13:45	2037-26-5	
4-Bromofluorobenzene (S)	102	%	66-143		1	04/24/24 10:00	04/26/24 13:45	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	60-140		1	04/24/24 10:00	04/26/24 13:45	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-125.2-VOC_20240419 **Lab ID: 40277236023** Collected: 04/19/24 13:06 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.3**	ug/kg	32.5	8.3	1	04/24/24 10:00	04/26/24 14:05	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.6**	ug/kg	32.5	10.6	1	04/24/24 10:00	04/26/24 14:05	76-13-1	
1,1-Dichloroethene	**<10.8**	ug/kg	32.5	10.8	1	04/24/24 10:00	04/26/24 14:05	75-35-4	
1,2-Dichloroethane	**<7.5**	ug/kg	32.5	7.5	1	04/24/24 10:00	04/26/24 14:05	107-06-2	
2-Butanone (MEK)	**<103**	ug/kg	814	103	1	04/24/24 10:00	04/26/24 14:05	78-93-3	
2-Hexanone	**<323**	ug/kg	814	323	1	04/24/24 10:00	04/26/24 14:05	591-78-6	v1
2-Propanol	**<1040**	ug/kg	3250	1040	1	04/24/24 10:00	04/26/24 14:05	67-63-0	
Acetone	**<198**	ug/kg	814	198	1	04/24/24 10:00	04/26/24 14:05	67-64-1	v1
Benzene	**<7.7**	ug/kg	13.0	7.7	1	04/24/24 10:00	04/26/24 14:05	71-43-2	
Bromodichloromethane	**<7.7**	ug/kg	32.5	7.7	1	04/24/24 10:00	04/26/24 14:05	75-27-4	
Bromoform	**<143**	ug/kg	163	143	1	04/24/24 10:00	04/26/24 14:05	75-25-2	
Chlorobenzene	**<3.9**	ug/kg	32.5	3.9	1	04/24/24 10:00	04/26/24 14:05	108-90-7	
Chloroform	**<23.3**	ug/kg	163	23.3	1	04/24/24 10:00	04/26/24 14:05	67-66-3	
Chloromethane	**<12.4**	ug/kg	32.5	12.4	1	04/24/24 10:00	04/26/24 14:05	74-87-3	L2
Dibromochloromethane	**<111**	ug/kg	163	111	1	04/24/24 10:00	04/26/24 14:05	124-48-1	
Dichlorofluoromethane	**<9.2**	ug/kg	32.5	9.2	1	04/24/24 10:00	04/26/24 14:05	75-43-4	
Methyl-tert-butyl ether	**<9.6**	ug/kg	32.5	9.6	1	04/24/24 10:00	04/26/24 14:05	1634-04-4	
Methylene Chloride	**<9.0**	ug/kg	32.5	9.0	1	04/24/24 10:00	04/26/24 14:05	75-09-2	
Tetrachloroethene	**<12.6**	ug/kg	32.5	12.6	1	04/24/24 10:00	04/26/24 14:05	127-18-4	
Toluene	**<8.2**	ug/kg	32.5	8.2	1	04/24/24 10:00	04/26/24 14:05	108-88-3	
Trichloroethene	**<12.2**	ug/kg	32.5	12.2	1	04/24/24 10:00	04/26/24 14:05	79-01-6	
Trichlorofluoromethane	**<9.4**	ug/kg	32.5	9.4	1	04/24/24 10:00	04/26/24 14:05	75-69-4	
m&p-Xylene	**<13.7**	ug/kg	65.1	13.7	1	04/24/24 10:00	04/26/24 14:05	179601-23-1	
trans-1,2-Dichloroethene	**<7.1**	ug/kg	32.5	7.1	1	04/24/24 10:00	04/26/24 14:05	156-60-5	
Surrogates									
Toluene-d8 (S)	98	%	60-140		1	04/24/24 10:00	04/26/24 14:05	2037-26-5	
4-Bromofluorobenzene (S)	101	%	66-143		1	04/24/24 10:00	04/26/24 14:05	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	60-140		1	04/24/24 10:00	04/26/24 14:05	2199-69-1	

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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-125.5-VOC_20240419 **Lab ID: 40277236024** Collected: 04/19/24 13:07 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.7**	ug/kg	34.1	8.7	1	04/24/24 10:00	04/26/24 14:25	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.1**	ug/kg	34.1	11.1	1	04/24/24 10:00	04/26/24 14:25	76-13-1	
1,1-Dichloroethene	**<11.3**	ug/kg	34.1	11.3	1	04/24/24 10:00	04/26/24 14:25	75-35-4	
1,2-Dichloroethane	**<7.8**	ug/kg	34.1	7.8	1	04/24/24 10:00	04/26/24 14:25	107-06-2	
2-Butanone (MEK)	**<108**	ug/kg	853	108	1	04/24/24 10:00	04/26/24 14:25	78-93-3	
2-Hexanone	**<339**	ug/kg	853	339	1	04/24/24 10:00	04/26/24 14:25	591-78-6	v1
2-Propanol	**<1090**	ug/kg	3410	1090	1	04/24/24 10:00	04/26/24 14:25	67-63-0	
Acetone	**<208**	ug/kg	853	208	1	04/24/24 10:00	04/26/24 14:25	67-64-1	v1
Benzene	**<8.1**	ug/kg	13.6	8.1	1	04/24/24 10:00	04/26/24 14:25	71-43-2	
Bromodichloromethane	**<8.1**	ug/kg	34.1	8.1	1	04/24/24 10:00	04/26/24 14:25	75-27-4	
Bromoform	**<150**	ug/kg	171	150	1	04/24/24 10:00	04/26/24 14:25	75-25-2	
Chlorobenzene	**<4.1**	ug/kg	34.1	4.1	1	04/24/24 10:00	04/26/24 14:25	108-90-7	
Chloroform	**<24.4**	ug/kg	171	24.4	1	04/24/24 10:00	04/26/24 14:25	67-66-3	
Chloromethane	**<13.0**	ug/kg	34.1	13.0	1	04/24/24 10:00	04/26/24 14:25	74-87-3	L2
Dibromochloromethane	**<117**	ug/kg	171	117	1	04/24/24 10:00	04/26/24 14:25	124-48-1	
Dichlorofluoromethane	**<9.6**	ug/kg	34.1	9.6	1	04/24/24 10:00	04/26/24 14:25	75-43-4	
Methyl-tert-butyl ether	**<10.0**	ug/kg	34.1	10.0	1	04/24/24 10:00	04/26/24 14:25	1634-04-4	
Methylene Chloride	**<9.5**	ug/kg	34.1	9.5	1	04/24/24 10:00	04/26/24 14:25	75-09-2	
Tetrachloroethene	**<13.2**	ug/kg	34.1	13.2	1	04/24/24 10:00	04/26/24 14:25	127-18-4	
Toluene	**<8.6**	ug/kg	34.1	8.6	1	04/24/24 10:00	04/26/24 14:25	108-88-3	
Trichloroethene	**<12.8**	ug/kg	34.1	12.8	1	04/24/24 10:00	04/26/24 14:25	79-01-6	
Trichlorofluoromethane	**<9.9**	ug/kg	34.1	9.9	1	04/24/24 10:00	04/26/24 14:25	75-69-4	
m&p-Xylene	**<14.4**	ug/kg	68.2	14.4	1	04/24/24 10:00	04/26/24 14:25	179601-23-1	
trans-1,2-Dichloroethene	**<7.5**	ug/kg	34.1	7.5	1	04/24/24 10:00	04/26/24 14:25	156-60-5	
Surrogates									
Toluene-d8 (S)	99	%	60-140		1	04/24/24 10:00	04/26/24 14:25	2037-26-5	
4-Bromofluorobenzene (S)	99	%	66-143		1	04/24/24 10:00	04/26/24 14:25	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	60-140		1	04/24/24 10:00	04/26/24 14:25	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-130.3-VOC_20240419 **Lab ID: 40277236025** Collected: 04/19/24 13:42 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.8**	ug/kg	42.2	10.8	1	04/24/24 08:00	04/25/24 14:50	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<13.8**	ug/kg	42.2	13.8	1	04/24/24 08:00	04/25/24 14:50	76-13-1	
1,1-Dichloroethene	**<14.0**	ug/kg	42.2	14.0	1	04/24/24 08:00	04/25/24 14:50	75-35-4	
1,2-Dichloroethane	**<9.7**	ug/kg	42.2	9.7	1	04/24/24 08:00	04/25/24 14:50	107-06-2	
2-Butanone (MEK)	**<133**	ug/kg	1050	133	1	04/24/24 08:00	04/25/24 14:50	78-93-3	v1
2-Hexanone	**<419**	ug/kg	1050	419	1	04/24/24 08:00	04/25/24 14:50	591-78-6	
2-Propanol	**<1340**	ug/kg	4220	1340	1	04/24/24 08:00	04/25/24 14:50	67-63-0	
Acetone	**<257**	ug/kg	1050	257	1	04/24/24 08:00	04/25/24 14:50	67-64-1	v1
Benzene	**<10.0**	ug/kg	16.9	10.0	1	04/24/24 08:00	04/25/24 14:50	71-43-2	
Bromodichloromethane	**<10.0**	ug/kg	42.2	10.0	1	04/24/24 08:00	04/25/24 14:50	75-27-4	
Bromoform	**<186**	ug/kg	211	186	1	04/24/24 08:00	04/25/24 14:50	75-25-2	
Chlorobenzene	**<5.1**	ug/kg	42.2	5.1	1	04/24/24 08:00	04/25/24 14:50	108-90-7	
Chloroform	**<30.2**	ug/kg	211	30.2	1	04/24/24 08:00	04/25/24 14:50	67-66-3	
Chloromethane	**<16.0**	ug/kg	42.2	16.0	1	04/24/24 08:00	04/25/24 14:50	74-87-3	L2,M0
Dibromochloromethane	**<144**	ug/kg	211	144	1	04/24/24 08:00	04/25/24 14:50	124-48-1	
Dichlorofluoromethane	**<11.9**	ug/kg	42.2	11.9	1	04/24/24 08:00	04/25/24 14:50	75-43-4	
Methyl-tert-butyl ether	**<12.4**	ug/kg	42.2	12.4	1	04/24/24 08:00	04/25/24 14:50	1634-04-4	
Methylene Chloride	**<11.7**	ug/kg	42.2	11.7	1	04/24/24 08:00	04/25/24 14:50	75-09-2	
Tetrachloroethene	**<16.4**	ug/kg	42.2	16.4	1	04/24/24 08:00	04/25/24 14:50	127-18-4	
Toluene	**<10.6**	ug/kg	42.2	10.6	1	04/24/24 08:00	04/25/24 14:50	108-88-3	
Trichloroethene	**<15.8**	ug/kg	42.2	15.8	1	04/24/24 08:00	04/25/24 14:50	79-01-6	
Trichlorofluoromethane	**<12.2**	ug/kg	42.2	12.2	1	04/24/24 08:00	04/25/24 14:50	75-69-4	
m&p-Xylene	**<17.8**	ug/kg	84.4	17.8	1	04/24/24 08:00	04/25/24 14:50	179601-23-1	
trans-1,2-Dichloroethene	**<9.2**	ug/kg	42.2	9.2	1	04/24/24 08:00	04/25/24 14:50	156-60-5	
Surrogates									
Toluene-d8 (S)	116	%	60-140		1	04/24/24 08:00	04/25/24 14:50	2037-26-5	
4-Bromofluorobenzene (S)	111	%	66-143		1	04/24/24 08:00	04/25/24 14:50	460-00-4	
1,2-Dichlorobenzene-d4 (S)	118	%	60-140		1	04/24/24 08:00	04/25/24 14:50	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-130.3-VOC-DUP_0419 **Lab ID: 40277236026** Collected: 04/19/24 13:42 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.7**	ug/kg	33.9	8.7	1	04/24/24 10:00	04/26/24 14:45	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.1**	ug/kg	33.9	11.1	1	04/24/24 10:00	04/26/24 14:45	76-13-1	
1,1-Dichloroethene	**<11.3**	ug/kg	33.9	11.3	1	04/24/24 10:00	04/26/24 14:45	75-35-4	
1,2-Dichloroethane	**<7.8**	ug/kg	33.9	7.8	1	04/24/24 10:00	04/26/24 14:45	107-06-2	
2-Butanone (MEK)	**<107**	ug/kg	848	107	1	04/24/24 10:00	04/26/24 14:45	78-93-3	
2-Hexanone	**<337**	ug/kg	848	337	1	04/24/24 10:00	04/26/24 14:45	591-78-6	v1
2-Propanol	**<1080**	ug/kg	3390	1080	1	04/24/24 10:00	04/26/24 14:45	67-63-0	
Acetone	**<206**	ug/kg	848	206	1	04/24/24 10:00	04/26/24 14:45	67-64-1	v1
Benzene	**<8.1**	ug/kg	13.6	8.1	1	04/24/24 10:00	04/26/24 14:45	71-43-2	
Bromodichloromethane	**<8.1**	ug/kg	33.9	8.1	1	04/24/24 10:00	04/26/24 14:45	75-27-4	
Bromoform	**<149**	ug/kg	170	149	1	04/24/24 10:00	04/26/24 14:45	75-25-2	
Chlorobenzene	**<4.1**	ug/kg	33.9	4.1	1	04/24/24 10:00	04/26/24 14:45	108-90-7	
Chloroform	**<24.3**	ug/kg	170	24.3	1	04/24/24 10:00	04/26/24 14:45	67-66-3	
Chloromethane	**<12.9**	ug/kg	33.9	12.9	1	04/24/24 10:00	04/26/24 14:45	74-87-3	L2
Dibromochloromethane	**<116**	ug/kg	170	116	1	04/24/24 10:00	04/26/24 14:45	124-48-1	
Dichlorofluoromethane	**<9.6**	ug/kg	33.9	9.6	1	04/24/24 10:00	04/26/24 14:45	75-43-4	
Methyl-tert-butyl ether	**<10**	ug/kg	33.9	10	1	04/24/24 10:00	04/26/24 14:45	1634-04-4	
Methylene Chloride	**<9.4**	ug/kg	33.9	9.4	1	04/24/24 10:00	04/26/24 14:45	75-09-2	
Tetrachloroethene	**<13.2**	ug/kg	33.9	13.2	1	04/24/24 10:00	04/26/24 14:45	127-18-4	
Toluene	**<8.5**	ug/kg	33.9	8.5	1	04/24/24 10:00	04/26/24 14:45	108-88-3	
Trichloroethene	**<12.7**	ug/kg	33.9	12.7	1	04/24/24 10:00	04/26/24 14:45	79-01-6	
Trichlorofluoromethane	**<9.8**	ug/kg	33.9	9.8	1	04/24/24 10:00	04/26/24 14:45	75-69-4	
m&p-Xylene	**<14.3**	ug/kg	67.8	14.3	1	04/24/24 10:00	04/26/24 14:45	179601-23-1	
trans-1,2-Dichloroethene	**<7.4**	ug/kg	33.9	7.4	1	04/24/24 10:00	04/26/24 14:45	156-60-5	
Surrogates									
Toluene-d8 (S)	97	%	60-140		1	04/24/24 10:00	04/26/24 14:45	2037-26-5	
4-Bromofluorobenzene (S)	102	%	66-143		1	04/24/24 10:00	04/26/24 14:45	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	60-140		1	04/24/24 10:00	04/26/24 14:45	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-130.43-VOC_240419 **Lab ID: 40277236027** Collected: 04/19/24 13:43 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.7**	ug/kg	33.9	8.7	1	04/24/24 10:00	04/26/24 15:06	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.1**	ug/kg	33.9	11.1	1	04/24/24 10:00	04/26/24 15:06	76-13-1	
1,1-Dichloroethene	**<11.3**	ug/kg	33.9	11.3	1	04/24/24 10:00	04/26/24 15:06	75-35-4	
1,2-Dichloroethane	**<7.8**	ug/kg	33.9	7.8	1	04/24/24 10:00	04/26/24 15:06	107-06-2	
2-Butanone (MEK)	**<107**	ug/kg	848	107	1	04/24/24 10:00	04/26/24 15:06	78-93-3	
2-Hexanone	**<337**	ug/kg	848	337	1	04/24/24 10:00	04/26/24 15:06	591-78-6	v1
2-Propanol	**<1080**	ug/kg	3390	1080	1	04/24/24 10:00	04/26/24 15:06	67-63-0	
Acetone	**<206**	ug/kg	848	206	1	04/24/24 10:00	04/26/24 15:06	67-64-1	v1
Benzene	**<8.1**	ug/kg	13.6	8.1	1	04/24/24 10:00	04/26/24 15:06	71-43-2	
Bromodichloromethane	**<8.1**	ug/kg	33.9	8.1	1	04/24/24 10:00	04/26/24 15:06	75-27-4	
Bromoform	**<149**	ug/kg	170	149	1	04/24/24 10:00	04/26/24 15:06	75-25-2	
Chlorobenzene	**<4.1**	ug/kg	33.9	4.1	1	04/24/24 10:00	04/26/24 15:06	108-90-7	
Chloroform	**<24.3**	ug/kg	170	24.3	1	04/24/24 10:00	04/26/24 15:06	67-66-3	
Chloromethane	**<12.9**	ug/kg	33.9	12.9	1	04/24/24 10:00	04/26/24 15:06	74-87-3	L2
Dibromochloromethane	**<116**	ug/kg	170	116	1	04/24/24 10:00	04/26/24 15:06	124-48-1	
Dichlorofluoromethane	**<9.6**	ug/kg	33.9	9.6	1	04/24/24 10:00	04/26/24 15:06	75-43-4	
Methyl-tert-butyl ether	**<10**	ug/kg	33.9	10	1	04/24/24 10:00	04/26/24 15:06	1634-04-4	
Methylene Chloride	**<9.4**	ug/kg	33.9	9.4	1	04/24/24 10:00	04/26/24 15:06	75-09-2	
Tetrachloroethene	**<13.2**	ug/kg	33.9	13.2	1	04/24/24 10:00	04/26/24 15:06	127-18-4	
Toluene	**<8.5**	ug/kg	33.9	8.5	1	04/24/24 10:00	04/26/24 15:06	108-88-3	
Trichloroethene	**<12.7**	ug/kg	33.9	12.7	1	04/24/24 10:00	04/26/24 15:06	79-01-6	
Trichlorofluoromethane	**<9.8**	ug/kg	33.9	9.8	1	04/24/24 10:00	04/26/24 15:06	75-69-4	
m&p-Xylene	**<14.3**	ug/kg	67.8	14.3	1	04/24/24 10:00	04/26/24 15:06	179601-23-1	
trans-1,2-Dichloroethene	**<7.4**	ug/kg	33.9	7.4	1	04/24/24 10:00	04/26/24 15:06	156-60-5	
Surrogates									
Toluene-d8 (S)	116	%	60-140		1	04/24/24 10:00	04/26/24 15:06	2037-26-5	
4-Bromofluorobenzene (S)	109	%	66-143		1	04/24/24 10:00	04/26/24 15:06	460-00-4	
1,2-Dichlorobenzene-d4 (S)	119	%	60-140		1	04/24/24 10:00	04/26/24 15:06	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-134.1-VOC_240419 **Lab ID: 40277236028** Collected: 04/19/24 15:02 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.5**	ug/kg	33.1	8.5	1	04/24/24 10:00	04/26/24 17:49	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.8**	ug/kg	33.1	10.8	1	04/24/24 10:00	04/26/24 17:49	76-13-1	v1
1,1-Dichloroethene	**<11.0**	ug/kg	33.1	11.0	1	04/24/24 10:00	04/26/24 17:49	75-35-4	
1,2-Dichloroethane	**<7.6**	ug/kg	33.1	7.6	1	04/24/24 10:00	04/26/24 17:49	107-06-2	
2-Butanone (MEK)	**<105**	ug/kg	828	105	1	04/24/24 10:00	04/26/24 17:49	78-93-3	
2-Hexanone	**<329**	ug/kg	828	329	1	04/24/24 10:00	04/26/24 17:49	591-78-6	v1
2-Propanol	**<1050**	ug/kg	3310	1050	1	04/24/24 10:00	04/26/24 17:49	67-63-0	v2
Acetone	**<201**	ug/kg	828	201	1	04/24/24 10:00	04/26/24 17:49	67-64-1	v1
Benzene	**<7.9**	ug/kg	13.2	7.9	1	04/24/24 10:00	04/26/24 17:49	71-43-2	
Bromodichloromethane	**<7.9**	ug/kg	33.1	7.9	1	04/24/24 10:00	04/26/24 17:49	75-27-4	
Bromoform	**<146**	ug/kg	166	146	1	04/24/24 10:00	04/26/24 17:49	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.1	4.0	1	04/24/24 10:00	04/26/24 17:49	108-90-7	
Chloroform	**<23.7**	ug/kg	166	23.7	1	04/24/24 10:00	04/26/24 17:49	67-66-3	
Chloromethane	**<12.6**	ug/kg	33.1	12.6	1	04/24/24 10:00	04/26/24 17:49	74-87-3	L2
Dibromochloromethane	**<113**	ug/kg	166	113	1	04/24/24 10:00	04/26/24 17:49	124-48-1	
Dichlorofluoromethane	**<9.3**	ug/kg	33.1	9.3	1	04/24/24 10:00	04/26/24 17:49	75-43-4	
Methyl-tert-butyl ether	**<9.7**	ug/kg	33.1	9.7	1	04/24/24 10:00	04/26/24 17:49	1634-04-4	
Methylene Chloride	**<9.2**	ug/kg	33.1	9.2	1	04/24/24 10:00	04/26/24 17:49	75-09-2	
Tetrachloroethene	**<12.8**	ug/kg	33.1	12.8	1	04/24/24 10:00	04/26/24 17:49	127-18-4	
Toluene	**<8.3**	ug/kg	33.1	8.3	1	04/24/24 10:00	04/26/24 17:49	108-88-3	
Trichloroethene	**<12.4**	ug/kg	33.1	12.4	1	04/24/24 10:00	04/26/24 17:49	79-01-6	
Trichlorofluoromethane	**<9.6**	ug/kg	33.1	9.6	1	04/24/24 10:00	04/26/24 17:49	75-69-4	
m&p-Xylene	**<14.0**	ug/kg	66.2	14.0	1	04/24/24 10:00	04/26/24 17:49	179601-23-1	
trans-1,2-Dichloroethene	**<7.2**	ug/kg	33.1	7.2	1	04/24/24 10:00	04/26/24 17:49	156-60-5	
Surrogates									
Toluene-d8 (S)	101	%	60-140		1	04/24/24 10:00	04/26/24 17:49	2037-26-5	
4-Bromofluorobenzene (S)	101	%	66-143		1	04/24/24 10:00	04/26/24 17:49	460-00-4	
1,2-Dichlorobenzene-d4 (S)	113	%	60-140		1	04/24/24 10:00	04/26/24 17:49	2199-69-1	

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-136.5-VOC_240419 **Lab ID: 40277236029** Collected: 04/19/24 15:03 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.5**	ug/kg	29.4	7.5	1	04/24/24 10:00	04/26/24 18:09	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<9.6**	ug/kg	29.4	9.6	1	04/24/24 10:00	04/26/24 18:09	76-13-1	v1
1,1-Dichloroethene	**<9.8**	ug/kg	29.4	9.8	1	04/24/24 10:00	04/26/24 18:09	75-35-4	
1,2-Dichloroethane	**<6.8**	ug/kg	29.4	6.8	1	04/24/24 10:00	04/26/24 18:09	107-06-2	
2-Butanone (MEK)	**<93.0**	ug/kg	736	93.0	1	04/24/24 10:00	04/26/24 18:09	78-93-3	
2-Hexanone	**<292**	ug/kg	736	292	1	04/24/24 10:00	04/26/24 18:09	591-78-6	v1
2-Propanol	**<938**	ug/kg	2940	938	1	04/24/24 10:00	04/26/24 18:09	67-63-0	v2
Acetone	**<179**	ug/kg	736	179	1	04/24/24 10:00	04/26/24 18:09	67-64-1	v1
Benzene	**<7.0**	ug/kg	11.8	7.0	1	04/24/24 10:00	04/26/24 18:09	71-43-2	
Bromodichloromethane	**<7.0**	ug/kg	29.4	7.0	1	04/24/24 10:00	04/26/24 18:09	75-27-4	
Bromoform	**<129**	ug/kg	147	129	1	04/24/24 10:00	04/26/24 18:09	75-25-2	
Chlorobenzene	**<3.5**	ug/kg	29.4	3.5	1	04/24/24 10:00	04/26/24 18:09	108-90-7	
Chloroform	**<21.1**	ug/kg	147	21.1	1	04/24/24 10:00	04/26/24 18:09	67-66-3	
Chloromethane	**<11.2**	ug/kg	29.4	11.2	1	04/24/24 10:00	04/26/24 18:09	74-87-3	L2
Dibromochloromethane	**<101**	ug/kg	147	101	1	04/24/24 10:00	04/26/24 18:09	124-48-1	
Dichlorofluoromethane	**<8.3**	ug/kg	29.4	8.3	1	04/24/24 10:00	04/26/24 18:09	75-43-4	
Methyl-tert-butyl ether	**<8.7**	ug/kg	29.4	8.7	1	04/24/24 10:00	04/26/24 18:09	1634-04-4	
Methylene Chloride	**<8.2**	ug/kg	29.4	8.2	1	04/24/24 10:00	04/26/24 18:09	75-09-2	
Tetrachloroethene	**<11.4**	ug/kg	29.4	11.4	1	04/24/24 10:00	04/26/24 18:09	127-18-4	
Toluene	**<7.4**	ug/kg	29.4	7.4	1	04/24/24 10:00	04/26/24 18:09	108-88-3	
Trichloroethene	**<11.0**	ug/kg	29.4	11.0	1	04/24/24 10:00	04/26/24 18:09	79-01-6	
Trichlorofluoromethane	**<8.5**	ug/kg	29.4	8.5	1	04/24/24 10:00	04/26/24 18:09	75-69-4	
m&p-Xylene	**<12.4**	ug/kg	58.9	12.4	1	04/24/24 10:00	04/26/24 18:09	179601-23-1	
trans-1,2-Dichloroethene	**<6.4**	ug/kg	29.4	6.4	1	04/24/24 10:00	04/26/24 18:09	156-60-5	
Surrogates									
Toluene-d8 (S)	101	%	60-140		1	04/24/24 10:00	04/26/24 18:09	2037-26-5	
4-Bromofluorobenzene (S)	103	%	66-143		1	04/24/24 10:00	04/26/24 18:09	460-00-4	
1,2-Dichlorobenzene-d4 (S)	114	%	60-140		1	04/24/24 10:00	04/26/24 18:09	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-140.7-VOC_240419 **Lab ID: 40277236030** Collected: 04/19/24 15:35 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.4**	ug/kg	28.8	7.4	1	04/24/24 10:00	04/26/24 18:29	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<9.4**	ug/kg	28.8	9.4	1	04/24/24 10:00	04/26/24 18:29	76-13-1	v1
1,1-Dichloroethene	**<9.6**	ug/kg	28.8	9.6	1	04/24/24 10:00	04/26/24 18:29	75-35-4	
1,2-Dichloroethane	**<6.6**	ug/kg	28.8	6.6	1	04/24/24 10:00	04/26/24 18:29	107-06-2	
2-Butanone (MEK)	**<91.1**	ug/kg	721	91.1	1	04/24/24 10:00	04/26/24 18:29	78-93-3	
2-Hexanone	**<286**	ug/kg	721	286	1	04/24/24 10:00	04/26/24 18:29	591-78-6	v1
2-Propanol	**<919**	ug/kg	2880	919	1	04/24/24 10:00	04/26/24 18:29	67-63-0	v2
Acetone	**<175**	ug/kg	721	175	1	04/24/24 10:00	04/26/24 18:29	67-64-1	v1
Benzene	**<6.9**	ug/kg	11.5	6.9	1	04/24/24 10:00	04/26/24 18:29	71-43-2	
Bromodichloromethane	**<6.9**	ug/kg	28.8	6.9	1	04/24/24 10:00	04/26/24 18:29	75-27-4	
Bromoform	**<127**	ug/kg	144	127	1	04/24/24 10:00	04/26/24 18:29	75-25-2	
Chlorobenzene	**<3.5**	ug/kg	28.8	3.5	1	04/24/24 10:00	04/26/24 18:29	108-90-7	
Chloroform	**<20.6**	ug/kg	144	20.6	1	04/24/24 10:00	04/26/24 18:29	67-66-3	
Chloromethane	**<11.0**	ug/kg	28.8	11.0	1	04/24/24 10:00	04/26/24 18:29	74-87-3	L2
Dibromochloromethane	**<98.6**	ug/kg	144	98.6	1	04/24/24 10:00	04/26/24 18:29	124-48-1	
Dichlorofluoromethane	**<8.1**	ug/kg	28.8	8.1	1	04/24/24 10:00	04/26/24 18:29	75-43-4	
Methyl-tert-butyl ether	**<8.5**	ug/kg	28.8	8.5	1	04/24/24 10:00	04/26/24 18:29	1634-04-4	
Methylene Chloride	**<8.0**	ug/kg	28.8	8.0	1	04/24/24 10:00	04/26/24 18:29	75-09-2	
Tetrachloroethene	**<11.2**	ug/kg	28.8	11.2	1	04/24/24 10:00	04/26/24 18:29	127-18-4	
Toluene	**<7.3**	ug/kg	28.8	7.3	1	04/24/24 10:00	04/26/24 18:29	108-88-3	
Trichloroethene	**<10.8**	ug/kg	28.8	10.8	1	04/24/24 10:00	04/26/24 18:29	79-01-6	
Trichlorofluoromethane	**<8.4**	ug/kg	28.8	8.4	1	04/24/24 10:00	04/26/24 18:29	75-69-4	
m&p-Xylene	**<12.2**	ug/kg	57.7	12.2	1	04/24/24 10:00	04/26/24 18:29	179601-23-1	
trans-1,2-Dichloroethene	**<6.3**	ug/kg	28.8	6.3	1	04/24/24 10:00	04/26/24 18:29	156-60-5	
Surrogates									
Toluene-d8 (S)	95	%	60-140		1	04/24/24 10:00	04/26/24 18:29	2037-26-5	
4-Bromofluorobenzene (S)	103	%	66-143		1	04/24/24 10:00	04/26/24 18:29	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	60-140		1	04/24/24 10:00	04/26/24 18:29	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: TB-01_20240422 **Lab ID: 40277236031** Collected: 04/22/24 15:30 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	04/24/24 10:00	04/26/24 15:26	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	04/24/24 10:00	04/26/24 15:26	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	04/24/24 10:00	04/26/24 15:26	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	04/24/24 10:00	04/26/24 15:26	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	04/24/24 10:00	04/26/24 15:26	78-93-3	
2-Hexanone	**<496**	ug/kg	1250	496	1	04/24/24 10:00	04/26/24 15:26	591-78-6	v1
2-Propanol	**<1590**	ug/kg	5000	1590	1	04/24/24 10:00	04/26/24 15:26	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	04/24/24 10:00	04/26/24 15:26	67-64-1	v1
Benzene	**<11.9**	ug/kg	20.0	11.9	1	04/24/24 10:00	04/26/24 15:26	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	04/24/24 10:00	04/26/24 15:26	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	04/24/24 10:00	04/26/24 15:26	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	04/24/24 10:00	04/26/24 15:26	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	04/24/24 10:00	04/26/24 15:26	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	04/24/24 10:00	04/26/24 15:26	74-87-3	L2
Dibromochloromethane	**<171**	ug/kg	250	171	1	04/24/24 10:00	04/26/24 15:26	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	04/24/24 10:00	04/26/24 15:26	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	04/24/24 10:00	04/26/24 15:26	1634-04-4	
Methylene Chloride	**45.1J**	ug/kg	50.0	13.9	1	04/24/24 10:00	04/26/24 15:26	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	04/24/24 10:00	04/26/24 15:26	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	04/24/24 10:00	04/26/24 15:26	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	04/24/24 10:00	04/26/24 15:26	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	04/24/24 10:00	04/26/24 15:26	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	04/24/24 10:00	04/26/24 15:26	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	04/24/24 10:00	04/26/24 15:26	156-60-5	
Surrogates									
Toluene-d8 (S)	89	%	60-140		1	04/24/24 10:00	04/26/24 15:26	2037-26-5	
4-Bromofluorobenzene (S)	107	%	66-143		1	04/24/24 10:00	04/26/24 15:26	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	60-140		1	04/24/24 10:00	04/26/24 15:26	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-141.5-VOC_20240419 **Lab ID: 40277236032** Collected: 04/19/24 15:36 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.0**	ug/kg	35.3	9.0	1	04/24/24 10:00	04/26/24 18:49	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.5**	ug/kg	35.3	11.5	1	04/24/24 10:00	04/26/24 18:49	76-13-1	v1
1,1-Dichloroethene	**<11.7**	ug/kg	35.3	11.7	1	04/24/24 10:00	04/26/24 18:49	75-35-4	
1,2-Dichloroethane	**<8.1**	ug/kg	35.3	8.1	1	04/24/24 10:00	04/26/24 18:49	107-06-2	
2-Butanone (MEK)	**<112**	ug/kg	884	112	1	04/24/24 10:00	04/26/24 18:49	78-93-3	
2-Hexanone	**<351**	ug/kg	884	351	1	04/24/24 10:00	04/26/24 18:49	591-78-6	v1
2-Propanol	**<1130**	ug/kg	3530	1130	1	04/24/24 10:00	04/26/24 18:49	67-63-0	v2
Acetone	**<215**	ug/kg	884	215	1	04/24/24 10:00	04/26/24 18:49	67-64-1	v1
Benzene	**<8.4**	ug/kg	14.1	8.4	1	04/24/24 10:00	04/26/24 18:49	71-43-2	
Bromodichloromethane	**<8.4**	ug/kg	35.3	8.4	1	04/24/24 10:00	04/26/24 18:49	75-27-4	
Bromoform	**<156**	ug/kg	177	156	1	04/24/24 10:00	04/26/24 18:49	75-25-2	
Chlorobenzene	**<4.2**	ug/kg	35.3	4.2	1	04/24/24 10:00	04/26/24 18:49	108-90-7	
Chloroform	**<25.3**	ug/kg	177	25.3	1	04/24/24 10:00	04/26/24 18:49	67-66-3	
Chloromethane	**<13.4**	ug/kg	35.3	13.4	1	04/24/24 10:00	04/26/24 18:49	74-87-3	L2
Dibromochloromethane	**<121**	ug/kg	177	121	1	04/24/24 10:00	04/26/24 18:49	124-48-1	
Dichlorofluoromethane	**<10**	ug/kg	35.3	10	1	04/24/24 10:00	04/26/24 18:49	75-43-4	
Methyl-tert-butyl ether	**<10.4**	ug/kg	35.3	10.4	1	04/24/24 10:00	04/26/24 18:49	1634-04-4	
Methylene Chloride	**<9.8**	ug/kg	35.3	9.8	1	04/24/24 10:00	04/26/24 18:49	75-09-2	
Tetrachloroethene	**<13.7**	ug/kg	35.3	13.7	1	04/24/24 10:00	04/26/24 18:49	127-18-4	
Toluene	**<8.9**	ug/kg	35.3	8.9	1	04/24/24 10:00	04/26/24 18:49	108-88-3	
Trichloroethene	**<13.2**	ug/kg	35.3	13.2	1	04/24/24 10:00	04/26/24 18:49	79-01-6	
Trichlorofluoromethane	**<10.3**	ug/kg	35.3	10.3	1	04/24/24 10:00	04/26/24 18:49	75-69-4	
m&p-Xylene	**<14.9**	ug/kg	70.7	14.9	1	04/24/24 10:00	04/26/24 18:49	179601-23-1	
trans-1,2-Dichloroethene	**<7.7**	ug/kg	35.3	7.7	1	04/24/24 10:00	04/26/24 18:49	156-60-5	
Surrogates									
Toluene-d8 (S)	84	%	60-140		1	04/24/24 10:00	04/26/24 18:49	2037-26-5	
4-Bromofluorobenzene (S)	89	%	66-143		1	04/24/24 10:00	04/26/24 18:49	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	60-140		1	04/24/24 10:00	04/26/24 18:49	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-144.37-VOC_240419 **Lab ID: 40277236033** Collected: 04/19/24 16:18 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.9**	ug/kg	30.9	7.9	1	04/24/24 10:00	04/26/24 19:10	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.1**	ug/kg	30.9	10.1	1	04/24/24 10:00	04/26/24 19:10	76-13-1	v1
1,1-Dichloroethene	**<10.3**	ug/kg	30.9	10.3	1	04/24/24 10:00	04/26/24 19:10	75-35-4	
1,2-Dichloroethane	**<7.1**	ug/kg	30.9	7.1	1	04/24/24 10:00	04/26/24 19:10	107-06-2	
2-Butanone (MEK)	**<97.6**	ug/kg	772	97.6	1	04/24/24 10:00	04/26/24 19:10	78-93-3	
2-Hexanone	**<307**	ug/kg	772	307	1	04/24/24 10:00	04/26/24 19:10	591-78-6	v1
2-Propanol	**<984**	ug/kg	3090	984	1	04/24/24 10:00	04/26/24 19:10	67-63-0	v2
Acetone	**<188**	ug/kg	772	188	1	04/24/24 10:00	04/26/24 19:10	67-64-1	v1
Benzene	**<7.3**	ug/kg	12.3	7.3	1	04/24/24 10:00	04/26/24 19:10	71-43-2	
Bromodichloromethane	**<7.3**	ug/kg	30.9	7.3	1	04/24/24 10:00	04/26/24 19:10	75-27-4	
Bromoform	**<136**	ug/kg	154	136	1	04/24/24 10:00	04/26/24 19:10	75-25-2	
Chlorobenzene	**<3.7**	ug/kg	30.9	3.7	1	04/24/24 10:00	04/26/24 19:10	108-90-7	
Chloroform	**<22.1**	ug/kg	154	22.1	1	04/24/24 10:00	04/26/24 19:10	67-66-3	
Chloromethane	**<11.7**	ug/kg	30.9	11.7	1	04/24/24 10:00	04/26/24 19:10	74-87-3	L2
Dibromochloromethane	**<106**	ug/kg	154	106	1	04/24/24 10:00	04/26/24 19:10	124-48-1	
Dichlorofluoromethane	**<8.7**	ug/kg	30.9	8.7	1	04/24/24 10:00	04/26/24 19:10	75-43-4	
Methyl-tert-butyl ether	**<9.1**	ug/kg	30.9	9.1	1	04/24/24 10:00	04/26/24 19:10	1634-04-4	
Methylene Chloride	**<8.6**	ug/kg	30.9	8.6	1	04/24/24 10:00	04/26/24 19:10	75-09-2	
Tetrachloroethene	**<12.0**	ug/kg	30.9	12.0	1	04/24/24 10:00	04/26/24 19:10	127-18-4	
Toluene	**<7.8**	ug/kg	30.9	7.8	1	04/24/24 10:00	04/26/24 19:10	108-88-3	
Trichloroethene	**<11.5**	ug/kg	30.9	11.5	1	04/24/24 10:00	04/26/24 19:10	79-01-6	
Trichlorofluoromethane	**<9.0**	ug/kg	30.9	9.0	1	04/24/24 10:00	04/26/24 19:10	75-69-4	
m&p-Xylene	**<13.0**	ug/kg	61.7	13.0	1	04/24/24 10:00	04/26/24 19:10	179601-23-1	
trans-1,2-Dichloroethene	**<6.7**	ug/kg	30.9	6.7	1	04/24/24 10:00	04/26/24 19:10	156-60-5	
Surrogates									
Toluene-d8 (S)	98	%	60-140		1	04/24/24 10:00	04/26/24 19:10	2037-26-5	
4-Bromofluorobenzene (S)	102	%	66-143		1	04/24/24 10:00	04/26/24 19:10	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	60-140		1	04/24/24 10:00	04/26/24 19:10	2199-69-1	

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(920)469-2436

ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-145.8-VOC_20240419 **Lab ID: 40277236034** Collected: 04/19/24 16:19 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.6**	ug/kg	33.4	8.6	1	04/24/24 10:00	04/26/24 19:30	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.9**	ug/kg	33.4	10.9	1	04/24/24 10:00	04/26/24 19:30	76-13-1	v1
1,1-Dichloroethene	**<11.1**	ug/kg	33.4	11.1	1	04/24/24 10:00	04/26/24 19:30	75-35-4	
1,2-Dichloroethane	**<7.7**	ug/kg	33.4	7.7	1	04/24/24 10:00	04/26/24 19:30	107-06-2	
2-Butanone (MEK)	**<106**	ug/kg	835	106	1	04/24/24 10:00	04/26/24 19:30	78-93-3	
2-Hexanone	**<332**	ug/kg	835	332	1	04/24/24 10:00	04/26/24 19:30	591-78-6	v1
2-Propanol	**<1060**	ug/kg	3340	1060	1	04/24/24 10:00	04/26/24 19:30	67-63-0	v2
Acetone	**<203**	ug/kg	835	203	1	04/24/24 10:00	04/26/24 19:30	67-64-1	v1
Benzene	**<8.0**	ug/kg	13.4	8.0	1	04/24/24 10:00	04/26/24 19:30	71-43-2	
Bromodichloromethane	**<8.0**	ug/kg	33.4	8.0	1	04/24/24 10:00	04/26/24 19:30	75-27-4	
Bromoform	**<147**	ug/kg	167	147	1	04/24/24 10:00	04/26/24 19:30	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.4	4.0	1	04/24/24 10:00	04/26/24 19:30	108-90-7	
Chloroform	**<23.9**	ug/kg	167	23.9	1	04/24/24 10:00	04/26/24 19:30	67-66-3	
Chloromethane	**<12.7**	ug/kg	33.4	12.7	1	04/24/24 10:00	04/26/24 19:30	74-87-3	L2
Dibromochloromethane	**<114**	ug/kg	167	114	1	04/24/24 10:00	04/26/24 19:30	124-48-1	
Dichlorofluoromethane	**<9.4**	ug/kg	33.4	9.4	1	04/24/24 10:00	04/26/24 19:30	75-43-4	
Methyl-tert-butyl ether	**<9.8**	ug/kg	33.4	9.8	1	04/24/24 10:00	04/26/24 19:30	1634-04-4	
Methylene Chloride	**<9.3**	ug/kg	33.4	9.3	1	04/24/24 10:00	04/26/24 19:30	75-09-2	
Tetrachloroethene	**<13.0**	ug/kg	33.4	13.0	1	04/24/24 10:00	04/26/24 19:30	127-18-4	
Toluene	**<8.4**	ug/kg	33.4	8.4	1	04/24/24 10:00	04/26/24 19:30	108-88-3	
Trichloroethene	**<12.5**	ug/kg	33.4	12.5	1	04/24/24 10:00	04/26/24 19:30	79-01-6	
Trichlorofluoromethane	**<9.7**	ug/kg	33.4	9.7	1	04/24/24 10:00	04/26/24 19:30	75-69-4	
m&p-Xylene	**<14.1**	ug/kg	66.8	14.1	1	04/24/24 10:00	04/26/24 19:30	179601-23-1	
trans-1,2-Dichloroethene	**<7.3**	ug/kg	33.4	7.3	1	04/24/24 10:00	04/26/24 19:30	156-60-5	
Surrogates									
Toluene-d8 (S)	102	%	60-140		1	04/24/24 10:00	04/26/24 19:30	2037-26-5	
4-Bromofluorobenzene (S)	99	%	66-143		1	04/24/24 10:00	04/26/24 19:30	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	60-140		1	04/24/24 10:00	04/26/24 19:30	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-146.3-VOC_20240419 **Lab ID: 40277236035** Collected: 04/19/24 16:20 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.0**	ug/kg	31.2	8.0	1	04/24/24 10:00	04/26/24 19:50	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.2**	ug/kg	31.2	10.2	1	04/24/24 10:00	04/26/24 19:50	76-13-1	v1
1,1-Dichloroethene	**<10.4**	ug/kg	31.2	10.4	1	04/24/24 10:00	04/26/24 19:50	75-35-4	
1,2-Dichloroethane	**<7.2**	ug/kg	31.2	7.2	1	04/24/24 10:00	04/26/24 19:50	107-06-2	
2-Butanone (MEK)	**<98.8**	ug/kg	781	98.8	1	04/24/24 10:00	04/26/24 19:50	78-93-3	
2-Hexanone	**<310**	ug/kg	781	310	1	04/24/24 10:00	04/26/24 19:50	591-78-6	v1
2-Propanol	**<996**	ug/kg	3120	996	1	04/24/24 10:00	04/26/24 19:50	67-63-0	v2
Acetone	**<190**	ug/kg	781	190	1	04/24/24 10:00	04/26/24 19:50	67-64-1	v1
Benzene	**<7.4**	ug/kg	12.5	7.4	1	04/24/24 10:00	04/26/24 19:50	71-43-2	
Bromodichloromethane	**<7.4**	ug/kg	31.2	7.4	1	04/24/24 10:00	04/26/24 19:50	75-27-4	
Bromoform	**<138**	ug/kg	156	138	1	04/24/24 10:00	04/26/24 19:50	75-25-2	
Chlorobenzene	**<3.7**	ug/kg	31.2	3.7	1	04/24/24 10:00	04/26/24 19:50	108-90-7	
Chloroform	**<22.4**	ug/kg	156	22.4	1	04/24/24 10:00	04/26/24 19:50	67-66-3	
Chloromethane	**<11.9**	ug/kg	31.2	11.9	1	04/24/24 10:00	04/26/24 19:50	74-87-3	L2
Dibromochloromethane	**<107**	ug/kg	156	107	1	04/24/24 10:00	04/26/24 19:50	124-48-1	
Dichlorofluoromethane	**<8.8**	ug/kg	31.2	8.8	1	04/24/24 10:00	04/26/24 19:50	75-43-4	
Methyl-tert-butyl ether	**<9.2**	ug/kg	31.2	9.2	1	04/24/24 10:00	04/26/24 19:50	1634-04-4	
Methylene Chloride	**<8.7**	ug/kg	31.2	8.7	1	04/24/24 10:00	04/26/24 19:50	75-09-2	
Tetrachloroethene	**<12.1**	ug/kg	31.2	12.1	1	04/24/24 10:00	04/26/24 19:50	127-18-4	
Toluene	**<7.9**	ug/kg	31.2	7.9	1	04/24/24 10:00	04/26/24 19:50	108-88-3	
Trichloroethene	**<11.7**	ug/kg	31.2	11.7	1	04/24/24 10:00	04/26/24 19:50	79-01-6	
Trichlorofluoromethane	**<9.1**	ug/kg	31.2	9.1	1	04/24/24 10:00	04/26/24 19:50	75-69-4	
m&p-Xylene	**<13.2**	ug/kg	62.5	13.2	1	04/24/24 10:00	04/26/24 19:50	179601-23-1	
trans-1,2-Dichloroethene	**<6.8**	ug/kg	31.2	6.8	1	04/24/24 10:00	04/26/24 19:50	156-60-5	
Surrogates									
Toluene-d8 (S)	102	%	60-140		1	04/24/24 10:00	04/26/24 19:50	2037-26-5	
4-Bromofluorobenzene (S)	101	%	66-143		1	04/24/24 10:00	04/26/24 19:50	460-00-4	
1,2-Dichlorobenzene-d4 (S)	109	%	60-140		1	04/24/24 10:00	04/26/24 19:50	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-150.35-VOC_240420 **Lab ID: 40277236036** Collected: 04/20/24 09:52 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.5**	ug/kg	37.1	9.5	1	04/24/24 10:00	04/26/24 20:10	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.1**	ug/kg	37.1	12.1	1	04/24/24 10:00	04/26/24 20:10	76-13-1	v1
1,1-Dichloroethene	**<12.3**	ug/kg	37.1	12.3	1	04/24/24 10:00	04/26/24 20:10	75-35-4	
1,2-Dichloroethane	**<8.5**	ug/kg	37.1	8.5	1	04/24/24 10:00	04/26/24 20:10	107-06-2	
2-Butanone (MEK)	**<117**	ug/kg	928	117	1	04/24/24 10:00	04/26/24 20:10	78-93-3	
2-Hexanone	**<368**	ug/kg	928	368	1	04/24/24 10:00	04/26/24 20:10	591-78-6	v1
2-Propanol	**<1180**	ug/kg	3710	1180	1	04/24/24 10:00	04/26/24 20:10	67-63-0	v2
Acetone	**<226**	ug/kg	928	226	1	04/24/24 10:00	04/26/24 20:10	67-64-1	v1
Benzene	**<8.8**	ug/kg	14.8	8.8	1	04/24/24 10:00	04/26/24 20:10	71-43-2	
Bromodichloromethane	**<8.8**	ug/kg	37.1	8.8	1	04/24/24 10:00	04/26/24 20:10	75-27-4	
Bromoform	**<163**	ug/kg	186	163	1	04/24/24 10:00	04/26/24 20:10	75-25-2	
Chlorobenzene	**<4.4**	ug/kg	37.1	4.4	1	04/24/24 10:00	04/26/24 20:10	108-90-7	
Chloroform	**<26.6**	ug/kg	186	26.6	1	04/24/24 10:00	04/26/24 20:10	67-66-3	
Chloromethane	**<14.1**	ug/kg	37.1	14.1	1	04/24/24 10:00	04/26/24 20:10	74-87-3	L2
Dibromochloromethane	**<127**	ug/kg	186	127	1	04/24/24 10:00	04/26/24 20:10	124-48-1	
Dichlorofluoromethane	**<10.5**	ug/kg	37.1	10.5	1	04/24/24 10:00	04/26/24 20:10	75-43-4	
Methyl-tert-butyl ether	**<10.9**	ug/kg	37.1	10.9	1	04/24/24 10:00	04/26/24 20:10	1634-04-4	
Methylene Chloride	**<10.3**	ug/kg	37.1	10.3	1	04/24/24 10:00	04/26/24 20:10	75-09-2	
Tetrachloroethene	**<14.4**	ug/kg	37.1	14.4	1	04/24/24 10:00	04/26/24 20:10	127-18-4	
Toluene	**<9.4**	ug/kg	37.1	9.4	1	04/24/24 10:00	04/26/24 20:10	108-88-3	
Trichloroethene	**<13.9**	ug/kg	37.1	13.9	1	04/24/24 10:00	04/26/24 20:10	79-01-6	
Trichlorofluoromethane	**<10.8**	ug/kg	37.1	10.8	1	04/24/24 10:00	04/26/24 20:10	75-69-4	
m&p-Xylene	**<15.7**	ug/kg	74.2	15.7	1	04/24/24 10:00	04/26/24 20:10	179601-23-1	
trans-1,2-Dichloroethene	**<8.1**	ug/kg	37.1	8.1	1	04/24/24 10:00	04/26/24 20:10	156-60-5	
Surrogates									
Toluene-d8 (S)	97	%	60-140		1	04/24/24 10:00	04/26/24 20:10	2037-26-5	
4-Bromofluorobenzene (S)	105	%	66-143		1	04/24/24 10:00	04/26/24 20:10	460-00-4	
1,2-Dichlorobenzene-d4 (S)	114	%	60-140		1	04/24/24 10:00	04/26/24 20:10	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-152.3-VOC_20240420 **Lab ID: 40277236037** Collected: 04/20/24 09:53 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<11.1**	ug/kg	43.2	11.1	1	04/24/24 10:00	04/26/24 20:30	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<14.1**	ug/kg	43.2	14.1	1	04/24/24 10:00	04/26/24 20:30	76-13-1	v1
1,1-Dichloroethene	**<14.4**	ug/kg	43.2	14.4	1	04/24/24 10:00	04/26/24 20:30	75-35-4	
1,2-Dichloroethane	**<9.9**	ug/kg	43.2	9.9	1	04/24/24 10:00	04/26/24 20:30	107-06-2	
2-Butanone (MEK)	**<137**	ug/kg	1080	137	1	04/24/24 10:00	04/26/24 20:30	78-93-3	
2-Hexanone	**<429**	ug/kg	1080	429	1	04/24/24 10:00	04/26/24 20:30	591-78-6	v1
2-Propanol	**<1380**	ug/kg	4320	1380	1	04/24/24 10:00	04/26/24 20:30	67-63-0	v2
Acetone	**<263**	ug/kg	1080	263	1	04/24/24 10:00	04/26/24 20:30	67-64-1	v1
Benzene	**<10.3**	ug/kg	17.3	10.3	1	04/24/24 10:00	04/26/24 20:30	71-43-2	
Bromodichloromethane	**<10.3**	ug/kg	43.2	10.3	1	04/24/24 10:00	04/26/24 20:30	75-27-4	
Bromoform	**<190**	ug/kg	216	190	1	04/24/24 10:00	04/26/24 20:30	75-25-2	
Chlorobenzene	**<5.2**	ug/kg	43.2	5.2	1	04/24/24 10:00	04/26/24 20:30	108-90-7	
Chloroform	**<31.0**	ug/kg	216	31.0	1	04/24/24 10:00	04/26/24 20:30	67-66-3	
Chloromethane	**<16.4**	ug/kg	43.2	16.4	1	04/24/24 10:00	04/26/24 20:30	74-87-3	L2
Dibromochloromethane	**<148**	ug/kg	216	148	1	04/24/24 10:00	04/26/24 20:30	124-48-1	
Dichlorofluoromethane	**<12.2**	ug/kg	43.2	12.2	1	04/24/24 10:00	04/26/24 20:30	75-43-4	
Methyl-tert-butyl ether	**<12.7**	ug/kg	43.2	12.7	1	04/24/24 10:00	04/26/24 20:30	1634-04-4	
Methylene Chloride	**<12.0**	ug/kg	43.2	12.0	1	04/24/24 10:00	04/26/24 20:30	75-09-2	
Tetrachloroethene	**<16.8**	ug/kg	43.2	16.8	1	04/24/24 10:00	04/26/24 20:30	127-18-4	
Toluene	**<10.9**	ug/kg	43.2	10.9	1	04/24/24 10:00	04/26/24 20:30	108-88-3	
Trichloroethene	**<16.2**	ug/kg	43.2	16.2	1	04/24/24 10:00	04/26/24 20:30	79-01-6	
Trichlorofluoromethane	**<12.5**	ug/kg	43.2	12.5	1	04/24/24 10:00	04/26/24 20:30	75-69-4	
m&p-Xylene	**<18.2**	ug/kg	86.5	18.2	1	04/24/24 10:00	04/26/24 20:30	179601-23-1	
trans-1,2-Dichloroethene	**<9.5**	ug/kg	43.2	9.5	1	04/24/24 10:00	04/26/24 20:30	156-60-5	
Surrogates									
Toluene-d8 (S)	96	%	60-140		1	04/24/24 10:00	04/26/24 20:30	2037-26-5	
4-Bromofluorobenzene (S)	96	%	66-143		1	04/24/24 10:00	04/26/24 20:30	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	60-140		1	04/24/24 10:00	04/26/24 20:30	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-154.2-VOC_20240420 **Lab ID: 40277236038** Collected: 04/20/24 10:30 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.7**	ug/kg	37.9	9.7	1	04/24/24 10:00	04/26/24 20:50	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.3**	ug/kg	37.9	12.3	1	04/24/24 10:00	04/26/24 20:50	76-13-1	v1
1,1-Dichloroethene	**<12.6**	ug/kg	37.9	12.6	1	04/24/24 10:00	04/26/24 20:50	75-35-4	
1,2-Dichloroethane	**<8.7**	ug/kg	37.9	8.7	1	04/24/24 10:00	04/26/24 20:50	107-06-2	
2-Butanone (MEK)	**<120**	ug/kg	947	120	1	04/24/24 10:00	04/26/24 20:50	78-93-3	
2-Hexanone	**<376**	ug/kg	947	376	1	04/24/24 10:00	04/26/24 20:50	591-78-6	v1
2-Propanol	**<1210**	ug/kg	3790	1210	1	04/24/24 10:00	04/26/24 20:50	67-63-0	v2
Acetone	**<230**	ug/kg	947	230	1	04/24/24 10:00	04/26/24 20:50	67-64-1	v1
Benzene	**<9.0**	ug/kg	15.1	9.0	1	04/24/24 10:00	04/26/24 20:50	71-43-2	
Bromodichloromethane	**<9.0**	ug/kg	37.9	9.0	1	04/24/24 10:00	04/26/24 20:50	75-27-4	
Bromoform	**<167**	ug/kg	189	167	1	04/24/24 10:00	04/26/24 20:50	75-25-2	
Chlorobenzene	**<4.5**	ug/kg	37.9	4.5	1	04/24/24 10:00	04/26/24 20:50	108-90-7	
Chloroform	**<27.1**	ug/kg	189	27.1	1	04/24/24 10:00	04/26/24 20:50	67-66-3	
Chloromethane	**<14.4**	ug/kg	37.9	14.4	1	04/24/24 10:00	04/26/24 20:50	74-87-3	L2
Dibromochloromethane	**<129**	ug/kg	189	129	1	04/24/24 10:00	04/26/24 20:50	124-48-1	
Dichlorofluoromethane	**<10.7**	ug/kg	37.9	10.7	1	04/24/24 10:00	04/26/24 20:50	75-43-4	
Methyl-tert-butyl ether	**<11.1**	ug/kg	37.9	11.1	1	04/24/24 10:00	04/26/24 20:50	1634-04-4	
Methylene Chloride	**<10.5**	ug/kg	37.9	10.5	1	04/24/24 10:00	04/26/24 20:50	75-09-2	
Tetrachloroethene	**<14.7**	ug/kg	37.9	14.7	1	04/24/24 10:00	04/26/24 20:50	127-18-4	
Toluene	**<9.5**	ug/kg	37.9	9.5	1	04/24/24 10:00	04/26/24 20:50	108-88-3	
Trichloroethene	**<14.2**	ug/kg	37.9	14.2	1	04/24/24 10:00	04/26/24 20:50	79-01-6	
Trichlorofluoromethane	**<11.0**	ug/kg	37.9	11.0	1	04/24/24 10:00	04/26/24 20:50	75-69-4	
m&p-Xylene	**<16.0**	ug/kg	75.7	16.0	1	04/24/24 10:00	04/26/24 20:50	179601-23-1	
trans-1,2-Dichloroethene	**<8.3**	ug/kg	37.9	8.3	1	04/24/24 10:00	04/26/24 20:50	156-60-5	
Surrogates									
Toluene-d8 (S)	94	%	60-140		1	04/24/24 10:00	04/26/24 20:50	2037-26-5	
4-Bromofluorobenzene (S)	100	%	66-143		1	04/24/24 10:00	04/26/24 20:50	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	60-140		1	04/24/24 10:00	04/26/24 20:50	2199-69-1	

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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-154.5-VOC_20240420 **Lab ID: 40277236039** Collected: 04/20/24 10:31 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.1**	ug/kg	31.6	8.1	1	04/24/24 10:00	04/26/24 21:10	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.3**	ug/kg	31.6	10.3	1	04/24/24 10:00	04/26/24 21:10	76-13-1	v1
1,1-Dichloroethene	**<10.5**	ug/kg	31.6	10.5	1	04/24/24 10:00	04/26/24 21:10	75-35-4	
1,2-Dichloroethane	**<7.3**	ug/kg	31.6	7.3	1	04/24/24 10:00	04/26/24 21:10	107-06-2	
2-Butanone (MEK)	**<100**	ug/kg	791	100	1	04/24/24 10:00	04/26/24 21:10	78-93-3	
2-Hexanone	**<314**	ug/kg	791	314	1	04/24/24 10:00	04/26/24 21:10	591-78-6	v1
2-Propanol	**<1010**	ug/kg	3160	1010	1	04/24/24 10:00	04/26/24 21:10	67-63-0	v2
Acetone	**<193**	ug/kg	791	193	1	04/24/24 10:00	04/26/24 21:10	67-64-1	v1
Benzene	**<7.5**	ug/kg	12.7	7.5	1	04/24/24 10:00	04/26/24 21:10	71-43-2	
Bromodichloromethane	**<7.5**	ug/kg	31.6	7.5	1	04/24/24 10:00	04/26/24 21:10	75-27-4	
Bromoform	**<139**	ug/kg	158	139	1	04/24/24 10:00	04/26/24 21:10	75-25-2	
Chlorobenzene	**<3.8**	ug/kg	31.6	3.8	1	04/24/24 10:00	04/26/24 21:10	108-90-7	
Chloroform	**<22.7**	ug/kg	158	22.7	1	04/24/24 10:00	04/26/24 21:10	67-66-3	
Chloromethane	**<12.0**	ug/kg	31.6	12.0	1	04/24/24 10:00	04/26/24 21:10	74-87-3	L2
Dibromochloromethane	**<108**	ug/kg	158	108	1	04/24/24 10:00	04/26/24 21:10	124-48-1	
Dichlorofluoromethane	**<8.9**	ug/kg	31.6	8.9	1	04/24/24 10:00	04/26/24 21:10	75-43-4	
Methyl-tert-butyl ether	**<9.3**	ug/kg	31.6	9.3	1	04/24/24 10:00	04/26/24 21:10	1634-04-4	
Methylene Chloride	**<8.8**	ug/kg	31.6	8.8	1	04/24/24 10:00	04/26/24 21:10	75-09-2	
Tetrachloroethene	**<12.3**	ug/kg	31.6	12.3	1	04/24/24 10:00	04/26/24 21:10	127-18-4	
Toluene	**<8.0**	ug/kg	31.6	8.0	1	04/24/24 10:00	04/26/24 21:10	108-88-3	
Trichloroethene	**<11.8**	ug/kg	31.6	11.8	1	04/24/24 10:00	04/26/24 21:10	79-01-6	
Trichlorofluoromethane	**15.6J**	ug/kg	31.6	9.2	1	04/24/24 10:00	04/26/24 21:10	75-69-4	
m&p-Xylene	**<13.4**	ug/kg	63.3	13.4	1	04/24/24 10:00	04/26/24 21:10	179601-23-1	
trans-1,2-Dichloroethene	**<6.9**	ug/kg	31.6	6.9	1	04/24/24 10:00	04/26/24 21:10	156-60-5	
Surrogates									
Toluene-d8 (S)	92	%	60-140		1	04/24/24 10:00	04/26/24 21:10	2037-26-5	
4-Bromofluorobenzene (S)	92	%	66-143		1	04/24/24 10:00	04/26/24 21:10	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	60-140		1	04/24/24 10:00	04/26/24 21:10	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-156.25-VOC_240420 **Lab ID: 40277236040** Collected: 04/20/24 10:32 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.4**	ug/kg	36.7	9.4	1	04/25/24 07:55	04/26/24 23:11	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.0**	ug/kg	36.7	12.0	1	04/25/24 07:55	04/26/24 23:11	76-13-1	v1
1,1-Dichloroethene	**<12.2**	ug/kg	36.7	12.2	1	04/25/24 07:55	04/26/24 23:11	75-35-4	
1,2-Dichloroethane	**<8.4**	ug/kg	36.7	8.4	1	04/25/24 07:55	04/26/24 23:11	107-06-2	
2-Butanone (MEK)	**<116**	ug/kg	918	116	1	04/25/24 07:55	04/26/24 23:11	78-93-3	
2-Hexanone	**<365**	ug/kg	918	365	1	04/25/24 07:55	04/26/24 23:11	591-78-6	v1
2-Propanol	**<1170**	ug/kg	3670	1170	1	04/25/24 07:55	04/26/24 23:11	67-63-0	v2
Acetone	**<224**	ug/kg	918	224	1	04/25/24 07:55	04/26/24 23:11	67-64-1	v1
Benzene	**<8.7**	ug/kg	14.7	8.7	1	04/25/24 07:55	04/26/24 23:11	71-43-2	
Bromodichloromethane	**<8.7**	ug/kg	36.7	8.7	1	04/25/24 07:55	04/26/24 23:11	75-27-4	
Bromoform	**<162**	ug/kg	184	162	1	04/25/24 07:55	04/26/24 23:11	75-25-2	
Chlorobenzene	**<4.4**	ug/kg	36.7	4.4	1	04/25/24 07:55	04/26/24 23:11	108-90-7	
Chloroform	**<26.3**	ug/kg	184	26.3	1	04/25/24 07:55	04/26/24 23:11	67-66-3	L2
Chloromethane	**<14.0**	ug/kg	36.7	14.0	1	04/25/24 07:55	04/26/24 23:11	74-87-3	
Dibromochloromethane	**<126**	ug/kg	184	126	1	04/25/24 07:55	04/26/24 23:11	124-48-1	
Dichlorofluoromethane	**<10.4**	ug/kg	36.7	10.4	1	04/25/24 07:55	04/26/24 23:11	75-43-4	
Methyl-tert-butyl ether	**<10.8**	ug/kg	36.7	10.8	1	04/25/24 07:55	04/26/24 23:11	1634-04-4	
Methylene Chloride	**<10.2**	ug/kg	36.7	10.2	1	04/25/24 07:55	04/26/24 23:11	75-09-2	
Tetrachloroethene	**<14.3**	ug/kg	36.7	14.3	1	04/25/24 07:55	04/26/24 23:11	127-18-4	
Toluene	**<9.3**	ug/kg	36.7	9.3	1	04/25/24 07:55	04/26/24 23:11	108-88-3	
Trichloroethene	**<13.7**	ug/kg	36.7	13.7	1	04/25/24 07:55	04/26/24 23:11	79-01-6	
Trichlorofluoromethane	**<10.7**	ug/kg	36.7	10.7	1	04/25/24 07:55	04/26/24 23:11	75-69-4	
m&p-Xylene	**<15.5**	ug/kg	73.5	15.5	1	04/25/24 07:55	04/26/24 23:11	179601-23-1	
trans-1,2-Dichloroethene	**<8.0**	ug/kg	36.7	8.0	1	04/25/24 07:55	04/26/24 23:11	156-60-5	
Surrogates									
Toluene-d8 (S)	99	%	60-140		1	04/25/24 07:55	04/26/24 23:11	2037-26-5	
4-Bromofluorobenzene (S)	96	%	66-143		1	04/25/24 07:55	04/26/24 23:11	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	60-140		1	04/25/24 07:55	04/26/24 23:11	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-161.45-VOC_240420 **Lab ID: 40277236041** Collected: 04/20/24 11:34 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.3**	ug/kg	40.4	10.3	1	04/25/24 07:55	04/26/24 23:31	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<13.2**	ug/kg	40.4	13.2	1	04/25/24 07:55	04/26/24 23:31	76-13-1	v1
1,1-Dichloroethene	**<13.4**	ug/kg	40.4	13.4	1	04/25/24 07:55	04/26/24 23:31	75-35-4	
1,2-Dichloroethane	**<9.3**	ug/kg	40.4	9.3	1	04/25/24 07:55	04/26/24 23:31	107-06-2	
2-Butanone (MEK)	**<128**	ug/kg	1010	128	1	04/25/24 07:55	04/26/24 23:31	78-93-3	
2-Hexanone	**<401**	ug/kg	1010	401	1	04/25/24 07:55	04/26/24 23:31	591-78-6	v1
2-Propanol	**<1290**	ug/kg	4040	1290	1	04/25/24 07:55	04/26/24 23:31	67-63-0	v2
Acetone	**<246**	ug/kg	1010	246	1	04/25/24 07:55	04/26/24 23:31	67-64-1	v1
Benzene	**<9.6**	ug/kg	16.1	9.6	1	04/25/24 07:55	04/26/24 23:31	71-43-2	
Bromodichloromethane	**<9.6**	ug/kg	40.4	9.6	1	04/25/24 07:55	04/26/24 23:31	75-27-4	
Bromoform	**<178**	ug/kg	202	178	1	04/25/24 07:55	04/26/24 23:31	75-25-2	
Chlorobenzene	**<4.8**	ug/kg	40.4	4.8	1	04/25/24 07:55	04/26/24 23:31	108-90-7	
Chloroform	**<28.9**	ug/kg	202	28.9	1	04/25/24 07:55	04/26/24 23:31	67-66-3	L2
Chloromethane	**<15.3**	ug/kg	40.4	15.3	1	04/25/24 07:55	04/26/24 23:31	74-87-3	
Dibromochloromethane	**<138**	ug/kg	202	138	1	04/25/24 07:55	04/26/24 23:31	124-48-1	
Dichlorofluoromethane	**<11.4**	ug/kg	40.4	11.4	1	04/25/24 07:55	04/26/24 23:31	75-43-4	
Methyl-tert-butyl ether	**<11.9**	ug/kg	40.4	11.9	1	04/25/24 07:55	04/26/24 23:31	1634-04-4	
Methylene Chloride	**<11.2**	ug/kg	40.4	11.2	1	04/25/24 07:55	04/26/24 23:31	75-09-2	
Tetrachloroethene	**<15.7**	ug/kg	40.4	15.7	1	04/25/24 07:55	04/26/24 23:31	127-18-4	
Toluene	**<10.2**	ug/kg	40.4	10.2	1	04/25/24 07:55	04/26/24 23:31	108-88-3	
Trichloroethene	**<15.1**	ug/kg	40.4	15.1	1	04/25/24 07:55	04/26/24 23:31	79-01-6	
Trichlorofluoromethane	**<11.7**	ug/kg	40.4	11.7	1	04/25/24 07:55	04/26/24 23:31	75-69-4	
m&p-Xylene	**<17.0**	ug/kg	80.7	17.0	1	04/25/24 07:55	04/26/24 23:31	179601-23-1	
trans-1,2-Dichloroethene	**<8.8**	ug/kg	40.4	8.8	1	04/25/24 07:55	04/26/24 23:31	156-60-5	
Surrogates									
Toluene-d8 (S)	103	%	60-140		1	04/25/24 07:55	04/26/24 23:31	2037-26-5	
4-Bromofluorobenzene (S)	101	%	66-143		1	04/25/24 07:55	04/26/24 23:31	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	60-140		1	04/25/24 07:55	04/26/24 23:31	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-164.9-VOC_20240420 **Lab ID: 40277236042** Collected: 04/20/24 12:47 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.9**	ug/kg	42.8	10.9	1	04/25/24 07:55	04/26/24 23:51	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<13.9**	ug/kg	42.8	13.9	1	04/25/24 07:55	04/26/24 23:51	76-13-1	v1
1,1-Dichloroethene	**<14.2**	ug/kg	42.8	14.2	1	04/25/24 07:55	04/26/24 23:51	75-35-4	
1,2-Dichloroethane	**<9.8**	ug/kg	42.8	9.8	1	04/25/24 07:55	04/26/24 23:51	107-06-2	
2-Butanone (MEK)	**<135**	ug/kg	1070	135	1	04/25/24 07:55	04/26/24 23:51	78-93-3	
2-Hexanone	**<425**	ug/kg	1070	425	1	04/25/24 07:55	04/26/24 23:51	591-78-6	v1
2-Propanol	**<1360**	ug/kg	4280	1360	1	04/25/24 07:55	04/26/24 23:51	67-63-0	v2
Acetone	**<260**	ug/kg	1070	260	1	04/25/24 07:55	04/26/24 23:51	67-64-1	v1
Benzene	**<10.2**	ug/kg	17.1	10.2	1	04/25/24 07:55	04/26/24 23:51	71-43-2	
Bromodichloromethane	**<10.2**	ug/kg	42.8	10.2	1	04/25/24 07:55	04/26/24 23:51	75-27-4	
Bromoform	**<188**	ug/kg	214	188	1	04/25/24 07:55	04/26/24 23:51	75-25-2	
Chlorobenzene	**<5.1**	ug/kg	42.8	5.1	1	04/25/24 07:55	04/26/24 23:51	108-90-7	
Chloroform	**<30.6**	ug/kg	214	30.6	1	04/25/24 07:55	04/26/24 23:51	67-66-3	L2
Chloromethane	**<16.3**	ug/kg	42.8	16.3	1	04/25/24 07:55	04/26/24 23:51	74-87-3	
Dibromochloromethane	**<146**	ug/kg	214	146	1	04/25/24 07:55	04/26/24 23:51	124-48-1	
Dichlorofluoromethane	**<12.1**	ug/kg	42.8	12.1	1	04/25/24 07:55	04/26/24 23:51	75-43-4	
Methyl-tert-butyl ether	**<12.6**	ug/kg	42.8	12.6	1	04/25/24 07:55	04/26/24 23:51	1634-04-4	
Methylene Chloride	**15.8J**	ug/kg	42.8	11.9	1	04/25/24 07:55	04/26/24 23:51	75-09-2	
Tetrachloroethene	**<16.6**	ug/kg	42.8	16.6	1	04/25/24 07:55	04/26/24 23:51	127-18-4	
Toluene	**<10.8**	ug/kg	42.8	10.8	1	04/25/24 07:55	04/26/24 23:51	108-88-3	
Trichloroethene	**<16.0**	ug/kg	42.8	16.0	1	04/25/24 07:55	04/26/24 23:51	79-01-6	
Trichlorofluoromethane	**<12.4**	ug/kg	42.8	12.4	1	04/25/24 07:55	04/26/24 23:51	75-69-4	
m&p-Xylene	**<18.0**	ug/kg	85.5	18.0	1	04/25/24 07:55	04/26/24 23:51	179601-23-1	
trans-1,2-Dichloroethene	**<9.3**	ug/kg	42.8	9.3	1	04/25/24 07:55	04/26/24 23:51	156-60-5	
Surrogates									
Toluene-d8 (S)	96	%	60-140		1	04/25/24 07:55	04/26/24 23:51	2037-26-5	
4-Bromofluorobenzene (S)	97	%	66-143		1	04/25/24 07:55	04/26/24 23:51	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	60-140		1	04/25/24 07:55	04/26/24 23:51	2199-69-1	

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(920)469-2436

ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-165.8-VOC_20240420 **Lab ID: 40277236043** Collected: 04/20/24 12:48 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<11.7**	ug/kg	45.5	11.7	1	04/25/24 07:55	04/27/24 00:11	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<14.8**	ug/kg	45.5	14.8	1	04/25/24 07:55	04/27/24 00:11	76-13-1	v1
1,1-Dichloroethene	**<15.1**	ug/kg	45.5	15.1	1	04/25/24 07:55	04/27/24 00:11	75-35-4	
1,2-Dichloroethane	**<10.5**	ug/kg	45.5	10.5	1	04/25/24 07:55	04/27/24 00:11	107-06-2	
2-Butanone (MEK)	**<144**	ug/kg	1140	144	1	04/25/24 07:55	04/27/24 00:11	78-93-3	
2-Hexanone	**<452**	ug/kg	1140	452	1	04/25/24 07:55	04/27/24 00:11	591-78-6	v1
2-Propanol	**<1450**	ug/kg	4550	1450	1	04/25/24 07:55	04/27/24 00:11	67-63-0	v2
Acetone	**<277**	ug/kg	1140	277	1	04/25/24 07:55	04/27/24 00:11	67-64-1	v1
Benzene	**<10.8**	ug/kg	18.2	10.8	1	04/25/24 07:55	04/27/24 00:11	71-43-2	
Bromodichloromethane	**<10.8**	ug/kg	45.5	10.8	1	04/25/24 07:55	04/27/24 00:11	75-27-4	
Bromoform	**<200**	ug/kg	228	200	1	04/25/24 07:55	04/27/24 00:11	75-25-2	
Chlorobenzene	**<5.5**	ug/kg	45.5	5.5	1	04/25/24 07:55	04/27/24 00:11	108-90-7	
Chloroform	**<32.6**	ug/kg	228	32.6	1	04/25/24 07:55	04/27/24 00:11	67-66-3	L2
Chloromethane	**<17.3**	ug/kg	45.5	17.3	1	04/25/24 07:55	04/27/24 00:11	74-87-3	
Dibromochloromethane	**<156**	ug/kg	228	156	1	04/25/24 07:55	04/27/24 00:11	124-48-1	
Dichlorofluoromethane	**<12.8**	ug/kg	45.5	12.8	1	04/25/24 07:55	04/27/24 00:11	75-43-4	
Methyl-tert-butyl ether	**<13.4**	ug/kg	45.5	13.4	1	04/25/24 07:55	04/27/24 00:11	1634-04-4	
Methylene Chloride	**20.2J**	ug/kg	45.5	12.7	1	04/25/24 07:55	04/27/24 00:11	75-09-2	
Tetrachloroethene	**<17.7**	ug/kg	45.5	17.7	1	04/25/24 07:55	04/27/24 00:11	127-18-4	
Toluene	**<11.5**	ug/kg	45.5	11.5	1	04/25/24 07:55	04/27/24 00:11	108-88-3	
Trichloroethene	**<17.0**	ug/kg	45.5	17.0	1	04/25/24 07:55	04/27/24 00:11	79-01-6	
Trichlorofluoromethane	**<13.2**	ug/kg	45.5	13.2	1	04/25/24 07:55	04/27/24 00:11	75-69-4	
m&p-Xylene	**<19.2**	ug/kg	91.1	19.2	1	04/25/24 07:55	04/27/24 00:11	179601-23-1	
trans-1,2-Dichloroethene	**<10**	ug/kg	45.5	10	1	04/25/24 07:55	04/27/24 00:11	156-60-5	
Surrogates									
Toluene-d8 (S)	101	%	60-140		1	04/25/24 07:55	04/27/24 00:11	2037-26-5	
4-Bromofluorobenzene (S)	93	%	66-143		1	04/25/24 07:55	04/27/24 00:11	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	60-140		1	04/25/24 07:55	04/27/24 00:11	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-167-VOC_20240420 **Lab ID: 40277236044** Collected: 04/20/24 12:49 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.5**	ug/kg	37.1	9.5	1	04/25/24 07:55	04/27/24 00:32	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.1**	ug/kg	37.1	12.1	1	04/25/24 07:55	04/27/24 00:32	76-13-1	v1
1,1-Dichloroethene	**<12.3**	ug/kg	37.1	12.3	1	04/25/24 07:55	04/27/24 00:32	75-35-4	
1,2-Dichloroethane	**<8.5**	ug/kg	37.1	8.5	1	04/25/24 07:55	04/27/24 00:32	107-06-2	
2-Butanone (MEK)	**<117**	ug/kg	928	117	1	04/25/24 07:55	04/27/24 00:32	78-93-3	
2-Hexanone	**<369**	ug/kg	928	369	1	04/25/24 07:55	04/27/24 00:32	591-78-6	v1
2-Propanol	**<1180**	ug/kg	3710	1180	1	04/25/24 07:55	04/27/24 00:32	67-63-0	v2
Acetone	**<226**	ug/kg	928	226	1	04/25/24 07:55	04/27/24 00:32	67-64-1	v1
Benzene	**<8.8**	ug/kg	14.9	8.8	1	04/25/24 07:55	04/27/24 00:32	71-43-2	
Bromodichloromethane	**<8.8**	ug/kg	37.1	8.8	1	04/25/24 07:55	04/27/24 00:32	75-27-4	
Bromoform	**<163**	ug/kg	186	163	1	04/25/24 07:55	04/27/24 00:32	75-25-2	
Chlorobenzene	**<4.4**	ug/kg	37.1	4.4	1	04/25/24 07:55	04/27/24 00:32	108-90-7	
Chloroform	**<26.6**	ug/kg	186	26.6	1	04/25/24 07:55	04/27/24 00:32	67-66-3	L2
Chloromethane	**<14.1**	ug/kg	37.1	14.1	1	04/25/24 07:55	04/27/24 00:32	74-87-3	
Dibromochloromethane	**<127**	ug/kg	186	127	1	04/25/24 07:55	04/27/24 00:32	124-48-1	
Dichlorofluoromethane	**<10.5**	ug/kg	37.1	10.5	1	04/25/24 07:55	04/27/24 00:32	75-43-4	
Methyl-tert-butyl ether	**<10.9**	ug/kg	37.1	10.9	1	04/25/24 07:55	04/27/24 00:32	1634-04-4	
Methylene Chloride	**18.9J**	ug/kg	37.1	10.3	1	04/25/24 07:55	04/27/24 00:32	75-09-2	
Tetrachloroethene	**<14.4**	ug/kg	37.1	14.4	1	04/25/24 07:55	04/27/24 00:32	127-18-4	
Toluene	**<9.4**	ug/kg	37.1	9.4	1	04/25/24 07:55	04/27/24 00:32	108-88-3	
Trichloroethene	**<13.9**	ug/kg	37.1	13.9	1	04/25/24 07:55	04/27/24 00:32	79-01-6	
Trichlorofluoromethane	**<10.8**	ug/kg	37.1	10.8	1	04/25/24 07:55	04/27/24 00:32	75-69-4	
m&p-Xylene	**<15.7**	ug/kg	74.3	15.7	1	04/25/24 07:55	04/27/24 00:32	179601-23-1	
trans-1,2-Dichloroethene	**<8.1**	ug/kg	37.1	8.1	1	04/25/24 07:55	04/27/24 00:32	156-60-5	
Surrogates									
Toluene-d8 (S)	98	%	60-140		1	04/25/24 07:55	04/27/24 00:32	2037-26-5	
4-Bromofluorobenzene (S)	90	%	66-143		1	04/25/24 07:55	04/27/24 00:32	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	60-140		1	04/25/24 07:55	04/27/24 00:32	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-170.6-VOC_20240420 **Lab ID: 40277236045** Collected: 04/20/24 13:45 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.3**	ug/kg	36.2	9.3	1	04/25/24 07:55	04/27/24 00:52	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.8**	ug/kg	36.2	11.8	1	04/25/24 07:55	04/27/24 00:52	76-13-1	v1
1,1-Dichloroethene	**<12.0**	ug/kg	36.2	12.0	1	04/25/24 07:55	04/27/24 00:52	75-35-4	
1,2-Dichloroethane	**<8.3**	ug/kg	36.2	8.3	1	04/25/24 07:55	04/27/24 00:52	107-06-2	
2-Butanone (MEK)	**<114**	ug/kg	904	114	1	04/25/24 07:55	04/27/24 00:52	78-93-3	
2-Hexanone	**<359**	ug/kg	904	359	1	04/25/24 07:55	04/27/24 00:52	591-78-6	v1
2-Propanol	**<1150**	ug/kg	3620	1150	1	04/25/24 07:55	04/27/24 00:52	67-63-0	v2
Acetone	**<220**	ug/kg	904	220	1	04/25/24 07:55	04/27/24 00:52	67-64-1	v1
Benzene	**<8.6**	ug/kg	14.5	8.6	1	04/25/24 07:55	04/27/24 00:52	71-43-2	
Bromodichloromethane	**<8.6**	ug/kg	36.2	8.6	1	04/25/24 07:55	04/27/24 00:52	75-27-4	
Bromoform	**<159**	ug/kg	181	159	1	04/25/24 07:55	04/27/24 00:52	75-25-2	
Chlorobenzene	**<4.3**	ug/kg	36.2	4.3	1	04/25/24 07:55	04/27/24 00:52	108-90-7	
Chloroform	**<25.9**	ug/kg	181	25.9	1	04/25/24 07:55	04/27/24 00:52	67-66-3	L2
Chloromethane	**<13.7**	ug/kg	36.2	13.7	1	04/25/24 07:55	04/27/24 00:52	74-87-3	
Dibromochloromethane	**<124**	ug/kg	181	124	1	04/25/24 07:55	04/27/24 00:52	124-48-1	
Dichlorofluoromethane	**<10.2**	ug/kg	36.2	10.2	1	04/25/24 07:55	04/27/24 00:52	75-43-4	
Methyl-tert-butyl ether	**<10.6**	ug/kg	36.2	10.6	1	04/25/24 07:55	04/27/24 00:52	1634-04-4	
Methylene Chloride	**17.3J**	ug/kg	36.2	10.1	1	04/25/24 07:55	04/27/24 00:52	75-09-2	
Tetrachloroethene	**<14.0**	ug/kg	36.2	14.0	1	04/25/24 07:55	04/27/24 00:52	127-18-4	
Toluene	**<9.1**	ug/kg	36.2	9.1	1	04/25/24 07:55	04/27/24 00:52	108-88-3	
Trichloroethene	**<13.5**	ug/kg	36.2	13.5	1	04/25/24 07:55	04/27/24 00:52	79-01-6	
Trichlorofluoromethane	**<10.5**	ug/kg	36.2	10.5	1	04/25/24 07:55	04/27/24 00:52	75-69-4	
m&p-Xylene	**<15.3**	ug/kg	72.3	15.3	1	04/25/24 07:55	04/27/24 00:52	179601-23-1	
trans-1,2-Dichloroethene	**<7.9**	ug/kg	36.2	7.9	1	04/25/24 07:55	04/27/24 00:52	156-60-5	
Surrogates									
Toluene-d8 (S)	96	%	60-140		1	04/25/24 07:55	04/27/24 00:52	2037-26-5	
4-Bromofluorobenzene (S)	100	%	66-143		1	04/25/24 07:55	04/27/24 00:52	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	60-140		1	04/25/24 07:55	04/27/24 00:52	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-171-VOC_20240420 **Lab ID: 40277236046** Collected: 04/20/24 13:46 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.0**	ug/kg	35.2	9.0	1	04/24/24 10:00	04/26/24 12:45	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.5**	ug/kg	35.2	11.5	1	04/24/24 10:00	04/26/24 12:45	76-13-1	R1
1,1-Dichloroethene	**<11.7**	ug/kg	35.2	11.7	1	04/24/24 10:00	04/26/24 12:45	75-35-4	
1,2-Dichloroethane	**<8.1**	ug/kg	35.2	8.1	1	04/24/24 10:00	04/26/24 12:45	107-06-2	
2-Butanone (MEK)	**<111**	ug/kg	880	111	1	04/24/24 10:00	04/26/24 12:45	78-93-3	
2-Hexanone	**<350**	ug/kg	880	350	1	04/24/24 10:00	04/26/24 12:45	591-78-6	v1
2-Propanol	**<1120**	ug/kg	3520	1120	1	04/24/24 10:00	04/26/24 12:45	67-63-0	
Acetone	**<214**	ug/kg	880	214	1	04/24/24 10:00	04/26/24 12:45	67-64-1	v1
Benzene	**<8.4**	ug/kg	14.1	8.4	1	04/24/24 10:00	04/26/24 12:45	71-43-2	
Bromodichloromethane	**<8.4**	ug/kg	35.2	8.4	1	04/24/24 10:00	04/26/24 12:45	75-27-4	
Bromoform	**<155**	ug/kg	176	155	1	04/24/24 10:00	04/26/24 12:45	75-25-2	
Chlorobenzene	**<4.2**	ug/kg	35.2	4.2	1	04/24/24 10:00	04/26/24 12:45	108-90-7	
Chloroform	**<25.2**	ug/kg	176	25.2	1	04/24/24 10:00	04/26/24 12:45	67-66-3	
Chloromethane	**<13.4**	ug/kg	35.2	13.4	1	04/24/24 10:00	04/26/24 12:45	74-87-3	L2,M0
Dibromochloromethane	**<120**	ug/kg	176	120	1	04/24/24 10:00	04/26/24 12:45	124-48-1	
Dichlorofluoromethane	**<9.9**	ug/kg	35.2	9.9	1	04/24/24 10:00	04/26/24 12:45	75-43-4	
Methyl-tert-butyl ether	**<10.4**	ug/kg	35.2	10.4	1	04/24/24 10:00	04/26/24 12:45	1634-04-4	
Methylene Chloride	**<9.8**	ug/kg	35.2	9.8	1	04/24/24 10:00	04/26/24 12:45	75-09-2	
Tetrachloroethene	**<13.7**	ug/kg	35.2	13.7	1	04/24/24 10:00	04/26/24 12:45	127-18-4	
Toluene	**<8.9**	ug/kg	35.2	8.9	1	04/24/24 10:00	04/26/24 12:45	108-88-3	
Trichloroethene	**<13.2**	ug/kg	35.2	13.2	1	04/24/24 10:00	04/26/24 12:45	79-01-6	
Trichlorofluoromethane	**<10.2**	ug/kg	35.2	10.2	1	04/24/24 10:00	04/26/24 12:45	75-69-4	R1
m&p-Xylene	**<14.9**	ug/kg	70.4	14.9	1	04/24/24 10:00	04/26/24 12:45	179601-23-1	
trans-1,2-Dichloroethene	**<7.7**	ug/kg	35.2	7.7	1	04/24/24 10:00	04/26/24 12:45	156-60-5	
Surrogates									
Toluene-d8 (S)	96	%	60-140		1	04/24/24 10:00	04/26/24 12:45	2037-26-5	
4-Bromofluorobenzene (S)	100	%	66-143		1	04/24/24 10:00	04/26/24 12:45	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	60-140		1	04/24/24 10:00	04/26/24 12:45	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-171-VOC-DUP_240420 **Lab ID: 40277236047** Collected: 04/20/24 13:46 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.0**	ug/kg	35.3	9.0	1	04/25/24 07:55	04/27/24 01:12	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.5**	ug/kg	35.3	11.5	1	04/25/24 07:55	04/27/24 01:12	76-13-1	v1
1,1-Dichloroethene	**<11.7**	ug/kg	35.3	11.7	1	04/25/24 07:55	04/27/24 01:12	75-35-4	
1,2-Dichloroethane	**<8.1**	ug/kg	35.3	8.1	1	04/25/24 07:55	04/27/24 01:12	107-06-2	
2-Butanone (MEK)	**<111**	ug/kg	882	111	1	04/25/24 07:55	04/27/24 01:12	78-93-3	
2-Hexanone	**<350**	ug/kg	882	350	1	04/25/24 07:55	04/27/24 01:12	591-78-6	v1
2-Propanol	**<1120**	ug/kg	3530	1120	1	04/25/24 07:55	04/27/24 01:12	67-63-0	v2
Acetone	**<215**	ug/kg	882	215	1	04/25/24 07:55	04/27/24 01:12	67-64-1	v1
Benzene	**<8.4**	ug/kg	14.1	8.4	1	04/25/24 07:55	04/27/24 01:12	71-43-2	
Bromodichloromethane	**<8.4**	ug/kg	35.3	8.4	1	04/25/24 07:55	04/27/24 01:12	75-27-4	
Bromoform	**<155**	ug/kg	176	155	1	04/25/24 07:55	04/27/24 01:12	75-25-2	
Chlorobenzene	**<4.2**	ug/kg	35.3	4.2	1	04/25/24 07:55	04/27/24 01:12	108-90-7	
Chloroform	**<25.3**	ug/kg	176	25.3	1	04/25/24 07:55	04/27/24 01:12	67-66-3	L2
Chloromethane	**<13.4**	ug/kg	35.3	13.4	1	04/25/24 07:55	04/27/24 01:12	74-87-3	
Dibromochloromethane	**<121**	ug/kg	176	121	1	04/25/24 07:55	04/27/24 01:12	124-48-1	
Dichlorofluoromethane	**<9.9**	ug/kg	35.3	9.9	1	04/25/24 07:55	04/27/24 01:12	75-43-4	
Methyl-tert-butyl ether	**<10.4**	ug/kg	35.3	10.4	1	04/25/24 07:55	04/27/24 01:12	1634-04-4	
Methylene Chloride	**12.0J**	ug/kg	35.3	9.8	1	04/25/24 07:55	04/27/24 01:12	75-09-2	
Tetrachloroethene	**<13.7**	ug/kg	35.3	13.7	1	04/25/24 07:55	04/27/24 01:12	127-18-4	
Toluene	**<8.9**	ug/kg	35.3	8.9	1	04/25/24 07:55	04/27/24 01:12	108-88-3	
Trichloroethene	**<13.2**	ug/kg	35.3	13.2	1	04/25/24 07:55	04/27/24 01:12	79-01-6	
Trichlorofluoromethane	**<10.2**	ug/kg	35.3	10.2	1	04/25/24 07:55	04/27/24 01:12	75-69-4	
m&p-Xylene	**<14.9**	ug/kg	70.5	14.9	1	04/25/24 07:55	04/27/24 01:12	179601-23-1	
trans-1,2-Dichloroethene	**<7.7**	ug/kg	35.3	7.7	1	04/25/24 07:55	04/27/24 01:12	156-60-5	
Surrogates									
Toluene-d8 (S)	103	%	60-140		1	04/25/24 07:55	04/27/24 01:12	2037-26-5	
4-Bromofluorobenzene (S)	106	%	66-143		1	04/25/24 07:55	04/27/24 01:12	460-00-4	
1,2-Dichlorobenzene-d4 (S)	116	%	60-140		1	04/25/24 07:55	04/27/24 01:12	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-174.8-VOC_20240420 **Lab ID: 40277236048** Collected: 04/20/24 14:17 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.4**	ug/kg	40.6	10.4	1	04/25/24 07:55	04/27/24 01:32	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<13.2**	ug/kg	40.6	13.2	1	04/25/24 07:55	04/27/24 01:32	76-13-1	v1
1,1-Dichloroethene	**<13.5**	ug/kg	40.6	13.5	1	04/25/24 07:55	04/27/24 01:32	75-35-4	
1,2-Dichloroethane	**<9.3**	ug/kg	40.6	9.3	1	04/25/24 07:55	04/27/24 01:32	107-06-2	
2-Butanone (MEK)	**<128**	ug/kg	1020	128	1	04/25/24 07:55	04/27/24 01:32	78-93-3	
2-Hexanone	**<403**	ug/kg	1020	403	1	04/25/24 07:55	04/27/24 01:32	591-78-6	v1
2-Propanol	**<1290**	ug/kg	4060	1290	1	04/25/24 07:55	04/27/24 01:32	67-63-0	v2
Acetone	**<247**	ug/kg	1020	247	1	04/25/24 07:55	04/27/24 01:32	67-64-1	v1
Benzene	**<9.7**	ug/kg	16.3	9.7	1	04/25/24 07:55	04/27/24 01:32	71-43-2	
Bromodichloromethane	**<9.7**	ug/kg	40.6	9.7	1	04/25/24 07:55	04/27/24 01:32	75-27-4	
Bromoform	**<179**	ug/kg	203	179	1	04/25/24 07:55	04/27/24 01:32	75-25-2	
Chlorobenzene	**<4.9**	ug/kg	40.6	4.9	1	04/25/24 07:55	04/27/24 01:32	108-90-7	
Chloroform	**<29.1**	ug/kg	203	29.1	1	04/25/24 07:55	04/27/24 01:32	67-66-3	L2
Chloromethane	**<15.4**	ug/kg	40.6	15.4	1	04/25/24 07:55	04/27/24 01:32	74-87-3	
Dibromochloromethane	**<139**	ug/kg	203	139	1	04/25/24 07:55	04/27/24 01:32	124-48-1	
Dichlorofluoromethane	**<11.5**	ug/kg	40.6	11.5	1	04/25/24 07:55	04/27/24 01:32	75-43-4	
Methyl-tert-butyl ether	**<11.9**	ug/kg	40.6	11.9	1	04/25/24 07:55	04/27/24 01:32	1634-04-4	
Methylene Chloride	**17.6J**	ug/kg	40.6	11.3	1	04/25/24 07:55	04/27/24 01:32	75-09-2	
Tetrachloroethene	**<15.8**	ug/kg	40.6	15.8	1	04/25/24 07:55	04/27/24 01:32	127-18-4	
Toluene	**<10.2**	ug/kg	40.6	10.2	1	04/25/24 07:55	04/27/24 01:32	108-88-3	
Trichloroethene	**<15.2**	ug/kg	40.6	15.2	1	04/25/24 07:55	04/27/24 01:32	79-01-6	
Trichlorofluoromethane	**<11.8**	ug/kg	40.6	11.8	1	04/25/24 07:55	04/27/24 01:32	75-69-4	
m&p-Xylene	**<17.1**	ug/kg	81.3	17.1	1	04/25/24 07:55	04/27/24 01:32	179601-23-1	
trans-1,2-Dichloroethene	**<8.9**	ug/kg	40.6	8.9	1	04/25/24 07:55	04/27/24 01:32	156-60-5	
Surrogates									
Toluene-d8 (S)	101	%	60-140		1	04/25/24 07:55	04/27/24 01:32	2037-26-5	
4-Bromofluorobenzene (S)	99	%	66-143		1	04/25/24 07:55	04/27/24 01:32	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	60-140		1	04/25/24 07:55	04/27/24 01:32	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-176.4-VOC_20240420 **Lab ID: 40277236049** Collected: 04/20/24 14:18 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.8**	ug/kg	38.4	9.8	1	04/25/24 07:55	04/27/24 01:52	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.5**	ug/kg	38.4	12.5	1	04/25/24 07:55	04/27/24 01:52	76-13-1	v1
1,1-Dichloroethene	**<12.8**	ug/kg	38.4	12.8	1	04/25/24 07:55	04/27/24 01:52	75-35-4	
1,2-Dichloroethane	**<8.8**	ug/kg	38.4	8.8	1	04/25/24 07:55	04/27/24 01:52	107-06-2	
2-Butanone (MEK)	**<121**	ug/kg	961	121	1	04/25/24 07:55	04/27/24 01:52	78-93-3	
2-Hexanone	**<382**	ug/kg	961	382	1	04/25/24 07:55	04/27/24 01:52	591-78-6	v1
2-Propanol	**<1220**	ug/kg	3840	1220	1	04/25/24 07:55	04/27/24 01:52	67-63-0	v2
Acetone	**<234**	ug/kg	961	234	1	04/25/24 07:55	04/27/24 01:52	67-64-1	v1
Benzene	**<9.1**	ug/kg	15.4	9.1	1	04/25/24 07:55	04/27/24 01:52	71-43-2	
Bromodichloromethane	**<9.1**	ug/kg	38.4	9.1	1	04/25/24 07:55	04/27/24 01:52	75-27-4	
Bromoform	**<169**	ug/kg	192	169	1	04/25/24 07:55	04/27/24 01:52	75-25-2	
Chlorobenzene	**<4.6**	ug/kg	38.4	4.6	1	04/25/24 07:55	04/27/24 01:52	108-90-7	
Chloroform	**<27.5**	ug/kg	192	27.5	1	04/25/24 07:55	04/27/24 01:52	67-66-3	L2
Chloromethane	**<14.6**	ug/kg	38.4	14.6	1	04/25/24 07:55	04/27/24 01:52	74-87-3	
Dibromochloromethane	**<131**	ug/kg	192	131	1	04/25/24 07:55	04/27/24 01:52	124-48-1	
Dichlorofluoromethane	**<10.8**	ug/kg	38.4	10.8	1	04/25/24 07:55	04/27/24 01:52	75-43-4	
Methyl-tert-butyl ether	**<11.3**	ug/kg	38.4	11.3	1	04/25/24 07:55	04/27/24 01:52	1634-04-4	
Methylene Chloride	**<10.7**	ug/kg	38.4	10.7	1	04/25/24 07:55	04/27/24 01:52	75-09-2	
Tetrachloroethene	**<14.9**	ug/kg	38.4	14.9	1	04/25/24 07:55	04/27/24 01:52	127-18-4	
Toluene	**<9.7**	ug/kg	38.4	9.7	1	04/25/24 07:55	04/27/24 01:52	108-88-3	
Trichloroethene	**<14.4**	ug/kg	38.4	14.4	1	04/25/24 07:55	04/27/24 01:52	79-01-6	
Trichlorofluoromethane	**<11.1**	ug/kg	38.4	11.1	1	04/25/24 07:55	04/27/24 01:52	75-69-4	
m&p-Xylene	**<16.2**	ug/kg	76.9	16.2	1	04/25/24 07:55	04/27/24 01:52	179601-23-1	
trans-1,2-Dichloroethene	**<8.4**	ug/kg	38.4	8.4	1	04/25/24 07:55	04/27/24 01:52	156-60-5	
Surrogates									
Toluene-d8 (S)	106	%	60-140		1	04/25/24 07:55	04/27/24 01:52	2037-26-5	
4-Bromofluorobenzene (S)	115	%	66-143		1	04/25/24 07:55	04/27/24 01:52	460-00-4	
1,2-Dichlorobenzene-d4 (S)	120	%	60-140		1	04/25/24 07:55	04/27/24 01:52	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-180.2-VOC_20240420 **Lab ID: 40277236050** Collected: 04/20/24 14:52 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.0**	ug/kg	31.1	8.0	1	04/25/24 07:55	04/27/24 02:12	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.1**	ug/kg	31.1	10.1	1	04/25/24 07:55	04/27/24 02:12	76-13-1	v1
1,1-Dichloroethene	**<10.3**	ug/kg	31.1	10.3	1	04/25/24 07:55	04/27/24 02:12	75-35-4	
1,2-Dichloroethane	**<7.1**	ug/kg	31.1	7.1	1	04/25/24 07:55	04/27/24 02:12	107-06-2	
2-Butanone (MEK)	**<98.2**	ug/kg	777	98.2	1	04/25/24 07:55	04/27/24 02:12	78-93-3	
2-Hexanone	**<308**	ug/kg	777	308	1	04/25/24 07:55	04/27/24 02:12	591-78-6	v1
2-Propanol	**<990**	ug/kg	3110	990	1	04/25/24 07:55	04/27/24 02:12	67-63-0	v2
Acetone	**<189**	ug/kg	777	189	1	04/25/24 07:55	04/27/24 02:12	67-64-1	v1
Benzene	**<7.4**	ug/kg	12.4	7.4	1	04/25/24 07:55	04/27/24 02:12	71-43-2	
Bromodichloromethane	**<7.4**	ug/kg	31.1	7.4	1	04/25/24 07:55	04/27/24 02:12	75-27-4	
Bromoform	**<137**	ug/kg	155	137	1	04/25/24 07:55	04/27/24 02:12	75-25-2	
Chlorobenzene	**<3.7**	ug/kg	31.1	3.7	1	04/25/24 07:55	04/27/24 02:12	108-90-7	
Chloroform	**<22.2**	ug/kg	155	22.2	1	04/25/24 07:55	04/27/24 02:12	67-66-3	L2
Chloromethane	**<11.8**	ug/kg	31.1	11.8	1	04/25/24 07:55	04/27/24 02:12	74-87-3	
Dibromochloromethane	**<106**	ug/kg	155	106	1	04/25/24 07:55	04/27/24 02:12	124-48-1	
Dichlorofluoromethane	**<8.8**	ug/kg	31.1	8.8	1	04/25/24 07:55	04/27/24 02:12	75-43-4	
Methyl-tert-butyl ether	**<9.1**	ug/kg	31.1	9.1	1	04/25/24 07:55	04/27/24 02:12	1634-04-4	
Methylene Chloride	**<8.6**	ug/kg	31.1	8.6	1	04/25/24 07:55	04/27/24 02:12	75-09-2	
Tetrachloroethene	**<12.1**	ug/kg	31.1	12.1	1	04/25/24 07:55	04/27/24 02:12	127-18-4	
Toluene	**<7.8**	ug/kg	31.1	7.8	1	04/25/24 07:55	04/27/24 02:12	108-88-3	
Trichloroethene	**<11.6**	ug/kg	31.1	11.6	1	04/25/24 07:55	04/27/24 02:12	79-01-6	
Trichlorofluoromethane	**<9.0**	ug/kg	31.1	9.0	1	04/25/24 07:55	04/27/24 02:12	75-69-4	
m&p-Xylene	**<13.1**	ug/kg	62.1	13.1	1	04/25/24 07:55	04/27/24 02:12	179601-23-1	
trans-1,2-Dichloroethene	**<6.8**	ug/kg	31.1	6.8	1	04/25/24 07:55	04/27/24 02:12	156-60-5	
Surrogates									
Toluene-d8 (S)	103	%	60-140		1	04/25/24 07:55	04/27/24 02:12	2037-26-5	
4-Bromofluorobenzene (S)	108	%	66-143		1	04/25/24 07:55	04/27/24 02:12	460-00-4	
1,2-Dichlorobenzene-d4 (S)	118	%	60-140		1	04/25/24 07:55	04/27/24 02:12	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-182.5-VOC_20240420 **Lab ID: 40277236051** Collected: 04/20/24 14:53 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.9**	ug/kg	30.7	7.9	1	04/25/24 07:55	04/27/24 02:32	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.0**	ug/kg	30.7	10.0	1	04/25/24 07:55	04/27/24 02:32	76-13-1	v1
1,1-Dichloroethene	**<10.2**	ug/kg	30.7	10.2	1	04/25/24 07:55	04/27/24 02:32	75-35-4	
1,2-Dichloroethane	**<7.1**	ug/kg	30.7	7.1	1	04/25/24 07:55	04/27/24 02:32	107-06-2	
2-Butanone (MEK)	**<97.0**	ug/kg	767	97.0	1	04/25/24 07:55	04/27/24 02:32	78-93-3	
2-Hexanone	**<305**	ug/kg	767	305	1	04/25/24 07:55	04/27/24 02:32	591-78-6	v1
2-Propanol	**<978**	ug/kg	3070	978	1	04/25/24 07:55	04/27/24 02:32	67-63-0	v2
Acetone	**<187**	ug/kg	767	187	1	04/25/24 07:55	04/27/24 02:32	67-64-1	v1
Benzene	**<7.3**	ug/kg	12.3	7.3	1	04/25/24 07:55	04/27/24 02:32	71-43-2	
Bromodichloromethane	**<7.3**	ug/kg	30.7	7.3	1	04/25/24 07:55	04/27/24 02:32	75-27-4	
Bromoform	**<135**	ug/kg	153	135	1	04/25/24 07:55	04/27/24 02:32	75-25-2	
Chlorobenzene	**<3.7**	ug/kg	30.7	3.7	1	04/25/24 07:55	04/27/24 02:32	108-90-7	
Chloroform	**<22.0**	ug/kg	153	22.0	1	04/25/24 07:55	04/27/24 02:32	67-66-3	L2
Chloromethane	**<11.7**	ug/kg	30.7	11.7	1	04/25/24 07:55	04/27/24 02:32	74-87-3	
Dibromochloromethane	**<105**	ug/kg	153	105	1	04/25/24 07:55	04/27/24 02:32	124-48-1	
Dichlorofluoromethane	**<8.7**	ug/kg	30.7	8.7	1	04/25/24 07:55	04/27/24 02:32	75-43-4	
Methyl-tert-butyl ether	**<9.0**	ug/kg	30.7	9.0	1	04/25/24 07:55	04/27/24 02:32	1634-04-4	
Methylene Chloride	**12.2J**	ug/kg	30.7	8.5	1	04/25/24 07:55	04/27/24 02:32	75-09-2	
Tetrachloroethene	**<11.9**	ug/kg	30.7	11.9	1	04/25/24 07:55	04/27/24 02:32	127-18-4	
Toluene	**<7.7**	ug/kg	30.7	7.7	1	04/25/24 07:55	04/27/24 02:32	108-88-3	
Trichloroethene	**<11.5**	ug/kg	30.7	11.5	1	04/25/24 07:55	04/27/24 02:32	79-01-6	
Trichlorofluoromethane	**<8.9**	ug/kg	30.7	8.9	1	04/25/24 07:55	04/27/24 02:32	75-69-4	
m&p-Xylene	**<13.0**	ug/kg	61.4	13.0	1	04/25/24 07:55	04/27/24 02:32	179601-23-1	
trans-1,2-Dichloroethene	**<6.7**	ug/kg	30.7	6.7	1	04/25/24 07:55	04/27/24 02:32	156-60-5	
Surrogates									
Toluene-d8 (S)	104	%	60-140		1	04/25/24 07:55	04/27/24 02:32	2037-26-5	
4-Bromofluorobenzene (S)	101	%	66-143		1	04/25/24 07:55	04/27/24 02:32	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	60-140		1	04/25/24 07:55	04/27/24 02:32	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-183.1-VOC_20240420 **Lab ID: 40277236052** Collected: 04/20/24 15:30 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.7**	ug/kg	37.8	9.7	1	04/25/24 07:55	04/27/24 02:52	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.3**	ug/kg	37.8	12.3	1	04/25/24 07:55	04/27/24 02:52	76-13-1	v1
1,1-Dichloroethene	**<12.5**	ug/kg	37.8	12.5	1	04/25/24 07:55	04/27/24 02:52	75-35-4	
1,2-Dichloroethane	**<8.7**	ug/kg	37.8	8.7	1	04/25/24 07:55	04/27/24 02:52	107-06-2	
2-Butanone (MEK)	**<119**	ug/kg	944	119	1	04/25/24 07:55	04/27/24 02:52	78-93-3	
2-Hexanone	**<375**	ug/kg	944	375	1	04/25/24 07:55	04/27/24 02:52	591-78-6	v1
2-Propanol	**<1200**	ug/kg	3780	1200	1	04/25/24 07:55	04/27/24 02:52	67-63-0	v2
Acetone	**<230**	ug/kg	944	230	1	04/25/24 07:55	04/27/24 02:52	67-64-1	v1
Benzene	**<9.0**	ug/kg	15.1	9.0	1	04/25/24 07:55	04/27/24 02:52	71-43-2	
Bromodichloromethane	**<9.0**	ug/kg	37.8	9.0	1	04/25/24 07:55	04/27/24 02:52	75-27-4	
Bromoform	**<166**	ug/kg	189	166	1	04/25/24 07:55	04/27/24 02:52	75-25-2	
Chlorobenzene	**<4.5**	ug/kg	37.8	4.5	1	04/25/24 07:55	04/27/24 02:52	108-90-7	
Chloroform	**<27.0**	ug/kg	189	27.0	1	04/25/24 07:55	04/27/24 02:52	67-66-3	L2
Chloromethane	**<14.4**	ug/kg	37.8	14.4	1	04/25/24 07:55	04/27/24 02:52	74-87-3	
Dibromochloromethane	**<129**	ug/kg	189	129	1	04/25/24 07:55	04/27/24 02:52	124-48-1	
Dichlorofluoromethane	**<10.7**	ug/kg	37.8	10.7	1	04/25/24 07:55	04/27/24 02:52	75-43-4	
Methyl-tert-butyl ether	**<11.1**	ug/kg	37.8	11.1	1	04/25/24 07:55	04/27/24 02:52	1634-04-4	
Methylene Chloride	**24.1J**	ug/kg	37.8	10.5	1	04/25/24 07:55	04/27/24 02:52	75-09-2	
Tetrachloroethene	**<14.7**	ug/kg	37.8	14.7	1	04/25/24 07:55	04/27/24 02:52	127-18-4	
Toluene	**<9.5**	ug/kg	37.8	9.5	1	04/25/24 07:55	04/27/24 02:52	108-88-3	
Trichloroethene	**<14.1**	ug/kg	37.8	14.1	1	04/25/24 07:55	04/27/24 02:52	79-01-6	
Trichlorofluoromethane	**<11.0**	ug/kg	37.8	11.0	1	04/25/24 07:55	04/27/24 02:52	75-69-4	
m&p-Xylene	**<15.9**	ug/kg	75.6	15.9	1	04/25/24 07:55	04/27/24 02:52	179601-23-1	
trans-1,2-Dichloroethene	**<8.3**	ug/kg	37.8	8.3	1	04/25/24 07:55	04/27/24 02:52	156-60-5	
Surrogates									
Toluene-d8 (S)	106	%	60-140		1	04/25/24 07:55	04/27/24 02:52	2037-26-5	
4-Bromofluorobenzene (S)	98	%	66-143		1	04/25/24 07:55	04/27/24 02:52	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	60-140		1	04/25/24 07:55	04/27/24 02:52	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-187.5-VOC_20240420 **Lab ID: 40277236053** Collected: 04/20/24 15:31 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.2**	ug/kg	28.1	7.2	1	04/25/24 07:55	04/27/24 03:13	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<9.2**	ug/kg	28.1	9.2	1	04/25/24 07:55	04/27/24 03:13	76-13-1	v1
1,1-Dichloroethene	**<9.3**	ug/kg	28.1	9.3	1	04/25/24 07:55	04/27/24 03:13	75-35-4	
1,2-Dichloroethane	**<6.5**	ug/kg	28.1	6.5	1	04/25/24 07:55	04/27/24 03:13	107-06-2	
2-Butanone (MEK)	**<88.8**	ug/kg	703	88.8	1	04/25/24 07:55	04/27/24 03:13	78-93-3	
2-Hexanone	**<279**	ug/kg	703	279	1	04/25/24 07:55	04/27/24 03:13	591-78-6	v1
2-Propanol	**<896**	ug/kg	2810	896	1	04/25/24 07:55	04/27/24 03:13	67-63-0	v2
Acetone	**<171**	ug/kg	703	171	1	04/25/24 07:55	04/27/24 03:13	67-64-1	v1
Benzene	**<6.7**	ug/kg	11.2	6.7	1	04/25/24 07:55	04/27/24 03:13	71-43-2	
Bromodichloromethane	**<6.7**	ug/kg	28.1	6.7	1	04/25/24 07:55	04/27/24 03:13	75-27-4	
Bromoform	**<124**	ug/kg	141	124	1	04/25/24 07:55	04/27/24 03:13	75-25-2	
Chlorobenzene	**<3.4**	ug/kg	28.1	3.4	1	04/25/24 07:55	04/27/24 03:13	108-90-7	
Chloroform	**<20.1**	ug/kg	141	20.1	1	04/25/24 07:55	04/27/24 03:13	67-66-3	L2
Chloromethane	**<10.7**	ug/kg	28.1	10.7	1	04/25/24 07:55	04/27/24 03:13	74-87-3	
Dibromochloromethane	**<96.1**	ug/kg	141	96.1	1	04/25/24 07:55	04/27/24 03:13	124-48-1	
Dichlorofluoromethane	**<7.9**	ug/kg	28.1	7.9	1	04/25/24 07:55	04/27/24 03:13	75-43-4	
Methyl-tert-butyl ether	**<8.3**	ug/kg	28.1	8.3	1	04/25/24 07:55	04/27/24 03:13	1634-04-4	
Methylene Chloride	**<7.8**	ug/kg	28.1	7.8	1	04/25/24 07:55	04/27/24 03:13	75-09-2	
Tetrachloroethene	**<10.9**	ug/kg	28.1	10.9	1	04/25/24 07:55	04/27/24 03:13	127-18-4	
Toluene	**<7.1**	ug/kg	28.1	7.1	1	04/25/24 07:55	04/27/24 03:13	108-88-3	
Trichloroethene	**<10.5**	ug/kg	28.1	10.5	1	04/25/24 07:55	04/27/24 03:13	79-01-6	
Trichlorofluoromethane	**<8.2**	ug/kg	28.1	8.2	1	04/25/24 07:55	04/27/24 03:13	75-69-4	
m&p-Xylene	**<11.9**	ug/kg	56.2	11.9	1	04/25/24 07:55	04/27/24 03:13	179601-23-1	
trans-1,2-Dichloroethene	**<6.1**	ug/kg	28.1	6.1	1	04/25/24 07:55	04/27/24 03:13	156-60-5	
Surrogates									
Toluene-d8 (S)	101	%	60-140		1	04/25/24 07:55	04/27/24 03:13	2037-26-5	
4-Bromofluorobenzene (S)	94	%	66-143		1	04/25/24 07:55	04/27/24 03:13	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	60-140		1	04/25/24 07:55	04/27/24 03:13	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-188.85-VOC_240420 **Lab ID: 40277236054** Collected: 04/20/24 16:17 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.5**	ug/kg	33.2	8.5	1	04/25/24 07:55	04/27/24 03:33	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.8**	ug/kg	33.2	10.8	1	04/25/24 07:55	04/27/24 03:33	76-13-1	v1
1,1-Dichloroethene	**<11.0**	ug/kg	33.2	11.0	1	04/25/24 07:55	04/27/24 03:33	75-35-4	
1,2-Dichloroethane	**<7.6**	ug/kg	33.2	7.6	1	04/25/24 07:55	04/27/24 03:33	107-06-2	
2-Butanone (MEK)	**<105**	ug/kg	831	105	1	04/25/24 07:55	04/27/24 03:33	78-93-3	
2-Hexanone	**<330**	ug/kg	831	330	1	04/25/24 07:55	04/27/24 03:33	591-78-6	v1
2-Propanol	**<1060**	ug/kg	3320	1060	1	04/25/24 07:55	04/27/24 03:33	67-63-0	v2
Acetone	**<202**	ug/kg	831	202	1	04/25/24 07:55	04/27/24 03:33	67-64-1	v1
Benzene	**<7.9**	ug/kg	13.3	7.9	1	04/25/24 07:55	04/27/24 03:33	71-43-2	
Bromodichloromethane	**<7.9**	ug/kg	33.2	7.9	1	04/25/24 07:55	04/27/24 03:33	75-27-4	
Bromoform	**<146**	ug/kg	166	146	1	04/25/24 07:55	04/27/24 03:33	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.2	4.0	1	04/25/24 07:55	04/27/24 03:33	108-90-7	
Chloroform	**<23.8**	ug/kg	166	23.8	1	04/25/24 07:55	04/27/24 03:33	67-66-3	L2
Chloromethane	**<12.6**	ug/kg	33.2	12.6	1	04/25/24 07:55	04/27/24 03:33	74-87-3	
Dibromochloromethane	**<114**	ug/kg	166	114	1	04/25/24 07:55	04/27/24 03:33	124-48-1	
Dichlorofluoromethane	**<9.4**	ug/kg	33.2	9.4	1	04/25/24 07:55	04/27/24 03:33	75-43-4	
Methyl-tert-butyl ether	**<9.8**	ug/kg	33.2	9.8	1	04/25/24 07:55	04/27/24 03:33	1634-04-4	
Methylene Chloride	**12.1J**	ug/kg	33.2	9.2	1	04/25/24 07:55	04/27/24 03:33	75-09-2	
Tetrachloroethene	**<12.9**	ug/kg	33.2	12.9	1	04/25/24 07:55	04/27/24 03:33	127-18-4	
Toluene	**<8.4**	ug/kg	33.2	8.4	1	04/25/24 07:55	04/27/24 03:33	108-88-3	
Trichloroethene	**<12.4**	ug/kg	33.2	12.4	1	04/25/24 07:55	04/27/24 03:33	79-01-6	
Trichlorofluoromethane	**<9.6**	ug/kg	33.2	9.6	1	04/25/24 07:55	04/27/24 03:33	75-69-4	
m&p-Xylene	**<14.0**	ug/kg	66.5	14.0	1	04/25/24 07:55	04/27/24 03:33	179601-23-1	
trans-1,2-Dichloroethene	**<7.3**	ug/kg	33.2	7.3	1	04/25/24 07:55	04/27/24 03:33	156-60-5	
Surrogates									
Toluene-d8 (S)	104	%	60-140		1	04/25/24 07:55	04/27/24 03:33	2037-26-5	
4-Bromofluorobenzene (S)	97	%	66-143		1	04/25/24 07:55	04/27/24 03:33	460-00-4	
1,2-Dichlorobenzene-d4 (S)	111	%	60-140		1	04/25/24 07:55	04/27/24 03:33	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-192.8-VOC_20240420 **Lab ID: 40277236055** Collected: 04/20/24 16:18 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.3**	ug/kg	28.5	7.3	1	04/25/24 09:40	04/29/24 14:04	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<9.3**	ug/kg	28.5	9.3	1	04/25/24 09:40	04/29/24 14:04	76-13-1	
1,1-Dichloroethene	**<9.5**	ug/kg	28.5	9.5	1	04/25/24 09:40	04/29/24 14:04	75-35-4	
1,2-Dichloroethane	**<6.5**	ug/kg	28.5	6.5	1	04/25/24 09:40	04/29/24 14:04	107-06-2	
2-Butanone (MEK)	**<90.0**	ug/kg	712	90.0	1	04/25/24 09:40	04/29/24 14:04	78-93-3	
2-Hexanone	**<283**	ug/kg	712	283	1	04/25/24 09:40	04/29/24 14:04	591-78-6	
2-Propanol	**<907**	ug/kg	2850	907	1	04/25/24 09:40	04/29/24 14:04	67-63-0	
Acetone	**<173**	ug/kg	712	173	1	04/25/24 09:40	04/29/24 14:04	67-64-1	v1
Benzene	**<6.8**	ug/kg	11.4	6.8	1	04/25/24 09:40	04/29/24 14:04	71-43-2	
Bromodichloromethane	**<6.8**	ug/kg	28.5	6.8	1	04/25/24 09:40	04/29/24 14:04	75-27-4	
Bromoform	**<125**	ug/kg	142	125	1	04/25/24 09:40	04/29/24 14:04	75-25-2	
Chlorobenzene	**<3.4**	ug/kg	28.5	3.4	1	04/25/24 09:40	04/29/24 14:04	108-90-7	
Chloroform	**<20.4**	ug/kg	142	20.4	1	04/25/24 09:40	04/29/24 14:04	67-66-3	
Chloromethane	**<10.8**	ug/kg	28.5	10.8	1	04/25/24 09:40	04/29/24 14:04	74-87-3	
Dibromochloromethane	**<97.3**	ug/kg	142	97.3	1	04/25/24 09:40	04/29/24 14:04	124-48-1	
Dichlorofluoromethane	**<8.0**	ug/kg	28.5	8.0	1	04/25/24 09:40	04/29/24 14:04	75-43-4	
Methyl-tert-butyl ether	**<8.4**	ug/kg	28.5	8.4	1	04/25/24 09:40	04/29/24 14:04	1634-04-4	
Methylene Chloride	**<7.9**	ug/kg	28.5	7.9	1	04/25/24 09:40	04/29/24 14:04	75-09-2	
Tetrachloroethene	**<11.0**	ug/kg	28.5	11.0	1	04/25/24 09:40	04/29/24 14:04	127-18-4	
Toluene	**<7.2**	ug/kg	28.5	7.2	1	04/25/24 09:40	04/29/24 14:04	108-88-3	
Trichloroethene	**<10.6**	ug/kg	28.5	10.6	1	04/25/24 09:40	04/29/24 14:04	79-01-6	
Trichlorofluoromethane	**<8.3**	ug/kg	28.5	8.3	1	04/25/24 09:40	04/29/24 14:04	75-69-4	
m&p-Xylene	**<12.0**	ug/kg	56.9	12.0	1	04/25/24 09:40	04/29/24 14:04	179601-23-1	
trans-1,2-Dichloroethene	**<6.2**	ug/kg	28.5	6.2	1	04/25/24 09:40	04/29/24 14:04	156-60-5	
Surrogates									
Toluene-d8 (S)	96	%	60-140		1	04/25/24 09:40	04/29/24 14:04	2037-26-5	
4-Bromofluorobenzene (S)	93	%	66-143		1	04/25/24 09:40	04/29/24 14:04	460-00-4	
1,2-Dichlorobenzene-d4 (S)	97	%	60-140		1	04/25/24 09:40	04/29/24 14:04	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-194.2-VOC_20240421 **Lab ID: 40277236056** Collected: 04/21/24 08:55 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.5**	ug/kg	33.1	8.5	1	04/25/24 09:40	04/29/24 14:24	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.8**	ug/kg	33.1	10.8	1	04/25/24 09:40	04/29/24 14:24	76-13-1	
1,1-Dichloroethene	**<11.0**	ug/kg	33.1	11.0	1	04/25/24 09:40	04/29/24 14:24	75-35-4	
1,2-Dichloroethane	**<7.6**	ug/kg	33.1	7.6	1	04/25/24 09:40	04/29/24 14:24	107-06-2	
2-Butanone (MEK)	**<104**	ug/kg	827	104	1	04/25/24 09:40	04/29/24 14:24	78-93-3	
2-Hexanone	**<328**	ug/kg	827	328	1	04/25/24 09:40	04/29/24 14:24	591-78-6	
2-Propanol	**<1050**	ug/kg	3310	1050	1	04/25/24 09:40	04/29/24 14:24	67-63-0	
Acetone	**<201**	ug/kg	827	201	1	04/25/24 09:40	04/29/24 14:24	67-64-1	v1
Benzene	**<7.9**	ug/kg	13.2	7.9	1	04/25/24 09:40	04/29/24 14:24	71-43-2	
Bromodichloromethane	**<7.9**	ug/kg	33.1	7.9	1	04/25/24 09:40	04/29/24 14:24	75-27-4	
Bromoform	**<146**	ug/kg	165	146	1	04/25/24 09:40	04/29/24 14:24	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.1	4.0	1	04/25/24 09:40	04/29/24 14:24	108-90-7	
Chloroform	**<23.7**	ug/kg	165	23.7	1	04/25/24 09:40	04/29/24 14:24	67-66-3	
Chloromethane	**<12.6**	ug/kg	33.1	12.6	1	04/25/24 09:40	04/29/24 14:24	74-87-3	
Dibromochloromethane	**<113**	ug/kg	165	113	1	04/25/24 09:40	04/29/24 14:24	124-48-1	
Dichlorofluoromethane	**<9.3**	ug/kg	33.1	9.3	1	04/25/24 09:40	04/29/24 14:24	75-43-4	
Methyl-tert-butyl ether	**<9.7**	ug/kg	33.1	9.7	1	04/25/24 09:40	04/29/24 14:24	1634-04-4	
Methylene Chloride	**12.5J**	ug/kg	33.1	9.2	1	04/25/24 09:40	04/29/24 14:24	75-09-2	
Tetrachloroethene	**<12.8**	ug/kg	33.1	12.8	1	04/25/24 09:40	04/29/24 14:24	127-18-4	
Toluene	**<8.3**	ug/kg	33.1	8.3	1	04/25/24 09:40	04/29/24 14:24	108-88-3	
Trichloroethene	**<12.4**	ug/kg	33.1	12.4	1	04/25/24 09:40	04/29/24 14:24	79-01-6	
Trichlorofluoromethane	**<9.6**	ug/kg	33.1	9.6	1	04/25/24 09:40	04/29/24 14:24	75-69-4	
m&p-Xylene	**<14.0**	ug/kg	66.1	14.0	1	04/25/24 09:40	04/29/24 14:24	179601-23-1	
trans-1,2-Dichloroethene	**<7.2**	ug/kg	33.1	7.2	1	04/25/24 09:40	04/29/24 14:24	156-60-5	
Surrogates									
Toluene-d8 (S)	94	%	60-140		1	04/25/24 09:40	04/29/24 14:24	2037-26-5	
4-Bromofluorobenzene (S)	97	%	66-143		1	04/25/24 09:40	04/29/24 14:24	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	60-140		1	04/25/24 09:40	04/29/24 14:24	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-196.7-VOC_20240421 **Lab ID: 40277236057** Collected: 04/21/24 08:56 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.2**	ug/kg	35.8	9.2	1	04/25/24 09:40	04/29/24 14:44	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.7**	ug/kg	35.8	11.7	1	04/25/24 09:40	04/29/24 14:44	76-13-1	
1,1-Dichloroethene	**<11.9**	ug/kg	35.8	11.9	1	04/25/24 09:40	04/29/24 14:44	75-35-4	
1,2-Dichloroethane	**<8.2**	ug/kg	35.8	8.2	1	04/25/24 09:40	04/29/24 14:44	107-06-2	
2-Butanone (MEK)	**<113**	ug/kg	895	113	1	04/25/24 09:40	04/29/24 14:44	78-93-3	
2-Hexanone	**<355**	ug/kg	895	355	1	04/25/24 09:40	04/29/24 14:44	591-78-6	
2-Propanol	**<1140**	ug/kg	3580	1140	1	04/25/24 09:40	04/29/24 14:44	67-63-0	
Acetone	**<218**	ug/kg	895	218	1	04/25/24 09:40	04/29/24 14:44	67-64-1	v1
Benzene	**<8.5**	ug/kg	14.3	8.5	1	04/25/24 09:40	04/29/24 14:44	71-43-2	
Bromodichloromethane	**<8.5**	ug/kg	35.8	8.5	1	04/25/24 09:40	04/29/24 14:44	75-27-4	
Bromoform	**<157**	ug/kg	179	157	1	04/25/24 09:40	04/29/24 14:44	75-25-2	
Chlorobenzene	**<4.3**	ug/kg	35.8	4.3	1	04/25/24 09:40	04/29/24 14:44	108-90-7	
Chloroform	**<25.6**	ug/kg	179	25.6	1	04/25/24 09:40	04/29/24 14:44	67-66-3	
Chloromethane	**<13.6**	ug/kg	35.8	13.6	1	04/25/24 09:40	04/29/24 14:44	74-87-3	
Dibromochloromethane	**<122**	ug/kg	179	122	1	04/25/24 09:40	04/29/24 14:44	124-48-1	
Dichlorofluoromethane	**<10.1**	ug/kg	35.8	10.1	1	04/25/24 09:40	04/29/24 14:44	75-43-4	
Methyl-tert-butyl ether	**<10.5**	ug/kg	35.8	10.5	1	04/25/24 09:40	04/29/24 14:44	1634-04-4	
Methylene Chloride	**12.7J**	ug/kg	35.8	9.9	1	04/25/24 09:40	04/29/24 14:44	75-09-2	
Tetrachloroethene	**<13.9**	ug/kg	35.8	13.9	1	04/25/24 09:40	04/29/24 14:44	127-18-4	
Toluene	**<9.0**	ug/kg	35.8	9.0	1	04/25/24 09:40	04/29/24 14:44	108-88-3	
Trichloroethene	**<13.4**	ug/kg	35.8	13.4	1	04/25/24 09:40	04/29/24 14:44	79-01-6	
Trichlorofluoromethane	**<10.4**	ug/kg	35.8	10.4	1	04/25/24 09:40	04/29/24 14:44	75-69-4	
m&p-Xylene	**<15.1**	ug/kg	71.6	15.1	1	04/25/24 09:40	04/29/24 14:44	179601-23-1	
trans-1,2-Dichloroethene	**<7.8**	ug/kg	35.8	7.8	1	04/25/24 09:40	04/29/24 14:44	156-60-5	
Surrogates									
Toluene-d8 (S)	87	%	60-140		1	04/25/24 09:40	04/29/24 14:44	2037-26-5	
4-Bromofluorobenzene (S)	90	%	66-143		1	04/25/24 09:40	04/29/24 14:44	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	60-140		1	04/25/24 09:40	04/29/24 14:44	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-197.1-VOC_20240421 **Lab ID: 40277236058** Collected: 04/21/24 08:57 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.9**	ug/kg	34.6	8.9	1	04/25/24 09:40	04/29/24 15:05	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.3**	ug/kg	34.6	11.3	1	04/25/24 09:40	04/29/24 15:05	76-13-1	
1,1-Dichloroethene	**<11.5**	ug/kg	34.6	11.5	1	04/25/24 09:40	04/29/24 15:05	75-35-4	
1,2-Dichloroethane	**<8.0**	ug/kg	34.6	8.0	1	04/25/24 09:40	04/29/24 15:05	107-06-2	
2-Butanone (MEK)	**<109**	ug/kg	866	109	1	04/25/24 09:40	04/29/24 15:05	78-93-3	
2-Hexanone	**<344**	ug/kg	866	344	1	04/25/24 09:40	04/29/24 15:05	591-78-6	
2-Propanol	**<1100**	ug/kg	3460	1100	1	04/25/24 09:40	04/29/24 15:05	67-63-0	
Acetone	**<211**	ug/kg	866	211	1	04/25/24 09:40	04/29/24 15:05	67-64-1	v1
Benzene	**<8.2**	ug/kg	13.9	8.2	1	04/25/24 09:40	04/29/24 15:05	71-43-2	
Bromodichloromethane	**<8.2**	ug/kg	34.6	8.2	1	04/25/24 09:40	04/29/24 15:05	75-27-4	
Bromoform	**<152**	ug/kg	173	152	1	04/25/24 09:40	04/29/24 15:05	75-25-2	
Chlorobenzene	**<4.1**	ug/kg	34.6	4.1	1	04/25/24 09:40	04/29/24 15:05	108-90-7	
Chloroform	**<24.8**	ug/kg	173	24.8	1	04/25/24 09:40	04/29/24 15:05	67-66-3	
Chloromethane	**<13.2**	ug/kg	34.6	13.2	1	04/25/24 09:40	04/29/24 15:05	74-87-3	
Dibromochloromethane	**<118**	ug/kg	173	118	1	04/25/24 09:40	04/29/24 15:05	124-48-1	
Dichlorofluoromethane	**<9.8**	ug/kg	34.6	9.8	1	04/25/24 09:40	04/29/24 15:05	75-43-4	
Methyl-tert-butyl ether	**<10.2**	ug/kg	34.6	10.2	1	04/25/24 09:40	04/29/24 15:05	1634-04-4	
Methylene Chloride	**<9.6**	ug/kg	34.6	9.6	1	04/25/24 09:40	04/29/24 15:05	75-09-2	
Tetrachloroethene	**<13.4**	ug/kg	34.6	13.4	1	04/25/24 09:40	04/29/24 15:05	127-18-4	
Toluene	**<8.7**	ug/kg	34.6	8.7	1	04/25/24 09:40	04/29/24 15:05	108-88-3	
Trichloroethene	**<13.0**	ug/kg	34.6	13.0	1	04/25/24 09:40	04/29/24 15:05	79-01-6	
Trichlorofluoromethane	**<10.0**	ug/kg	34.6	10.0	1	04/25/24 09:40	04/29/24 15:05	75-69-4	
m&p-Xylene	**<14.6**	ug/kg	69.3	14.6	1	04/25/24 09:40	04/29/24 15:05	179601-23-1	
trans-1,2-Dichloroethene	**<7.6**	ug/kg	34.6	7.6	1	04/25/24 09:40	04/29/24 15:05	156-60-5	
Surrogates									
Toluene-d8 (S)	87	%	60-140		1	04/25/24 09:40	04/29/24 15:05	2037-26-5	
4-Bromofluorobenzene (S)	91	%	66-143		1	04/25/24 09:40	04/29/24 15:05	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	60-140		1	04/25/24 09:40	04/29/24 15:05	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-200-VOC_20240421 **Lab ID: 40277236059** Collected: 04/21/24 09:30 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.4**	ug/kg	36.6	9.4	1	04/25/24 09:40	04/29/24 15:25	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.9**	ug/kg	36.6	11.9	1	04/25/24 09:40	04/29/24 15:25	76-13-1	
1,1-Dichloroethene	**<12.2**	ug/kg	36.6	12.2	1	04/25/24 09:40	04/29/24 15:25	75-35-4	
1,2-Dichloroethane	**<8.4**	ug/kg	36.6	8.4	1	04/25/24 09:40	04/29/24 15:25	107-06-2	
2-Butanone (MEK)	**<116**	ug/kg	916	116	1	04/25/24 09:40	04/29/24 15:25	78-93-3	
2-Hexanone	**<364**	ug/kg	916	364	1	04/25/24 09:40	04/29/24 15:25	591-78-6	
2-Propanol	**<1170**	ug/kg	3660	1170	1	04/25/24 09:40	04/29/24 15:25	67-63-0	
Acetone	**<223**	ug/kg	916	223	1	04/25/24 09:40	04/29/24 15:25	67-64-1	v1
Benzene	**10.9J**	ug/kg	14.7	8.7	1	04/25/24 09:40	04/29/24 15:25	71-43-2	
Bromodichloromethane	**<8.7**	ug/kg	36.6	8.7	1	04/25/24 09:40	04/29/24 15:25	75-27-4	
Bromoform	**<161**	ug/kg	183	161	1	04/25/24 09:40	04/29/24 15:25	75-25-2	
Chlorobenzene	**<4.4**	ug/kg	36.6	4.4	1	04/25/24 09:40	04/29/24 15:25	108-90-7	
Chloroform	**<26.2**	ug/kg	183	26.2	1	04/25/24 09:40	04/29/24 15:25	67-66-3	
Chloromethane	**<13.9**	ug/kg	36.6	13.9	1	04/25/24 09:40	04/29/24 15:25	74-87-3	
Dibromochloromethane	**<125**	ug/kg	183	125	1	04/25/24 09:40	04/29/24 15:25	124-48-1	
Dichlorofluoromethane	**<10.3**	ug/kg	36.6	10.3	1	04/25/24 09:40	04/29/24 15:25	75-43-4	
Methyl-tert-butyl ether	**<10.8**	ug/kg	36.6	10.8	1	04/25/24 09:40	04/29/24 15:25	1634-04-4	
Methylene Chloride	**<10.2**	ug/kg	36.6	10.2	1	04/25/24 09:40	04/29/24 15:25	75-09-2	
Tetrachloroethene	**<14.2**	ug/kg	36.6	14.2	1	04/25/24 09:40	04/29/24 15:25	127-18-4	
Toluene	**<9.2**	ug/kg	36.6	9.2	1	04/25/24 09:40	04/29/24 15:25	108-88-3	
Trichloroethene	**<13.7**	ug/kg	36.6	13.7	1	04/25/24 09:40	04/29/24 15:25	79-01-6	
Trichlorofluoromethane	**75.0**	ug/kg	36.6	10.6	1	04/25/24 09:40	04/29/24 15:25	75-69-4	
m&p-Xylene	**<15.5**	ug/kg	73.3	15.5	1	04/25/24 09:40	04/29/24 15:25	179601-23-1	
trans-1,2-Dichloroethene	**<8.0**	ug/kg	36.6	8.0	1	04/25/24 09:40	04/29/24 15:25	156-60-5	
Surrogates									
Toluene-d8 (S)	98	%	60-140		1	04/25/24 09:40	04/29/24 15:25	2037-26-5	
4-Bromofluorobenzene (S)	97	%	66-143		1	04/25/24 09:40	04/29/24 15:25	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	60-140		1	04/25/24 09:40	04/29/24 15:25	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-202-VOC_20240421 **Lab ID: 40277236060** Collected: 04/21/24 09:31 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.2**	ug/kg	35.8	9.2	1	04/25/24 09:40	04/29/24 15:45	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.7**	ug/kg	35.8	11.7	1	04/25/24 09:40	04/29/24 15:45	76-13-1	
1,1-Dichloroethene	**<11.9**	ug/kg	35.8	11.9	1	04/25/24 09:40	04/29/24 15:45	75-35-4	
1,2-Dichloroethane	**<8.2**	ug/kg	35.8	8.2	1	04/25/24 09:40	04/29/24 15:45	107-06-2	
2-Butanone (MEK)	**<113**	ug/kg	895	113	1	04/25/24 09:40	04/29/24 15:45	78-93-3	
2-Hexanone	**<355**	ug/kg	895	355	1	04/25/24 09:40	04/29/24 15:45	591-78-6	
2-Propanol	**<1140**	ug/kg	3580	1140	1	04/25/24 09:40	04/29/24 15:45	67-63-0	
Acetone	**<218**	ug/kg	895	218	1	04/25/24 09:40	04/29/24 15:45	67-64-1	v1
Benzene	**<8.5**	ug/kg	14.3	8.5	1	04/25/24 09:40	04/29/24 15:45	71-43-2	
Bromodichloromethane	**<8.5**	ug/kg	35.8	8.5	1	04/25/24 09:40	04/29/24 15:45	75-27-4	
Bromoform	**<158**	ug/kg	179	158	1	04/25/24 09:40	04/29/24 15:45	75-25-2	
Chlorobenzene	**<4.3**	ug/kg	35.8	4.3	1	04/25/24 09:40	04/29/24 15:45	108-90-7	
Chloroform	**<25.6**	ug/kg	179	25.6	1	04/25/24 09:40	04/29/24 15:45	67-66-3	
Chloromethane	**<13.6**	ug/kg	35.8	13.6	1	04/25/24 09:40	04/29/24 15:45	74-87-3	
Dibromochloromethane	**<122**	ug/kg	179	122	1	04/25/24 09:40	04/29/24 15:45	124-48-1	
Dichlorofluoromethane	**<10.1**	ug/kg	35.8	10.1	1	04/25/24 09:40	04/29/24 15:45	75-43-4	
Methyl-tert-butyl ether	**<10.5**	ug/kg	35.8	10.5	1	04/25/24 09:40	04/29/24 15:45	1634-04-4	
Methylene Chloride	**18.0J**	ug/kg	35.8	10	1	04/25/24 09:40	04/29/24 15:45	75-09-2	
Tetrachloroethene	**<13.9**	ug/kg	35.8	13.9	1	04/25/24 09:40	04/29/24 15:45	127-18-4	
Toluene	**<9.0**	ug/kg	35.8	9.0	1	04/25/24 09:40	04/29/24 15:45	108-88-3	
Trichloroethene	**<13.4**	ug/kg	35.8	13.4	1	04/25/24 09:40	04/29/24 15:45	79-01-6	
Trichlorofluoromethane	**134**	ug/kg	35.8	10.4	1	04/25/24 09:40	04/29/24 15:45	75-69-4	
m&p-Xylene	**<15.1**	ug/kg	71.6	15.1	1	04/25/24 09:40	04/29/24 15:45	179601-23-1	
trans-1,2-Dichloroethene	**<7.8**	ug/kg	35.8	7.8	1	04/25/24 09:40	04/29/24 15:45	156-60-5	
Surrogates									
Toluene-d8 (S)	108	%	60-140		1	04/25/24 09:40	04/29/24 15:45	2037-26-5	
4-Bromofluorobenzene (S)	94	%	66-143		1	04/25/24 09:40	04/29/24 15:45	460-00-4	
1,2-Dichlorobenzene-d4 (S)	92	%	60-140		1	04/25/24 09:40	04/29/24 15:45	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-205.4-VOC_20240421 **Lab ID: 40277236061** Collected: 04/21/24 10:30 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.6**	ug/kg	37.6	9.6	1	04/25/24 09:40	04/29/24 16:06	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.2**	ug/kg	37.6	12.2	1	04/25/24 09:40	04/29/24 16:06	76-13-1	
1,1-Dichloroethene	**<12.5**	ug/kg	37.6	12.5	1	04/25/24 09:40	04/29/24 16:06	75-35-4	
1,2-Dichloroethane	**<8.6**	ug/kg	37.6	8.6	1	04/25/24 09:40	04/29/24 16:06	107-06-2	
2-Butanone (MEK)	**<119**	ug/kg	939	119	1	04/25/24 09:40	04/29/24 16:06	78-93-3	
2-Hexanone	**<373**	ug/kg	939	373	1	04/25/24 09:40	04/29/24 16:06	591-78-6	
2-Propanol	**<1200**	ug/kg	3760	1200	1	04/25/24 09:40	04/29/24 16:06	67-63-0	
Acetone	**<229**	ug/kg	939	229	1	04/25/24 09:40	04/29/24 16:06	67-64-1	v1
Benzene	**<8.9**	ug/kg	15.0	8.9	1	04/25/24 09:40	04/29/24 16:06	71-43-2	
Bromodichloromethane	**<8.9**	ug/kg	37.6	8.9	1	04/25/24 09:40	04/29/24 16:06	75-27-4	
Bromoform	**<165**	ug/kg	188	165	1	04/25/24 09:40	04/29/24 16:06	75-25-2	
Chlorobenzene	**<4.5**	ug/kg	37.6	4.5	1	04/25/24 09:40	04/29/24 16:06	108-90-7	
Chloroform	**<26.9**	ug/kg	188	26.9	1	04/25/24 09:40	04/29/24 16:06	67-66-3	
Chloromethane	**<14.3**	ug/kg	37.6	14.3	1	04/25/24 09:40	04/29/24 16:06	74-87-3	
Dibromochloromethane	**<128**	ug/kg	188	128	1	04/25/24 09:40	04/29/24 16:06	124-48-1	
Dichlorofluoromethane	**<10.6**	ug/kg	37.6	10.6	1	04/25/24 09:40	04/29/24 16:06	75-43-4	
Methyl-tert-butyl ether	**<11.0**	ug/kg	37.6	11.0	1	04/25/24 09:40	04/29/24 16:06	1634-04-4	
Methylene Chloride	**14.7J**	ug/kg	37.6	10.4	1	04/25/24 09:40	04/29/24 16:06	75-09-2	
Tetrachloroethene	**<14.6**	ug/kg	37.6	14.6	1	04/25/24 09:40	04/29/24 16:06	127-18-4	
Toluene	**<9.5**	ug/kg	37.6	9.5	1	04/25/24 09:40	04/29/24 16:06	108-88-3	
Trichloroethene	**<14.0**	ug/kg	37.6	14.0	1	04/25/24 09:40	04/29/24 16:06	79-01-6	
Trichlorofluoromethane	**<10.9**	ug/kg	37.6	10.9	1	04/25/24 09:40	04/29/24 16:06	75-69-4	
m&p-Xylene	**<15.9**	ug/kg	75.1	15.9	1	04/25/24 09:40	04/29/24 16:06	179601-23-1	
trans-1,2-Dichloroethene	**<8.2**	ug/kg	37.6	8.2	1	04/25/24 09:40	04/29/24 16:06	156-60-5	
Surrogates									
Toluene-d8 (S)	98	%	60-140		1	04/25/24 09:40	04/29/24 16:06	2037-26-5	
4-Bromofluorobenzene (S)	94	%	66-143		1	04/25/24 09:40	04/29/24 16:06	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	60-140		1	04/25/24 09:40	04/29/24 16:06	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: TB-02_20240422 **Lab ID: 40277236062** Collected: 04/22/24 15:30 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	04/25/24 09:40	04/29/24 13:00	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	04/25/24 09:40	04/29/24 13:00	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	04/25/24 09:40	04/29/24 13:00	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	04/25/24 09:40	04/29/24 13:00	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	04/25/24 09:40	04/29/24 13:00	78-93-3	
2-Hexanone	**<496**	ug/kg	1250	496	1	04/25/24 09:40	04/29/24 13:00	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	04/25/24 09:40	04/29/24 13:00	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	04/25/24 09:40	04/29/24 13:00	67-64-1	v1
Benzene	**<11.9**	ug/kg	20.0	11.9	1	04/25/24 09:40	04/29/24 13:00	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	04/25/24 09:40	04/29/24 13:00	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	04/25/24 09:40	04/29/24 13:00	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	04/25/24 09:40	04/29/24 13:00	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	04/25/24 09:40	04/29/24 13:00	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	04/25/24 09:40	04/29/24 13:00	74-87-3	
Dibromochloromethane	**<171**	ug/kg	250	171	1	04/25/24 09:40	04/29/24 13:00	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	04/25/24 09:40	04/29/24 13:00	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	04/25/24 09:40	04/29/24 13:00	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	04/25/24 09:40	04/29/24 13:00	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	04/25/24 09:40	04/29/24 13:00	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	04/25/24 09:40	04/29/24 13:00	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	04/25/24 09:40	04/29/24 13:00	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	04/25/24 09:40	04/29/24 13:00	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	04/25/24 09:40	04/29/24 13:00	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	04/25/24 09:40	04/29/24 13:00	156-60-5	
Surrogates									
Toluene-d8 (S)	95	%	60-140		1	04/25/24 09:40	04/29/24 13:00	2037-26-5	
4-Bromofluorobenzene (S)	95	%	66-143		1	04/25/24 09:40	04/29/24 13:00	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	60-140		1	04/25/24 09:40	04/29/24 13:00	2199-69-1	

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(920)469-2436

ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-207.8-VOC_20240421 **Lab ID: 40277236063** Collected: 04/21/24 10:31 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.5**	ug/kg	37.2	9.5	1	04/25/24 09:40	04/29/24 16:26	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.1**	ug/kg	37.2	12.1	1	04/25/24 09:40	04/29/24 16:26	76-13-1	
1,1-Dichloroethene	**<12.4**	ug/kg	37.2	12.4	1	04/25/24 09:40	04/29/24 16:26	75-35-4	
1,2-Dichloroethane	**<8.6**	ug/kg	37.2	8.6	1	04/25/24 09:40	04/29/24 16:26	107-06-2	
2-Butanone (MEK)	**<118**	ug/kg	931	118	1	04/25/24 09:40	04/29/24 16:26	78-93-3	
2-Hexanone	**<370**	ug/kg	931	370	1	04/25/24 09:40	04/29/24 16:26	591-78-6	
2-Propanol	**<1190**	ug/kg	3720	1190	1	04/25/24 09:40	04/29/24 16:26	67-63-0	
Acetone	**<227**	ug/kg	931	227	1	04/25/24 09:40	04/29/24 16:26	67-64-1	v1
Benzene	**8.9J**	ug/kg	14.9	8.9	1	04/25/24 09:40	04/29/24 16:26	71-43-2	
Bromodichloromethane	**<8.9**	ug/kg	37.2	8.9	1	04/25/24 09:40	04/29/24 16:26	75-27-4	
Bromoform	**<164**	ug/kg	186	164	1	04/25/24 09:40	04/29/24 16:26	75-25-2	
Chlorobenzene	**<4.5**	ug/kg	37.2	4.5	1	04/25/24 09:40	04/29/24 16:26	108-90-7	
Chloroform	**<26.7**	ug/kg	186	26.7	1	04/25/24 09:40	04/29/24 16:26	67-66-3	
Chloromethane	**<14.2**	ug/kg	37.2	14.2	1	04/25/24 09:40	04/29/24 16:26	74-87-3	
Dibromochloromethane	**<127**	ug/kg	186	127	1	04/25/24 09:40	04/29/24 16:26	124-48-1	
Dichlorofluoromethane	**<10.5**	ug/kg	37.2	10.5	1	04/25/24 09:40	04/29/24 16:26	75-43-4	
Methyl-tert-butyl ether	**<10.9**	ug/kg	37.2	10.9	1	04/25/24 09:40	04/29/24 16:26	1634-04-4	
Methylene Chloride	**12.9J**	ug/kg	37.2	10.4	1	04/25/24 09:40	04/29/24 16:26	75-09-2	
Tetrachloroethene	**<14.5**	ug/kg	37.2	14.5	1	04/25/24 09:40	04/29/24 16:26	127-18-4	
Toluene	**<9.4**	ug/kg	37.2	9.4	1	04/25/24 09:40	04/29/24 16:26	108-88-3	
Trichloroethene	**<13.9**	ug/kg	37.2	13.9	1	04/25/24 09:40	04/29/24 16:26	79-01-6	
Trichlorofluoromethane	**<10.8**	ug/kg	37.2	10.8	1	04/25/24 09:40	04/29/24 16:26	75-69-4	
m&p-Xylene	**<15.7**	ug/kg	74.5	15.7	1	04/25/24 09:40	04/29/24 16:26	179601-23-1	
trans-1,2-Dichloroethene	**<8.1**	ug/kg	37.2	8.1	1	04/25/24 09:40	04/29/24 16:26	156-60-5	
Surrogates									
Toluene-d8 (S)	106	%	60-140		1	04/25/24 09:40	04/29/24 16:26	2037-26-5	
4-Bromofluorobenzene (S)	100	%	66-143		1	04/25/24 09:40	04/29/24 16:26	460-00-4	
1,2-Dichlorobenzene-d4 (S)	109	%	60-140		1	04/25/24 09:40	04/29/24 16:26	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-210.2-VOC_20240421 **Lab ID: 40277236064** Collected: 04/21/24 11:53 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.9**	ug/kg	34.9	8.9	1	04/25/24 09:40	04/29/24 16:46	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.4**	ug/kg	34.9	11.4	1	04/25/24 09:40	04/29/24 16:46	76-13-1	
1,1-Dichloroethene	**<11.6**	ug/kg	34.9	11.6	1	04/25/24 09:40	04/29/24 16:46	75-35-4	
1,2-Dichloroethane	**<8.0**	ug/kg	34.9	8.0	1	04/25/24 09:40	04/29/24 16:46	107-06-2	
2-Butanone (MEK)	**<110**	ug/kg	873	110	1	04/25/24 09:40	04/29/24 16:46	78-93-3	
2-Hexanone	**<347**	ug/kg	873	347	1	04/25/24 09:40	04/29/24 16:46	591-78-6	
2-Propanol	**<1110**	ug/kg	3490	1110	1	04/25/24 09:40	04/29/24 16:46	67-63-0	
Acetone	**<212**	ug/kg	873	212	1	04/25/24 09:40	04/29/24 16:46	67-64-1	v1
Benzene	**29.7**	ug/kg	14.0	8.3	1	04/25/24 09:40	04/29/24 16:46	71-43-2	
Bromodichloromethane	**<8.3**	ug/kg	34.9	8.3	1	04/25/24 09:40	04/29/24 16:46	75-27-4	
Bromoform	**<154**	ug/kg	175	154	1	04/25/24 09:40	04/29/24 16:46	75-25-2	
Chlorobenzene	**<4.2**	ug/kg	34.9	4.2	1	04/25/24 09:40	04/29/24 16:46	108-90-7	
Chloroform	**<25.0**	ug/kg	175	25.0	1	04/25/24 09:40	04/29/24 16:46	67-66-3	
Chloromethane	**<13.3**	ug/kg	34.9	13.3	1	04/25/24 09:40	04/29/24 16:46	74-87-3	
Dibromochloromethane	**<119**	ug/kg	175	119	1	04/25/24 09:40	04/29/24 16:46	124-48-1	
Dichlorofluoromethane	**<9.8**	ug/kg	34.9	9.8	1	04/25/24 09:40	04/29/24 16:46	75-43-4	
Methyl-tert-butyl ether	**<10.3**	ug/kg	34.9	10.3	1	04/25/24 09:40	04/29/24 16:46	1634-04-4	
Methylene Chloride	**<9.7**	ug/kg	34.9	9.7	1	04/25/24 09:40	04/29/24 16:46	75-09-2	
Tetrachloroethene	**<13.5**	ug/kg	34.9	13.5	1	04/25/24 09:40	04/29/24 16:46	127-18-4	
Toluene	**20.6J**	ug/kg	34.9	8.8	1	04/25/24 09:40	04/29/24 16:46	108-88-3	
Trichloroethene	**<13.1**	ug/kg	34.9	13.1	1	04/25/24 09:40	04/29/24 16:46	79-01-6	
Trichlorofluoromethane	**<10.1**	ug/kg	34.9	10.1	1	04/25/24 09:40	04/29/24 16:46	75-69-4	
m&p-Xylene	**<14.7**	ug/kg	69.8	14.7	1	04/25/24 09:40	04/29/24 16:46	179601-23-1	
trans-1,2-Dichloroethene	**<7.6**	ug/kg	34.9	7.6	1	04/25/24 09:40	04/29/24 16:46	156-60-5	
Surrogates									
Toluene-d8 (S)	102	%	60-140		1	04/25/24 09:40	04/29/24 16:46	2037-26-5	
4-Bromofluorobenzene (S)	100	%	66-143		1	04/25/24 09:40	04/29/24 16:46	460-00-4	
1,2-Dichlorobenzene-d4 (S)	111	%	60-140		1	04/25/24 09:40	04/29/24 16:46	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-214.95-VOC_240421 **Lab ID: 40277236065** Collected: 04/21/24 13:42 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.5**	ug/kg	29.3	7.5	1	04/25/24 09:40	04/29/24 17:06	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<9.5**	ug/kg	29.3	9.5	1	04/25/24 09:40	04/29/24 17:06	76-13-1	
1,1-Dichloroethene	**<9.7**	ug/kg	29.3	9.7	1	04/25/24 09:40	04/29/24 17:06	75-35-4	
1,2-Dichloroethane	**<6.7**	ug/kg	29.3	6.7	1	04/25/24 09:40	04/29/24 17:06	107-06-2	
2-Butanone (MEK)	**<92.5**	ug/kg	732	92.5	1	04/25/24 09:40	04/29/24 17:06	78-93-3	
2-Hexanone	**<291**	ug/kg	732	291	1	04/25/24 09:40	04/29/24 17:06	591-78-6	
2-Propanol	**<933**	ug/kg	2930	933	1	04/25/24 09:40	04/29/24 17:06	67-63-0	
Acetone	**<178**	ug/kg	732	178	1	04/25/24 09:40	04/29/24 17:06	67-64-1	v1
Benzene	**14.2**	ug/kg	11.7	7.0	1	04/25/24 09:40	04/29/24 17:06	71-43-2	
Bromodichloromethane	**<7.0**	ug/kg	29.3	7.0	1	04/25/24 09:40	04/29/24 17:06	75-27-4	
Bromoform	**<129**	ug/kg	146	129	1	04/25/24 09:40	04/29/24 17:06	75-25-2	
Chlorobenzene	**<3.5**	ug/kg	29.3	3.5	1	04/25/24 09:40	04/29/24 17:06	108-90-7	
Chloroform	**<21.0**	ug/kg	146	21.0	1	04/25/24 09:40	04/29/24 17:06	67-66-3	
Chloromethane	**<11.1**	ug/kg	29.3	11.1	1	04/25/24 09:40	04/29/24 17:06	74-87-3	
Dibromochloromethane	**<100**	ug/kg	146	100	1	04/25/24 09:40	04/29/24 17:06	124-48-1	
Dichlorofluoromethane	**<8.3**	ug/kg	29.3	8.3	1	04/25/24 09:40	04/29/24 17:06	75-43-4	
Methyl-tert-butyl ether	**<8.6**	ug/kg	29.3	8.6	1	04/25/24 09:40	04/29/24 17:06	1634-04-4	
Methylene Chloride	**11.4J**	ug/kg	29.3	8.1	1	04/25/24 09:40	04/29/24 17:06	75-09-2	
Tetrachloroethene	**<11.4**	ug/kg	29.3	11.4	1	04/25/24 09:40	04/29/24 17:06	127-18-4	
Toluene	**<7.4**	ug/kg	29.3	7.4	1	04/25/24 09:40	04/29/24 17:06	108-88-3	
Trichloroethene	**<11.0**	ug/kg	29.3	11.0	1	04/25/24 09:40	04/29/24 17:06	79-01-6	
Trichlorofluoromethane	**<8.5**	ug/kg	29.3	8.5	1	04/25/24 09:40	04/29/24 17:06	75-69-4	
m&p-Xylene	**<12.4**	ug/kg	58.6	12.4	1	04/25/24 09:40	04/29/24 17:06	179601-23-1	
trans-1,2-Dichloroethene	**<6.4**	ug/kg	29.3	6.4	1	04/25/24 09:40	04/29/24 17:06	156-60-5	
Surrogates									
Toluene-d8 (S)	98	%	60-140		1	04/25/24 09:40	04/29/24 17:06	2037-26-5	
4-Bromofluorobenzene (S)	97	%	66-143		1	04/25/24 09:40	04/29/24 17:06	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	60-140		1	04/25/24 09:40	04/29/24 17:06	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-216.35-VOC_240421 **Lab ID: 40277236066** Collected: 04/21/24 13:43 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.0**	ug/kg	31.2	8.0	1	04/25/24 09:40	04/29/24 17:27	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.2**	ug/kg	31.2	10.2	1	04/25/24 09:40	04/29/24 17:27	76-13-1	
1,1-Dichloroethene	**<10.4**	ug/kg	31.2	10.4	1	04/25/24 09:40	04/29/24 17:27	75-35-4	
1,2-Dichloroethane	**<7.2**	ug/kg	31.2	7.2	1	04/25/24 09:40	04/29/24 17:27	107-06-2	
2-Butanone (MEK)	**<98.6**	ug/kg	780	98.6	1	04/25/24 09:40	04/29/24 17:27	78-93-3	
2-Hexanone	**<310**	ug/kg	780	310	1	04/25/24 09:40	04/29/24 17:27	591-78-6	
2-Propanol	**<994**	ug/kg	3120	994	1	04/25/24 09:40	04/29/24 17:27	67-63-0	
Acetone	**<190**	ug/kg	780	190	1	04/25/24 09:40	04/29/24 17:27	67-64-1	v1
Benzene	**<7.4**	ug/kg	12.5	7.4	1	04/25/24 09:40	04/29/24 17:27	71-43-2	
Bromodichloromethane	**<7.4**	ug/kg	31.2	7.4	1	04/25/24 09:40	04/29/24 17:27	75-27-4	
Bromoform	**<137**	ug/kg	156	137	1	04/25/24 09:40	04/29/24 17:27	75-25-2	
Chlorobenzene	**<3.7**	ug/kg	31.2	3.7	1	04/25/24 09:40	04/29/24 17:27	108-90-7	
Chloroform	**<22.3**	ug/kg	156	22.3	1	04/25/24 09:40	04/29/24 17:27	67-66-3	
Chloromethane	**<11.9**	ug/kg	31.2	11.9	1	04/25/24 09:40	04/29/24 17:27	74-87-3	
Dibromochloromethane	**<107**	ug/kg	156	107	1	04/25/24 09:40	04/29/24 17:27	124-48-1	
Dichlorofluoromethane	**<8.8**	ug/kg	31.2	8.8	1	04/25/24 09:40	04/29/24 17:27	75-43-4	
Methyl-tert-butyl ether	**<9.2**	ug/kg	31.2	9.2	1	04/25/24 09:40	04/29/24 17:27	1634-04-4	
Methylene Chloride	**<8.7**	ug/kg	31.2	8.7	1	04/25/24 09:40	04/29/24 17:27	75-09-2	
Tetrachloroethene	**<12.1**	ug/kg	31.2	12.1	1	04/25/24 09:40	04/29/24 17:27	127-18-4	
Toluene	**<7.9**	ug/kg	31.2	7.9	1	04/25/24 09:40	04/29/24 17:27	108-88-3	
Trichloroethene	**<11.7**	ug/kg	31.2	11.7	1	04/25/24 09:40	04/29/24 17:27	79-01-6	
Trichlorofluoromethane	**<9.0**	ug/kg	31.2	9.0	1	04/25/24 09:40	04/29/24 17:27	75-69-4	
m&p-Xylene	**<13.2**	ug/kg	62.4	13.2	1	04/25/24 09:40	04/29/24 17:27	179601-23-1	
trans-1,2-Dichloroethene	**<6.8**	ug/kg	31.2	6.8	1	04/25/24 09:40	04/29/24 17:27	156-60-5	
Surrogates									
Toluene-d8 (S)	102	%	60-140		1	04/25/24 09:40	04/29/24 17:27	2037-26-5	
4-Bromofluorobenzene (S)	100	%	66-143		1	04/25/24 09:40	04/29/24 17:27	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	60-140		1	04/25/24 09:40	04/29/24 17:27	2199-69-1	

REPORT OF LABORATORY ANALYSIS

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-219.7-VOC_20240421 **Lab ID: 40277236067** Collected: 04/21/24 15:46 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.0**	ug/kg	39.1	10.0	1	04/25/24 07:55	04/26/24 22:51	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.7**	ug/kg	39.1	12.7	1	04/25/24 07:55	04/26/24 22:51	76-13-1	v1
1,1-Dichloroethene	**<13.0**	ug/kg	39.1	13.0	1	04/25/24 07:55	04/26/24 22:51	75-35-4	
1,2-Dichloroethane	**<9.0**	ug/kg	39.1	9.0	1	04/25/24 07:55	04/26/24 22:51	107-06-2	
2-Butanone (MEK)	**<124**	ug/kg	977	124	1	04/25/24 07:55	04/26/24 22:51	78-93-3	
2-Hexanone	**<388**	ug/kg	977	388	1	04/25/24 07:55	04/26/24 22:51	591-78-6	v1
2-Propanol	**<1250**	ug/kg	3910	1250	1	04/25/24 07:55	04/26/24 22:51	67-63-0	v2
Acetone	**<238**	ug/kg	977	238	1	04/25/24 07:55	04/26/24 22:51	67-64-1	v1
Benzene	**<9.3**	ug/kg	15.6	9.3	1	04/25/24 07:55	04/26/24 22:51	71-43-2	
Bromodichloromethane	**<9.3**	ug/kg	39.1	9.3	1	04/25/24 07:55	04/26/24 22:51	75-27-4	
Bromoform	**<172**	ug/kg	195	172	1	04/25/24 07:55	04/26/24 22:51	75-25-2	
Chlorobenzene	**<4.7**	ug/kg	39.1	4.7	1	04/25/24 07:55	04/26/24 22:51	108-90-7	
Chloroform	**<28.0**	ug/kg	195	28.0	1	04/25/24 07:55	04/26/24 22:51	67-66-3	L2
Chloromethane	**<14.9**	ug/kg	39.1	14.9	1	04/25/24 07:55	04/26/24 22:51	74-87-3	
Dibromochloromethane	**<134**	ug/kg	195	134	1	04/25/24 07:55	04/26/24 22:51	124-48-1	
Dichlorofluoromethane	**<11.0**	ug/kg	39.1	11.0	1	04/25/24 07:55	04/26/24 22:51	75-43-4	
Methyl-tert-butyl ether	**<11.5**	ug/kg	39.1	11.5	1	04/25/24 07:55	04/26/24 22:51	1634-04-4	
Methylene Chloride	**15.6J**	ug/kg	39.1	10.9	1	04/25/24 07:55	04/26/24 22:51	75-09-2	
Tetrachloroethene	**<15.2**	ug/kg	39.1	15.2	1	04/25/24 07:55	04/26/24 22:51	127-18-4	
Toluene	**<9.9**	ug/kg	39.1	9.9	1	04/25/24 07:55	04/26/24 22:51	108-88-3	
Trichloroethene	**<14.6**	ug/kg	39.1	14.6	1	04/25/24 07:55	04/26/24 22:51	79-01-6	M1
Trichlorofluoromethane	**<11.3**	ug/kg	39.1	11.3	1	04/25/24 07:55	04/26/24 22:51	75-69-4	
m&p-Xylene	**<16.5**	ug/kg	78.2	16.5	1	04/25/24 07:55	04/26/24 22:51	179601-23-1	
trans-1,2-Dichloroethene	**<8.5**	ug/kg	39.1	8.5	1	04/25/24 07:55	04/26/24 22:51	156-60-5	
Surrogates									
Toluene-d8 (S)	100	%	60-140		1	04/25/24 07:55	04/26/24 22:51	2037-26-5	
4-Bromofluorobenzene (S)	102	%	66-143		1	04/25/24 07:55	04/26/24 22:51	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	60-140		1	04/25/24 07:55	04/26/24 22:51	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-219.7-VOC-DUP_0421 **Lab ID: 40277236068** Collected: 04/21/24 15:46 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<6.9**	ug/kg	27.1	6.9	1	04/25/24 09:40	04/29/24 17:47	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<8.8**	ug/kg	27.1	8.8	1	04/25/24 09:40	04/29/24 17:47	76-13-1	
1,1-Dichloroethene	**<9.0**	ug/kg	27.1	9.0	1	04/25/24 09:40	04/29/24 17:47	75-35-4	
1,2-Dichloroethane	**<6.2**	ug/kg	27.1	6.2	1	04/25/24 09:40	04/29/24 17:47	107-06-2	
2-Butanone (MEK)	**<85.6**	ug/kg	677	85.6	1	04/25/24 09:40	04/29/24 17:47	78-93-3	
2-Hexanone	**<269**	ug/kg	677	269	1	04/25/24 09:40	04/29/24 17:47	591-78-6	
2-Propanol	**<863**	ug/kg	2710	863	1	04/25/24 09:40	04/29/24 17:47	67-63-0	
Acetone	**<165**	ug/kg	677	165	1	04/25/24 09:40	04/29/24 17:47	67-64-1	v1
Benzene	**<6.4**	ug/kg	10.8	6.4	1	04/25/24 09:40	04/29/24 17:47	71-43-2	
Bromodichloromethane	**<6.4**	ug/kg	27.1	6.4	1	04/25/24 09:40	04/29/24 17:47	75-27-4	
Bromoform	**<119**	ug/kg	135	119	1	04/25/24 09:40	04/29/24 17:47	75-25-2	
Chlorobenzene	**<3.2**	ug/kg	27.1	3.2	1	04/25/24 09:40	04/29/24 17:47	108-90-7	
Chloroform	**<19.4**	ug/kg	135	19.4	1	04/25/24 09:40	04/29/24 17:47	67-66-3	
Chloromethane	**<10.3**	ug/kg	27.1	10.3	1	04/25/24 09:40	04/29/24 17:47	74-87-3	
Dibromochloromethane	**<92.6**	ug/kg	135	92.6	1	04/25/24 09:40	04/29/24 17:47	124-48-1	
Dichlorofluoromethane	**<7.6**	ug/kg	27.1	7.6	1	04/25/24 09:40	04/29/24 17:47	75-43-4	
Methyl-tert-butyl ether	**<8.0**	ug/kg	27.1	8.0	1	04/25/24 09:40	04/29/24 17:47	1634-04-4	
Methylene Chloride	**14.3J**	ug/kg	27.1	7.5	1	04/25/24 09:40	04/29/24 17:47	75-09-2	
Tetrachloroethene	**<10.5**	ug/kg	27.1	10.5	1	04/25/24 09:40	04/29/24 17:47	127-18-4	
Toluene	**<6.8**	ug/kg	27.1	6.8	1	04/25/24 09:40	04/29/24 17:47	108-88-3	
Trichloroethene	**<10.1**	ug/kg	27.1	10.1	1	04/25/24 09:40	04/29/24 17:47	79-01-6	
Trichlorofluoromethane	**<7.9**	ug/kg	27.1	7.9	1	04/25/24 09:40	04/29/24 17:47	75-69-4	
m&p-Xylene	**<11.4**	ug/kg	54.2	11.4	1	04/25/24 09:40	04/29/24 17:47	179601-23-1	
trans-1,2-Dichloroethene	**<5.9**	ug/kg	27.1	5.9	1	04/25/24 09:40	04/29/24 17:47	156-60-5	
Surrogates									
Toluene-d8 (S)	115	%	60-140		1	04/25/24 09:40	04/29/24 17:47	2037-26-5	
4-Bromofluorobenzene (S)	114	%	66-143		1	04/25/24 09:40	04/29/24 17:47	460-00-4	
1,2-Dichlorobenzene-d4 (S)	123	%	60-140		1	04/25/24 09:40	04/29/24 17:47	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-226.2-VOC_20240421 **Lab ID: 40277236069** Collected: 04/21/24 16:25 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.9**	ug/kg	38.8	9.9	1	04/26/24 08:30	04/29/24 21:21	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.6**	ug/kg	38.8	12.6	1	04/26/24 08:30	04/29/24 21:21	76-13-1	
1,1-Dichloroethene	**<12.9**	ug/kg	38.8	12.9	1	04/26/24 08:30	04/29/24 21:21	75-35-4	
1,2-Dichloroethane	**<8.9**	ug/kg	38.8	8.9	1	04/26/24 08:30	04/29/24 21:21	107-06-2	
2-Butanone (MEK)	**<122**	ug/kg	969	122	1	04/26/24 08:30	04/29/24 21:21	78-93-3	v1
2-Hexanone	**<385**	ug/kg	969	385	1	04/26/24 08:30	04/29/24 21:21	591-78-6	v1
2-Propanol	**<1240**	ug/kg	3880	1240	1	04/26/24 08:30	04/29/24 21:21	67-63-0	
Acetone	**<236**	ug/kg	969	236	1	04/26/24 08:30	04/29/24 21:21	67-64-1	v1
Benzene	**<9.2**	ug/kg	15.5	9.2	1	04/26/24 08:30	04/29/24 21:21	71-43-2	
Bromodichloromethane	**<9.2**	ug/kg	38.8	9.2	1	04/26/24 08:30	04/29/24 21:21	75-27-4	
Bromoform	**<171**	ug/kg	194	171	1	04/26/24 08:30	04/29/24 21:21	75-25-2	
Chlorobenzene	**<4.6**	ug/kg	38.8	4.6	1	04/26/24 08:30	04/29/24 21:21	108-90-7	
Chloroform	**<27.8**	ug/kg	194	27.8	1	04/26/24 08:30	04/29/24 21:21	67-66-3	
Chloromethane	**<14.7**	ug/kg	38.8	14.7	1	04/26/24 08:30	04/29/24 21:21	74-87-3	
Dibromochloromethane	**<132**	ug/kg	194	132	1	04/26/24 08:30	04/29/24 21:21	124-48-1	
Dichlorofluoromethane	**<10.9**	ug/kg	38.8	10.9	1	04/26/24 08:30	04/29/24 21:21	75-43-4	
Methyl-tert-butyl ether	**<11.4**	ug/kg	38.8	11.4	1	04/26/24 08:30	04/29/24 21:21	1634-04-4	
Methylene Chloride	**<10.8**	ug/kg	38.8	10.8	1	04/26/24 08:30	04/29/24 21:21	75-09-2	
Tetrachloroethene	**<15.0**	ug/kg	38.8	15.0	1	04/26/24 08:30	04/29/24 21:21	127-18-4	
Toluene	**<9.8**	ug/kg	38.8	9.8	1	04/26/24 08:30	04/29/24 21:21	108-88-3	
Trichloroethene	**<14.5**	ug/kg	38.8	14.5	1	04/26/24 08:30	04/29/24 21:21	79-01-6	
Trichlorofluoromethane	**<11.2**	ug/kg	38.8	11.2	1	04/26/24 08:30	04/29/24 21:21	75-69-4	
m&p-Xylene	**<16.4**	ug/kg	77.5	16.4	1	04/26/24 08:30	04/29/24 21:21	179601-23-1	
trans-1,2-Dichloroethene	**<8.5**	ug/kg	38.8	8.5	1	04/26/24 08:30	04/29/24 21:21	156-60-5	
Surrogates									
Toluene-d8 (S)	101	%	60-140		1	04/26/24 08:30	04/29/24 21:21	2037-26-5	
4-Bromofluorobenzene (S)	100	%	66-143		1	04/26/24 08:30	04/29/24 21:21	460-00-4	
1,2-Dichlorobenzene-d4 (S)	109	%	60-140		1	04/26/24 08:30	04/29/24 21:21	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-229.6-VOC_20240422 **Lab ID: 40277236070** Collected: 04/22/24 09:55 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.8**	ug/kg	30.4	7.8	1	04/26/24 08:30	04/29/24 21:42	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<9.9**	ug/kg	30.4	9.9	1	04/26/24 08:30	04/29/24 21:42	76-13-1	
1,1-Dichloroethene	**<10.1**	ug/kg	30.4	10.1	1	04/26/24 08:30	04/29/24 21:42	75-35-4	
1,2-Dichloroethane	**<7.0**	ug/kg	30.4	7.0	1	04/26/24 08:30	04/29/24 21:42	107-06-2	
2-Butanone (MEK)	**<96.0**	ug/kg	759	96.0	1	04/26/24 08:30	04/29/24 21:42	78-93-3	v1
2-Hexanone	**<301**	ug/kg	759	301	1	04/26/24 08:30	04/29/24 21:42	591-78-6	v1
2-Propanol	**<968**	ug/kg	3040	968	1	04/26/24 08:30	04/29/24 21:42	67-63-0	
Acetone	**<185**	ug/kg	759	185	1	04/26/24 08:30	04/29/24 21:42	67-64-1	v1
Benzene	**<7.2**	ug/kg	12.1	7.2	1	04/26/24 08:30	04/29/24 21:42	71-43-2	
Bromodichloromethane	**<7.2**	ug/kg	30.4	7.2	1	04/26/24 08:30	04/29/24 21:42	75-27-4	
Bromoform	**<134**	ug/kg	152	134	1	04/26/24 08:30	04/29/24 21:42	75-25-2	
Chlorobenzene	**<3.6**	ug/kg	30.4	3.6	1	04/26/24 08:30	04/29/24 21:42	108-90-7	
Chloroform	**<21.7**	ug/kg	152	21.7	1	04/26/24 08:30	04/29/24 21:42	67-66-3	
Chloromethane	**<11.5**	ug/kg	30.4	11.5	1	04/26/24 08:30	04/29/24 21:42	74-87-3	
Dibromochloromethane	**<104**	ug/kg	152	104	1	04/26/24 08:30	04/29/24 21:42	124-48-1	
Dichlorofluoromethane	**<8.6**	ug/kg	30.4	8.6	1	04/26/24 08:30	04/29/24 21:42	75-43-4	
Methyl-tert-butyl ether	**<8.9**	ug/kg	30.4	8.9	1	04/26/24 08:30	04/29/24 21:42	1634-04-4	
Methylene Chloride	**<8.4**	ug/kg	30.4	8.4	1	04/26/24 08:30	04/29/24 21:42	75-09-2	
Tetrachloroethene	**<11.8**	ug/kg	30.4	11.8	1	04/26/24 08:30	04/29/24 21:42	127-18-4	
Toluene	**<7.7**	ug/kg	30.4	7.7	1	04/26/24 08:30	04/29/24 21:42	108-88-3	
Trichloroethene	**<11.4**	ug/kg	30.4	11.4	1	04/26/24 08:30	04/29/24 21:42	79-01-6	
Trichlorofluoromethane	**<8.8**	ug/kg	30.4	8.8	1	04/26/24 08:30	04/29/24 21:42	75-69-4	
m&p-Xylene	**<12.8**	ug/kg	60.7	12.8	1	04/26/24 08:30	04/29/24 21:42	179601-23-1	
trans-1,2-Dichloroethene	**<6.6**	ug/kg	30.4	6.6	1	04/26/24 08:30	04/29/24 21:42	156-60-5	
Surrogates									
Toluene-d8 (S)	103	%	60-140		1	04/26/24 08:30	04/29/24 21:42	2037-26-5	
4-Bromofluorobenzene (S)	105	%	66-143		1	04/26/24 08:30	04/29/24 21:42	460-00-4	
1,2-Dichlorobenzene-d4 (S)	115	%	60-140		1	04/26/24 08:30	04/29/24 21:42	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-229.7-VOC_20240422 **Lab ID: 40277236071** Collected: 04/22/24 09:56 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.9**	ug/kg	42.7	10.9	1	04/26/24 08:30	04/29/24 22:02	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<13.9**	ug/kg	42.7	13.9	1	04/26/24 08:30	04/29/24 22:02	76-13-1	
1,1-Dichloroethene	**<14.2**	ug/kg	42.7	14.2	1	04/26/24 08:30	04/29/24 22:02	75-35-4	
1,2-Dichloroethane	**<9.8**	ug/kg	42.7	9.8	1	04/26/24 08:30	04/29/24 22:02	107-06-2	
2-Butanone (MEK)	**<135**	ug/kg	1070	135	1	04/26/24 08:30	04/29/24 22:02	78-93-3	v1
2-Hexanone	**<424**	ug/kg	1070	424	1	04/26/24 08:30	04/29/24 22:02	591-78-6	v1
2-Propanol	**<1360**	ug/kg	4270	1360	1	04/26/24 08:30	04/29/24 22:02	67-63-0	
Acetone	**<260**	ug/kg	1070	260	1	04/26/24 08:30	04/29/24 22:02	67-64-1	v1
Benzene	**<10.2**	ug/kg	17.1	10.2	1	04/26/24 08:30	04/29/24 22:02	71-43-2	
Bromodichloromethane	**<10.2**	ug/kg	42.7	10.2	1	04/26/24 08:30	04/29/24 22:02	75-27-4	
Bromoform	**<188**	ug/kg	213	188	1	04/26/24 08:30	04/29/24 22:02	75-25-2	
Chlorobenzene	**<5.1**	ug/kg	42.7	5.1	1	04/26/24 08:30	04/29/24 22:02	108-90-7	
Chloroform	**<30.6**	ug/kg	213	30.6	1	04/26/24 08:30	04/29/24 22:02	67-66-3	
Chloromethane	**<16.2**	ug/kg	42.7	16.2	1	04/26/24 08:30	04/29/24 22:02	74-87-3	
Dibromochloromethane	**<146**	ug/kg	213	146	1	04/26/24 08:30	04/29/24 22:02	124-48-1	
Dichlorofluoromethane	**<12.0**	ug/kg	42.7	12.0	1	04/26/24 08:30	04/29/24 22:02	75-43-4	
Methyl-tert-butyl ether	**<12.5**	ug/kg	42.7	12.5	1	04/26/24 08:30	04/29/24 22:02	1634-04-4	
Methylene Chloride	**<11.9**	ug/kg	42.7	11.9	1	04/26/24 08:30	04/29/24 22:02	75-09-2	
Tetrachloroethene	**<16.6**	ug/kg	42.7	16.6	1	04/26/24 08:30	04/29/24 22:02	127-18-4	
Toluene	**<10.8**	ug/kg	42.7	10.8	1	04/26/24 08:30	04/29/24 22:02	108-88-3	
Trichloroethene	**<16.0**	ug/kg	42.7	16.0	1	04/26/24 08:30	04/29/24 22:02	79-01-6	
Trichlorofluoromethane	**<12.4**	ug/kg	42.7	12.4	1	04/26/24 08:30	04/29/24 22:02	75-69-4	
m&p-Xylene	**<18.0**	ug/kg	85.4	18.0	1	04/26/24 08:30	04/29/24 22:02	179601-23-1	
trans-1,2-Dichloroethene	**<9.3**	ug/kg	42.7	9.3	1	04/26/24 08:30	04/29/24 22:02	156-60-5	
Surrogates									
Toluene-d8 (S)	98	%	60-140		1	04/26/24 08:30	04/29/24 22:02	2037-26-5	
4-Bromofluorobenzene (S)	97	%	66-143		1	04/26/24 08:30	04/29/24 22:02	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	60-140		1	04/26/24 08:30	04/29/24 22:02	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-230.45-VOC_240422 **Lab ID: 40277236072** Collected: 04/22/24 09:57 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.7**	ug/kg	37.8	9.7	1	04/26/24 08:30	04/29/24 22:22	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.3**	ug/kg	37.8	12.3	1	04/26/24 08:30	04/29/24 22:22	76-13-1	
1,1-Dichloroethene	**<12.5**	ug/kg	37.8	12.5	1	04/26/24 08:30	04/29/24 22:22	75-35-4	
1,2-Dichloroethane	**<8.7**	ug/kg	37.8	8.7	1	04/26/24 08:30	04/29/24 22:22	107-06-2	
2-Butanone (MEK)	**<119**	ug/kg	944	119	1	04/26/24 08:30	04/29/24 22:22	78-93-3	v1
2-Hexanone	**<375**	ug/kg	944	375	1	04/26/24 08:30	04/29/24 22:22	591-78-6	v1
2-Propanol	**<1200**	ug/kg	3780	1200	1	04/26/24 08:30	04/29/24 22:22	67-63-0	
Acetone	**<230**	ug/kg	944	230	1	04/26/24 08:30	04/29/24 22:22	67-64-1	v1
Benzene	**<9.0**	ug/kg	15.1	9.0	1	04/26/24 08:30	04/29/24 22:22	71-43-2	
Bromodichloromethane	**<9.0**	ug/kg	37.8	9.0	1	04/26/24 08:30	04/29/24 22:22	75-27-4	
Bromoform	**<166**	ug/kg	189	166	1	04/26/24 08:30	04/29/24 22:22	75-25-2	
Chlorobenzene	**<4.5**	ug/kg	37.8	4.5	1	04/26/24 08:30	04/29/24 22:22	108-90-7	
Chloroform	**<27.0**	ug/kg	189	27.0	1	04/26/24 08:30	04/29/24 22:22	67-66-3	
Chloromethane	**<14.3**	ug/kg	37.8	14.3	1	04/26/24 08:30	04/29/24 22:22	74-87-3	
Dibromochloromethane	**<129**	ug/kg	189	129	1	04/26/24 08:30	04/29/24 22:22	124-48-1	
Dichlorofluoromethane	**<10.6**	ug/kg	37.8	10.6	1	04/26/24 08:30	04/29/24 22:22	75-43-4	
Methyl-tert-butyl ether	**<11.1**	ug/kg	37.8	11.1	1	04/26/24 08:30	04/29/24 22:22	1634-04-4	
Methylene Chloride	**<10.5**	ug/kg	37.8	10.5	1	04/26/24 08:30	04/29/24 22:22	75-09-2	
Tetrachloroethene	**<14.6**	ug/kg	37.8	14.6	1	04/26/24 08:30	04/29/24 22:22	127-18-4	
Toluene	**<9.5**	ug/kg	37.8	9.5	1	04/26/24 08:30	04/29/24 22:22	108-88-3	
Trichloroethene	**<14.1**	ug/kg	37.8	14.1	1	04/26/24 08:30	04/29/24 22:22	79-01-6	
Trichlorofluoromethane	**<10.9**	ug/kg	37.8	10.9	1	04/26/24 08:30	04/29/24 22:22	75-69-4	
m&p-Xylene	**<15.9**	ug/kg	75.5	15.9	1	04/26/24 08:30	04/29/24 22:22	179601-23-1	
trans-1,2-Dichloroethene	**<8.3**	ug/kg	37.8	8.3	1	04/26/24 08:30	04/29/24 22:22	156-60-5	
Surrogates									
Toluene-d8 (S)	97	%	60-140		1	04/26/24 08:30	04/29/24 22:22	2037-26-5	
4-Bromofluorobenzene (S)	99	%	66-143		1	04/26/24 08:30	04/29/24 22:22	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	60-140		1	04/26/24 08:30	04/29/24 22:22	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-233.6-VOC_20240422 **Lab ID: 40277236073** Collected: 04/22/24 10:30 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.6**	ug/kg	29.8	7.6	1	04/26/24 08:30	04/29/24 22:42	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<9.7**	ug/kg	29.8	9.7	1	04/26/24 08:30	04/29/24 22:42	76-13-1	
1,1-Dichloroethene	**<9.9**	ug/kg	29.8	9.9	1	04/26/24 08:30	04/29/24 22:42	75-35-4	
1,2-Dichloroethane	**<6.9**	ug/kg	29.8	6.9	1	04/26/24 08:30	04/29/24 22:42	107-06-2	
2-Butanone (MEK)	**<94.2**	ug/kg	745	94.2	1	04/26/24 08:30	04/29/24 22:42	78-93-3	v1
2-Hexanone	**<296**	ug/kg	745	296	1	04/26/24 08:30	04/29/24 22:42	591-78-6	v1
2-Propanol	**<950**	ug/kg	2980	950	1	04/26/24 08:30	04/29/24 22:42	67-63-0	
Acetone	**<181**	ug/kg	745	181	1	04/26/24 08:30	04/29/24 22:42	67-64-1	v1
Benzene	**<7.1**	ug/kg	11.9	7.1	1	04/26/24 08:30	04/29/24 22:42	71-43-2	
Bromodichloromethane	**<7.1**	ug/kg	29.8	7.1	1	04/26/24 08:30	04/29/24 22:42	75-27-4	
Bromoform	**<131**	ug/kg	149	131	1	04/26/24 08:30	04/29/24 22:42	75-25-2	
Chlorobenzene	**<3.6**	ug/kg	29.8	3.6	1	04/26/24 08:30	04/29/24 22:42	108-90-7	
Chloroform	**<21.3**	ug/kg	149	21.3	1	04/26/24 08:30	04/29/24 22:42	67-66-3	
Chloromethane	**<11.3**	ug/kg	29.8	11.3	1	04/26/24 08:30	04/29/24 22:42	74-87-3	
Dibromochloromethane	**<102**	ug/kg	149	102	1	04/26/24 08:30	04/29/24 22:42	124-48-1	
Dichlorofluoromethane	**<8.4**	ug/kg	29.8	8.4	1	04/26/24 08:30	04/29/24 22:42	75-43-4	
Methyl-tert-butyl ether	**<8.8**	ug/kg	29.8	8.8	1	04/26/24 08:30	04/29/24 22:42	1634-04-4	
Methylene Chloride	**<8.3**	ug/kg	29.8	8.3	1	04/26/24 08:30	04/29/24 22:42	75-09-2	
Tetrachloroethene	**<11.6**	ug/kg	29.8	11.6	1	04/26/24 08:30	04/29/24 22:42	127-18-4	
Toluene	**<7.5**	ug/kg	29.8	7.5	1	04/26/24 08:30	04/29/24 22:42	108-88-3	
Trichloroethene	**<11.2**	ug/kg	29.8	11.2	1	04/26/24 08:30	04/29/24 22:42	79-01-6	
Trichlorofluoromethane	**<8.6**	ug/kg	29.8	8.6	1	04/26/24 08:30	04/29/24 22:42	75-69-4	
m&p-Xylene	**<12.6**	ug/kg	59.6	12.6	1	04/26/24 08:30	04/29/24 22:42	179601-23-1	
trans-1,2-Dichloroethene	**<6.5**	ug/kg	29.8	6.5	1	04/26/24 08:30	04/29/24 22:42	156-60-5	
Surrogates									
Toluene-d8 (S)	96	%	60-140		1	04/26/24 08:30	04/29/24 22:42	2037-26-5	
4-Bromofluorobenzene (S)	98	%	66-143		1	04/26/24 08:30	04/29/24 22:42	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	60-140		1	04/26/24 08:30	04/29/24 22:42	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-236.4-VOC_20240422 **Lab ID: 40277236074** Collected: 04/22/24 10:31 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.4**	ug/kg	33.0	8.4	1	04/26/24 08:30	04/29/24 23:02	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.8**	ug/kg	33.0	10.8	1	04/26/24 08:30	04/29/24 23:02	76-13-1	
1,1-Dichloroethene	**<10.9**	ug/kg	33.0	10.9	1	04/26/24 08:30	04/29/24 23:02	75-35-4	
1,2-Dichloroethane	**<7.6**	ug/kg	33.0	7.6	1	04/26/24 08:30	04/29/24 23:02	107-06-2	
2-Butanone (MEK)	**<104**	ug/kg	825	104	1	04/26/24 08:30	04/29/24 23:02	78-93-3	v1
2-Hexanone	**<327**	ug/kg	825	327	1	04/26/24 08:30	04/29/24 23:02	591-78-6	v1
2-Propanol	**<1050**	ug/kg	3300	1050	1	04/26/24 08:30	04/29/24 23:02	67-63-0	
Acetone	**<201**	ug/kg	825	201	1	04/26/24 08:30	04/29/24 23:02	67-64-1	v1
Benzene	**<7.8**	ug/kg	13.2	7.8	1	04/26/24 08:30	04/29/24 23:02	71-43-2	
Bromodichloromethane	**<7.8**	ug/kg	33.0	7.8	1	04/26/24 08:30	04/29/24 23:02	75-27-4	
Bromoform	**<145**	ug/kg	165	145	1	04/26/24 08:30	04/29/24 23:02	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.0	4.0	1	04/26/24 08:30	04/29/24 23:02	108-90-7	
Chloroform	**<23.6**	ug/kg	165	23.6	1	04/26/24 08:30	04/29/24 23:02	67-66-3	
Chloromethane	**<12.5**	ug/kg	33.0	12.5	1	04/26/24 08:30	04/29/24 23:02	74-87-3	
Dibromochloromethane	**<113**	ug/kg	165	113	1	04/26/24 08:30	04/29/24 23:02	124-48-1	
Dichlorofluoromethane	**<9.3**	ug/kg	33.0	9.3	1	04/26/24 08:30	04/29/24 23:02	75-43-4	
Methyl-tert-butyl ether	**<9.7**	ug/kg	33.0	9.7	1	04/26/24 08:30	04/29/24 23:02	1634-04-4	
Methylene Chloride	**10.6J**	ug/kg	33.0	9.2	1	04/26/24 08:30	04/29/24 23:02	75-09-2	
Tetrachloroethene	**<12.8**	ug/kg	33.0	12.8	1	04/26/24 08:30	04/29/24 23:02	127-18-4	
Toluene	**<8.3**	ug/kg	33.0	8.3	1	04/26/24 08:30	04/29/24 23:02	108-88-3	
Trichloroethene	**<12.3**	ug/kg	33.0	12.3	1	04/26/24 08:30	04/29/24 23:02	79-01-6	
Trichlorofluoromethane	**<9.6**	ug/kg	33.0	9.6	1	04/26/24 08:30	04/29/24 23:02	75-69-4	
m&p-Xylene	**<13.9**	ug/kg	66.0	13.9	1	04/26/24 08:30	04/29/24 23:02	179601-23-1	
trans-1,2-Dichloroethene	**<7.2**	ug/kg	33.0	7.2	1	04/26/24 08:30	04/29/24 23:02	156-60-5	
Surrogates									
Toluene-d8 (S)	97	%	60-140		1	04/26/24 08:30	04/29/24 23:02	2037-26-5	
4-Bromofluorobenzene (S)	100	%	66-143		1	04/26/24 08:30	04/29/24 23:02	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	60-140		1	04/26/24 08:30	04/29/24 23:02	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-236.6-VOC_20240422 **Lab ID: 40277236075** Collected: 04/22/24 10:32 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.7**	ug/kg	30.1	7.7	1	04/26/24 08:30	04/29/24 23:22	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<9.8**	ug/kg	30.1	9.8	1	04/26/24 08:30	04/29/24 23:22	76-13-1	
1,1-Dichloroethene	**<10.0**	ug/kg	30.1	10.0	1	04/26/24 08:30	04/29/24 23:22	75-35-4	
1,2-Dichloroethane	**<6.9**	ug/kg	30.1	6.9	1	04/26/24 08:30	04/29/24 23:22	107-06-2	
2-Butanone (MEK)	**<95.2**	ug/kg	753	95.2	1	04/26/24 08:30	04/29/24 23:22	78-93-3	v1
2-Hexanone	**<299**	ug/kg	753	299	1	04/26/24 08:30	04/29/24 23:22	591-78-6	v1
2-Propanol	**<960**	ug/kg	3010	960	1	04/26/24 08:30	04/29/24 23:22	67-63-0	
Acetone	**<183**	ug/kg	753	183	1	04/26/24 08:30	04/29/24 23:22	67-64-1	v1
Benzene	**<7.2**	ug/kg	12.0	7.2	1	04/26/24 08:30	04/29/24 23:22	71-43-2	
Bromodichloromethane	**<7.2**	ug/kg	30.1	7.2	1	04/26/24 08:30	04/29/24 23:22	75-27-4	
Bromoform	**<133**	ug/kg	151	133	1	04/26/24 08:30	04/29/24 23:22	75-25-2	
Chlorobenzene	**<3.6**	ug/kg	30.1	3.6	1	04/26/24 08:30	04/29/24 23:22	108-90-7	
Chloroform	**<21.6**	ug/kg	151	21.6	1	04/26/24 08:30	04/29/24 23:22	67-66-3	
Chloromethane	**<11.4**	ug/kg	30.1	11.4	1	04/26/24 08:30	04/29/24 23:22	74-87-3	
Dibromochloromethane	**<103**	ug/kg	151	103	1	04/26/24 08:30	04/29/24 23:22	124-48-1	
Dichlorofluoromethane	**<8.5**	ug/kg	30.1	8.5	1	04/26/24 08:30	04/29/24 23:22	75-43-4	
Methyl-tert-butyl ether	**<8.9**	ug/kg	30.1	8.9	1	04/26/24 08:30	04/29/24 23:22	1634-04-4	
Methylene Chloride	**<8.4**	ug/kg	30.1	8.4	1	04/26/24 08:30	04/29/24 23:22	75-09-2	
Tetrachloroethene	**<11.7**	ug/kg	30.1	11.7	1	04/26/24 08:30	04/29/24 23:22	127-18-4	
Toluene	**<7.6**	ug/kg	30.1	7.6	1	04/26/24 08:30	04/29/24 23:22	108-88-3	
Trichloroethene	**<11.3**	ug/kg	30.1	11.3	1	04/26/24 08:30	04/29/24 23:22	79-01-6	
Trichlorofluoromethane	**<8.7**	ug/kg	30.1	8.7	1	04/26/24 08:30	04/29/24 23:22	75-69-4	
m&p-Xylene	**<12.7**	ug/kg	60.2	12.7	1	04/26/24 08:30	04/29/24 23:22	179601-23-1	
trans-1,2-Dichloroethene	**<6.6**	ug/kg	30.1	6.6	1	04/26/24 08:30	04/29/24 23:22	156-60-5	
Surrogates									
Toluene-d8 (S)	102	%	60-140		1	04/26/24 08:30	04/29/24 23:22	2037-26-5	
4-Bromofluorobenzene (S)	102	%	66-143		1	04/26/24 08:30	04/29/24 23:22	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	60-140		1	04/26/24 08:30	04/29/24 23:22	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-238.1-VOC_20240422 **Lab ID: 40277236076** Collected: 04/22/24 11:11 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.5**	ug/kg	33.1	8.5	1	04/26/24 08:30	04/29/24 23:42	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.8**	ug/kg	33.1	10.8	1	04/26/24 08:30	04/29/24 23:42	76-13-1	
1,1-Dichloroethene	**<11.0**	ug/kg	33.1	11.0	1	04/26/24 08:30	04/29/24 23:42	75-35-4	
1,2-Dichloroethane	**<7.6**	ug/kg	33.1	7.6	1	04/26/24 08:30	04/29/24 23:42	107-06-2	
2-Butanone (MEK)	**<104**	ug/kg	827	104	1	04/26/24 08:30	04/29/24 23:42	78-93-3	v1
2-Hexanone	**<328**	ug/kg	827	328	1	04/26/24 08:30	04/29/24 23:42	591-78-6	v1
2-Propanol	**<1050**	ug/kg	3310	1050	1	04/26/24 08:30	04/29/24 23:42	67-63-0	
Acetone	**<201**	ug/kg	827	201	1	04/26/24 08:30	04/29/24 23:42	67-64-1	v1
Benzene	**<7.9**	ug/kg	13.2	7.9	1	04/26/24 08:30	04/29/24 23:42	71-43-2	
Bromodichloromethane	**<7.9**	ug/kg	33.1	7.9	1	04/26/24 08:30	04/29/24 23:42	75-27-4	
Bromoform	**<146**	ug/kg	165	146	1	04/26/24 08:30	04/29/24 23:42	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.1	4.0	1	04/26/24 08:30	04/29/24 23:42	108-90-7	
Chloroform	**<23.7**	ug/kg	165	23.7	1	04/26/24 08:30	04/29/24 23:42	67-66-3	
Chloromethane	**<12.6**	ug/kg	33.1	12.6	1	04/26/24 08:30	04/29/24 23:42	74-87-3	
Dibromochloromethane	**<113**	ug/kg	165	113	1	04/26/24 08:30	04/29/24 23:42	124-48-1	
Dichlorofluoromethane	**<9.3**	ug/kg	33.1	9.3	1	04/26/24 08:30	04/29/24 23:42	75-43-4	
Methyl-tert-butyl ether	**<9.7**	ug/kg	33.1	9.7	1	04/26/24 08:30	04/29/24 23:42	1634-04-4	
Methylene Chloride	**10.1J**	ug/kg	33.1	9.2	1	04/26/24 08:30	04/29/24 23:42	75-09-2	
Tetrachloroethene	**<12.8**	ug/kg	33.1	12.8	1	04/26/24 08:30	04/29/24 23:42	127-18-4	
Toluene	**<8.3**	ug/kg	33.1	8.3	1	04/26/24 08:30	04/29/24 23:42	108-88-3	
Trichloroethene	**<12.4**	ug/kg	33.1	12.4	1	04/26/24 08:30	04/29/24 23:42	79-01-6	
Trichlorofluoromethane	**<9.6**	ug/kg	33.1	9.6	1	04/26/24 08:30	04/29/24 23:42	75-69-4	
m&p-Xylene	**<14.0**	ug/kg	66.1	14.0	1	04/26/24 08:30	04/29/24 23:42	179601-23-1	
trans-1,2-Dichloroethene	**<7.2**	ug/kg	33.1	7.2	1	04/26/24 08:30	04/29/24 23:42	156-60-5	
Surrogates									
Toluene-d8 (S)	97	%	60-140		1	04/26/24 08:30	04/29/24 23:42	2037-26-5	
4-Bromofluorobenzene (S)	96	%	66-143		1	04/26/24 08:30	04/29/24 23:42	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	60-140		1	04/26/24 08:30	04/29/24 23:42	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-241.9-VOC_20240422 **Lab ID: 40277236077** Collected: 04/22/24 11:12 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.1**	ug/kg	39.4	10.1	1	04/26/24 08:30	04/30/24 00:03	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.9**	ug/kg	39.4	12.9	1	04/26/24 08:30	04/30/24 00:03	76-13-1	
1,1-Dichloroethene	**<13.1**	ug/kg	39.4	13.1	1	04/26/24 08:30	04/30/24 00:03	75-35-4	
1,2-Dichloroethane	**<9.1**	ug/kg	39.4	9.1	1	04/26/24 08:30	04/30/24 00:03	107-06-2	
2-Butanone (MEK)	**<125**	ug/kg	986	125	1	04/26/24 08:30	04/30/24 00:03	78-93-3	v1
2-Hexanone	**<392**	ug/kg	986	392	1	04/26/24 08:30	04/30/24 00:03	591-78-6	v1
2-Propanol	**<1260**	ug/kg	3940	1260	1	04/26/24 08:30	04/30/24 00:03	67-63-0	
Acetone	**<240**	ug/kg	986	240	1	04/26/24 08:30	04/30/24 00:03	67-64-1	v1
Benzene	**<9.4**	ug/kg	15.8	9.4	1	04/26/24 08:30	04/30/24 00:03	71-43-2	
Bromodichloromethane	**<9.4**	ug/kg	39.4	9.4	1	04/26/24 08:30	04/30/24 00:03	75-27-4	
Bromoform	**<174**	ug/kg	197	174	1	04/26/24 08:30	04/30/24 00:03	75-25-2	
Chlorobenzene	**<4.7**	ug/kg	39.4	4.7	1	04/26/24 08:30	04/30/24 00:03	108-90-7	
Chloroform	**<28.2**	ug/kg	197	28.2	1	04/26/24 08:30	04/30/24 00:03	67-66-3	
Chloromethane	**<15.0**	ug/kg	39.4	15.0	1	04/26/24 08:30	04/30/24 00:03	74-87-3	
Dibromochloromethane	**<135**	ug/kg	197	135	1	04/26/24 08:30	04/30/24 00:03	124-48-1	
Dichlorofluoromethane	**<11.1**	ug/kg	39.4	11.1	1	04/26/24 08:30	04/30/24 00:03	75-43-4	
Methyl-tert-butyl ether	**<11.6**	ug/kg	39.4	11.6	1	04/26/24 08:30	04/30/24 00:03	1634-04-4	
Methylene Chloride	**<11.0**	ug/kg	39.4	11.0	1	04/26/24 08:30	04/30/24 00:03	75-09-2	
Tetrachloroethene	**<15.3**	ug/kg	39.4	15.3	1	04/26/24 08:30	04/30/24 00:03	127-18-4	
Toluene	**<9.9**	ug/kg	39.4	9.9	1	04/26/24 08:30	04/30/24 00:03	108-88-3	
Trichloroethene	**<14.8**	ug/kg	39.4	14.8	1	04/26/24 08:30	04/30/24 00:03	79-01-6	
Trichlorofluoromethane	**<11.4**	ug/kg	39.4	11.4	1	04/26/24 08:30	04/30/24 00:03	75-69-4	
m&p-Xylene	**<16.6**	ug/kg	78.9	16.6	1	04/26/24 08:30	04/30/24 00:03	179601-23-1	
trans-1,2-Dichloroethene	**<8.6**	ug/kg	39.4	8.6	1	04/26/24 08:30	04/30/24 00:03	156-60-5	
Surrogates									
Toluene-d8 (S)	95	%	60-140		1	04/26/24 08:30	04/30/24 00:03	2037-26-5	
4-Bromofluorobenzene (S)	99	%	66-143		1	04/26/24 08:30	04/30/24 00:03	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	60-140		1	04/26/24 08:30	04/30/24 00:03	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-242.05-VOC_240422 **Lab ID: 40277236078** Collected: 04/22/24 11:13 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<6.8**	ug/kg	26.6	6.8	1	04/26/24 08:30	04/30/24 00:23	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<8.7**	ug/kg	26.6	8.7	1	04/26/24 08:30	04/30/24 00:23	76-13-1	
1,1-Dichloroethene	**<8.8**	ug/kg	26.6	8.8	1	04/26/24 08:30	04/30/24 00:23	75-35-4	
1,2-Dichloroethane	**<6.1**	ug/kg	26.6	6.1	1	04/26/24 08:30	04/30/24 00:23	107-06-2	
2-Butanone (MEK)	**<83.9**	ug/kg	664	83.9	1	04/26/24 08:30	04/30/24 00:23	78-93-3	v1
2-Hexanone	**<264**	ug/kg	664	264	1	04/26/24 08:30	04/30/24 00:23	591-78-6	v1
2-Propanol	**<846**	ug/kg	2660	846	1	04/26/24 08:30	04/30/24 00:23	67-63-0	
Acetone	**<162**	ug/kg	664	162	1	04/26/24 08:30	04/30/24 00:23	67-64-1	v1
Benzene	**<6.3**	ug/kg	10.6	6.3	1	04/26/24 08:30	04/30/24 00:23	71-43-2	
Bromodichloromethane	**<6.3**	ug/kg	26.6	6.3	1	04/26/24 08:30	04/30/24 00:23	75-27-4	
Bromoform	**<117**	ug/kg	133	117	1	04/26/24 08:30	04/30/24 00:23	75-25-2	
Chlorobenzene	**<3.2**	ug/kg	26.6	3.2	1	04/26/24 08:30	04/30/24 00:23	108-90-7	
Chloroform	**<19.0**	ug/kg	133	19.0	1	04/26/24 08:30	04/30/24 00:23	67-66-3	
Chloromethane	**<10.1**	ug/kg	26.6	10.1	1	04/26/24 08:30	04/30/24 00:23	74-87-3	
Dibromochloromethane	**<90.8**	ug/kg	133	90.8	1	04/26/24 08:30	04/30/24 00:23	124-48-1	
Dichlorofluoromethane	**<7.5**	ug/kg	26.6	7.5	1	04/26/24 08:30	04/30/24 00:23	75-43-4	
Methyl-tert-butyl ether	**<7.8**	ug/kg	26.6	7.8	1	04/26/24 08:30	04/30/24 00:23	1634-04-4	
Methylene Chloride	**8.7J**	ug/kg	26.6	7.4	1	04/26/24 08:30	04/30/24 00:23	75-09-2	
Tetrachloroethene	**<10.3**	ug/kg	26.6	10.3	1	04/26/24 08:30	04/30/24 00:23	127-18-4	
Toluene	**<6.7**	ug/kg	26.6	6.7	1	04/26/24 08:30	04/30/24 00:23	108-88-3	
Trichloroethene	**<9.9**	ug/kg	26.6	9.9	1	04/26/24 08:30	04/30/24 00:23	79-01-6	
Trichlorofluoromethane	**<7.7**	ug/kg	26.6	7.7	1	04/26/24 08:30	04/30/24 00:23	75-69-4	
m&p-Xylene	**<11.2**	ug/kg	53.1	11.2	1	04/26/24 08:30	04/30/24 00:23	179601-23-1	
trans-1,2-Dichloroethene	**<5.8**	ug/kg	26.6	5.8	1	04/26/24 08:30	04/30/24 00:23	156-60-5	
Surrogates									
Toluene-d8 (S)	126	%	60-140		1	04/26/24 08:30	04/30/24 00:23	2037-26-5	
4-Bromofluorobenzene (S)	101	%	66-143		1	04/26/24 08:30	04/30/24 00:23	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	60-140		1	04/26/24 08:30	04/30/24 00:23	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-243.55-VOC_240422 **Lab ID: 40277236079** Collected: 04/22/24 12:20 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.6**	ug/kg	41.5	10.6	1	04/26/24 08:30	04/30/24 13:45	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<13.5**	ug/kg	41.5	13.5	1	04/26/24 08:30	04/30/24 13:45	76-13-1	
1,1-Dichloroethene	**<13.8**	ug/kg	41.5	13.8	1	04/26/24 08:30	04/30/24 13:45	75-35-4	
1,2-Dichloroethane	**<9.6**	ug/kg	41.5	9.6	1	04/26/24 08:30	04/30/24 13:45	107-06-2	
2-Butanone (MEK)	**<131**	ug/kg	1040	131	1	04/26/24 08:30	04/30/24 13:45	78-93-3	v1
2-Hexanone	**<412**	ug/kg	1040	412	1	04/26/24 08:30	04/30/24 13:45	591-78-6	
2-Propanol	**<1320**	ug/kg	4150	1320	1	04/26/24 08:30	04/30/24 13:45	67-63-0	
Acetone	**<253**	ug/kg	1040	253	1	04/26/24 08:30	04/30/24 13:45	67-64-1	v1
Benzene	**<9.9**	ug/kg	16.6	9.9	1	04/26/24 08:30	04/30/24 13:45	71-43-2	
Bromodichloromethane	**<9.9**	ug/kg	41.5	9.9	1	04/26/24 08:30	04/30/24 13:45	75-27-4	
Bromoform	**<183**	ug/kg	208	183	1	04/26/24 08:30	04/30/24 13:45	75-25-2	
Chlorobenzene	**<5.0**	ug/kg	41.5	5.0	1	04/26/24 08:30	04/30/24 13:45	108-90-7	
Chloroform	**<29.7**	ug/kg	208	29.7	1	04/26/24 08:30	04/30/24 13:45	67-66-3	
Chloromethane	**<15.8**	ug/kg	41.5	15.8	1	04/26/24 08:30	04/30/24 13:45	74-87-3	
Dibromochloromethane	**<142**	ug/kg	208	142	1	04/26/24 08:30	04/30/24 13:45	124-48-1	
Dichlorofluoromethane	**<11.7**	ug/kg	41.5	11.7	1	04/26/24 08:30	04/30/24 13:45	75-43-4	
Methyl-tert-butyl ether	**<12.2**	ug/kg	41.5	12.2	1	04/26/24 08:30	04/30/24 13:45	1634-04-4	
Methylene Chloride	**<11.5**	ug/kg	41.5	11.5	1	04/26/24 08:30	04/30/24 13:45	75-09-2	
Tetrachloroethene	**<16.1**	ug/kg	41.5	16.1	1	04/26/24 08:30	04/30/24 13:45	127-18-4	
Toluene	**<10.5**	ug/kg	41.5	10.5	1	04/26/24 08:30	04/30/24 13:45	108-88-3	
Trichloroethene	**<15.5**	ug/kg	41.5	15.5	1	04/26/24 08:30	04/30/24 13:45	79-01-6	
Trichlorofluoromethane	**17.3J**	ug/kg	41.5	12.0	1	04/26/24 08:30	04/30/24 13:45	75-69-4	
m&p-Xylene	**<17.5**	ug/kg	83.1	17.5	1	04/26/24 08:30	04/30/24 13:45	179601-23-1	
trans-1,2-Dichloroethene	**<9.1**	ug/kg	41.5	9.1	1	04/26/24 08:30	04/30/24 13:45	156-60-5	
Surrogates									
Toluene-d8 (S)	83	%	60-140		1	04/26/24 08:30	04/30/24 13:45	2037-26-5	
4-Bromofluorobenzene (S)	93	%	66-143		1	04/26/24 08:30	04/30/24 13:45	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	60-140		1	04/26/24 08:30	04/30/24 13:45	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-245.15-VOC_240422 **Lab ID: 40277236080** Collected: 04/22/24 12:21 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.4**	ug/kg	40.7	10.4	1	04/26/24 08:30	04/30/24 14:05	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<13.3**	ug/kg	40.7	13.3	1	04/26/24 08:30	04/30/24 14:05	76-13-1	
1,1-Dichloroethene	**<13.5**	ug/kg	40.7	13.5	1	04/26/24 08:30	04/30/24 14:05	75-35-4	
1,2-Dichloroethane	**<9.4**	ug/kg	40.7	9.4	1	04/26/24 08:30	04/30/24 14:05	107-06-2	
2-Butanone (MEK)	**<129**	ug/kg	1020	129	1	04/26/24 08:30	04/30/24 14:05	78-93-3	v1
2-Hexanone	**<404**	ug/kg	1020	404	1	04/26/24 08:30	04/30/24 14:05	591-78-6	
2-Propanol	**<1300**	ug/kg	4070	1300	1	04/26/24 08:30	04/30/24 14:05	67-63-0	
Acetone	**<247**	ug/kg	1020	247	1	04/26/24 08:30	04/30/24 14:05	67-64-1	v1
Benzene	**<9.7**	ug/kg	16.3	9.7	1	04/26/24 08:30	04/30/24 14:05	71-43-2	
Bromodichloromethane	**<9.7**	ug/kg	40.7	9.7	1	04/26/24 08:30	04/30/24 14:05	75-27-4	
Bromoform	**<179**	ug/kg	203	179	1	04/26/24 08:30	04/30/24 14:05	75-25-2	
Chlorobenzene	**<4.9**	ug/kg	40.7	4.9	1	04/26/24 08:30	04/30/24 14:05	108-90-7	
Chloroform	**<29.1**	ug/kg	203	29.1	1	04/26/24 08:30	04/30/24 14:05	67-66-3	
Chloromethane	**<15.5**	ug/kg	40.7	15.5	1	04/26/24 08:30	04/30/24 14:05	74-87-3	
Dibromochloromethane	**<139**	ug/kg	203	139	1	04/26/24 08:30	04/30/24 14:05	124-48-1	
Dichlorofluoromethane	**<11.5**	ug/kg	40.7	11.5	1	04/26/24 08:30	04/30/24 14:05	75-43-4	
Methyl-tert-butyl ether	**<12.0**	ug/kg	40.7	12.0	1	04/26/24 08:30	04/30/24 14:05	1634-04-4	
Methylene Chloride	**<11.3**	ug/kg	40.7	11.3	1	04/26/24 08:30	04/30/24 14:05	75-09-2	
Tetrachloroethene	**<15.8**	ug/kg	40.7	15.8	1	04/26/24 08:30	04/30/24 14:05	127-18-4	
Toluene	**<10.2**	ug/kg	40.7	10.2	1	04/26/24 08:30	04/30/24 14:05	108-88-3	
Trichloroethene	**<15.2**	ug/kg	40.7	15.2	1	04/26/24 08:30	04/30/24 14:05	79-01-6	
Trichlorofluoromethane	**<11.8**	ug/kg	40.7	11.8	1	04/26/24 08:30	04/30/24 14:05	75-69-4	
m&p-Xylene	**<17.2**	ug/kg	81.3	17.2	1	04/26/24 08:30	04/30/24 14:05	179601-23-1	
trans-1,2-Dichloroethene	**<8.9**	ug/kg	40.7	8.9	1	04/26/24 08:30	04/30/24 14:05	156-60-5	
Surrogates									
Toluene-d8 (S)	99	%	60-140		1	04/26/24 08:30	04/30/24 14:05	2037-26-5	
4-Bromofluorobenzene (S)	97	%	66-143		1	04/26/24 08:30	04/30/24 14:05	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	60-140		1	04/26/24 08:30	04/30/24 14:05	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-247-VOC_20240422 **Lab ID: 40277236081** Collected: 04/22/24 12:22 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.3**	ug/kg	40.4	10.3	1	04/26/24 08:30	04/30/24 14:25	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<13.2**	ug/kg	40.4	13.2	1	04/26/24 08:30	04/30/24 14:25	76-13-1	
1,1-Dichloroethene	**<13.4**	ug/kg	40.4	13.4	1	04/26/24 08:30	04/30/24 14:25	75-35-4	
1,2-Dichloroethane	**<9.3**	ug/kg	40.4	9.3	1	04/26/24 08:30	04/30/24 14:25	107-06-2	
2-Butanone (MEK)	**<128**	ug/kg	1010	128	1	04/26/24 08:30	04/30/24 14:25	78-93-3	v1
2-Hexanone	**<401**	ug/kg	1010	401	1	04/26/24 08:30	04/30/24 14:25	591-78-6	
2-Propanol	**<1290**	ug/kg	4040	1290	1	04/26/24 08:30	04/30/24 14:25	67-63-0	
Acetone	**<246**	ug/kg	1010	246	1	04/26/24 08:30	04/30/24 14:25	67-64-1	v1
Benzene	**<9.6**	ug/kg	16.1	9.6	1	04/26/24 08:30	04/30/24 14:25	71-43-2	
Bromodichloromethane	**<9.6**	ug/kg	40.4	9.6	1	04/26/24 08:30	04/30/24 14:25	75-27-4	
Bromoform	**<178**	ug/kg	202	178	1	04/26/24 08:30	04/30/24 14:25	75-25-2	
Chlorobenzene	**<4.8**	ug/kg	40.4	4.8	1	04/26/24 08:30	04/30/24 14:25	108-90-7	
Chloroform	**<28.9**	ug/kg	202	28.9	1	04/26/24 08:30	04/30/24 14:25	67-66-3	
Chloromethane	**<15.3**	ug/kg	40.4	15.3	1	04/26/24 08:30	04/30/24 14:25	74-87-3	
Dibromochloromethane	**<138**	ug/kg	202	138	1	04/26/24 08:30	04/30/24 14:25	124-48-1	
Dichlorofluoromethane	**<11.4**	ug/kg	40.4	11.4	1	04/26/24 08:30	04/30/24 14:25	75-43-4	
Methyl-tert-butyl ether	**<11.9**	ug/kg	40.4	11.9	1	04/26/24 08:30	04/30/24 14:25	1634-04-4	
Methylene Chloride	**<11.2**	ug/kg	40.4	11.2	1	04/26/24 08:30	04/30/24 14:25	75-09-2	
Tetrachloroethene	**<15.7**	ug/kg	40.4	15.7	1	04/26/24 08:30	04/30/24 14:25	127-18-4	
Toluene	**<10.2**	ug/kg	40.4	10.2	1	04/26/24 08:30	04/30/24 14:25	108-88-3	
Trichloroethene	**<15.1**	ug/kg	40.4	15.1	1	04/26/24 08:30	04/30/24 14:25	79-01-6	
Trichlorofluoromethane	**<11.7**	ug/kg	40.4	11.7	1	04/26/24 08:30	04/30/24 14:25	75-69-4	
m&p-Xylene	**<17.0**	ug/kg	80.7	17.0	1	04/26/24 08:30	04/30/24 14:25	179601-23-1	
trans-1,2-Dichloroethene	**<8.8**	ug/kg	40.4	8.8	1	04/26/24 08:30	04/30/24 14:25	156-60-5	
Surrogates									
Toluene-d8 (S)	82	%	60-140		1	04/26/24 08:30	04/30/24 14:25	2037-26-5	
4-Bromofluorobenzene (S)	89	%	66-143		1	04/26/24 08:30	04/30/24 14:25	460-00-4	
1,2-Dichlorobenzene-d4 (S)	97	%	60-140		1	04/26/24 08:30	04/30/24 14:25	2199-69-1	

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(920)469-2436

ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-248.65-VOC_240422 **Lab ID: 40277236082** Collected: 04/22/24 13:36 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.3**	ug/kg	40.2	10.3	1	04/25/24 09:40	04/29/24 13:44	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<13.1**	ug/kg	40.2	13.1	1	04/25/24 09:40	04/29/24 13:44	76-13-1	
1,1-Dichloroethene	**<13.3**	ug/kg	40.2	13.3	1	04/25/24 09:40	04/29/24 13:44	75-35-4	
1,2-Dichloroethane	**<9.2**	ug/kg	40.2	9.2	1	04/25/24 09:40	04/29/24 13:44	107-06-2	
2-Butanone (MEK)	**<127**	ug/kg	1000	127	1	04/25/24 09:40	04/29/24 13:44	78-93-3	
2-Hexanone	**<399**	ug/kg	1000	399	1	04/25/24 09:40	04/29/24 13:44	591-78-6	
2-Propanol	**<1280**	ug/kg	4020	1280	1	04/25/24 09:40	04/29/24 13:44	67-63-0	
Acetone	**<245**	ug/kg	1000	245	1	04/25/24 09:40	04/29/24 13:44	67-64-1	v1
Benzene	**<9.6**	ug/kg	16.1	9.6	1	04/25/24 09:40	04/29/24 13:44	71-43-2	
Bromodichloromethane	**<9.6**	ug/kg	40.2	9.6	1	04/25/24 09:40	04/29/24 13:44	75-27-4	
Bromoform	**<177**	ug/kg	201	177	1	04/25/24 09:40	04/29/24 13:44	75-25-2	
Chlorobenzene	**<4.8**	ug/kg	40.2	4.8	1	04/25/24 09:40	04/29/24 13:44	108-90-7	
Chloroform	**<28.8**	ug/kg	201	28.8	1	04/25/24 09:40	04/29/24 13:44	67-66-3	
Chloromethane	**<15.3**	ug/kg	40.2	15.3	1	04/25/24 09:40	04/29/24 13:44	74-87-3	
Dibromochloromethane	**<137**	ug/kg	201	137	1	04/25/24 09:40	04/29/24 13:44	124-48-1	
Dichlorofluoromethane	**<11.3**	ug/kg	40.2	11.3	1	04/25/24 09:40	04/29/24 13:44	75-43-4	
Methyl-tert-butyl ether	**<11.8**	ug/kg	40.2	11.8	1	04/25/24 09:40	04/29/24 13:44	1634-04-4	
Methylene Chloride	**<11.2**	ug/kg	40.2	11.2	1	04/25/24 09:40	04/29/24 13:44	75-09-2	
Tetrachloroethene	**<15.6**	ug/kg	40.2	15.6	1	04/25/24 09:40	04/29/24 13:44	127-18-4	
Toluene	**<10.1**	ug/kg	40.2	10.1	1	04/25/24 09:40	04/29/24 13:44	108-88-3	
Trichloroethene	**<15.0**	ug/kg	40.2	15.0	1	04/25/24 09:40	04/29/24 13:44	79-01-6	
Trichlorofluoromethane	**<11.7**	ug/kg	40.2	11.7	1	04/25/24 09:40	04/29/24 13:44	75-69-4	
m&p-Xylene	**<17.0**	ug/kg	80.4	17.0	1	04/25/24 09:40	04/29/24 13:44	179601-23-1	
trans-1,2-Dichloroethene	**<8.8**	ug/kg	40.2	8.8	1	04/25/24 09:40	04/29/24 13:44	156-60-5	
Surrogates									
Toluene-d8 (S)	95	%	60-140		1	04/25/24 09:40	04/29/24 13:44	2037-26-5	
4-Bromofluorobenzene (S)	96	%	66-143		1	04/25/24 09:40	04/29/24 13:44	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	60-140		1	04/25/24 09:40	04/29/24 13:44	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: 300-002-GSV-248.65-VOC-DUP_422 **Lab ID: 40277236083** Collected: 04/22/24 13:36 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<11.1**	ug/kg	43.5	11.1	1	04/26/24 08:30	04/30/24 14:45	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<14.2**	ug/kg	43.5	14.2	1	04/26/24 08:30	04/30/24 14:45	76-13-1	
1,1-Dichloroethene	**<14.4**	ug/kg	43.5	14.4	1	04/26/24 08:30	04/30/24 14:45	75-35-4	
1,2-Dichloroethane	**<10.0**	ug/kg	43.5	10.0	1	04/26/24 08:30	04/30/24 14:45	107-06-2	
2-Butanone (MEK)	**<137**	ug/kg	1090	137	1	04/26/24 08:30	04/30/24 14:45	78-93-3	v1
2-Hexanone	**<432**	ug/kg	1090	432	1	04/26/24 08:30	04/30/24 14:45	591-78-6	
2-Propanol	**<1390**	ug/kg	4350	1390	1	04/26/24 08:30	04/30/24 14:45	67-63-0	
Acetone	**<265**	ug/kg	1090	265	1	04/26/24 08:30	04/30/24 14:45	67-64-1	v1
Benzene	**<10.4**	ug/kg	17.4	10.4	1	04/26/24 08:30	04/30/24 14:45	71-43-2	
Bromodichloromethane	**<10.4**	ug/kg	43.5	10.4	1	04/26/24 08:30	04/30/24 14:45	75-27-4	
Bromoform	**<191**	ug/kg	217	191	1	04/26/24 08:30	04/30/24 14:45	75-25-2	
Chlorobenzene	**<5.2**	ug/kg	43.5	5.2	1	04/26/24 08:30	04/30/24 14:45	108-90-7	
Chloroform	**<31.1**	ug/kg	217	31.1	1	04/26/24 08:30	04/30/24 14:45	67-66-3	
Chloromethane	**<16.5**	ug/kg	43.5	16.5	1	04/26/24 08:30	04/30/24 14:45	74-87-3	
Dibromochloromethane	**<149**	ug/kg	217	149	1	04/26/24 08:30	04/30/24 14:45	124-48-1	
Dichlorofluoromethane	**<12.3**	ug/kg	43.5	12.3	1	04/26/24 08:30	04/30/24 14:45	75-43-4	
Methyl-tert-butyl ether	**<12.8**	ug/kg	43.5	12.8	1	04/26/24 08:30	04/30/24 14:45	1634-04-4	
Methylene Chloride	**<12.1**	ug/kg	43.5	12.1	1	04/26/24 08:30	04/30/24 14:45	75-09-2	
Tetrachloroethene	**<16.9**	ug/kg	43.5	16.9	1	04/26/24 08:30	04/30/24 14:45	127-18-4	
Toluene	**<11.0**	ug/kg	43.5	11.0	1	04/26/24 08:30	04/30/24 14:45	108-88-3	
Trichloroethene	**<16.3**	ug/kg	43.5	16.3	1	04/26/24 08:30	04/30/24 14:45	79-01-6	
Trichlorofluoromethane	**<12.6**	ug/kg	43.5	12.6	1	04/26/24 08:30	04/30/24 14:45	75-69-4	
m&p-Xylene	**<18.4**	ug/kg	87.0	18.4	1	04/26/24 08:30	04/30/24 14:45	179601-23-1	
trans-1,2-Dichloroethene	**<9.5**	ug/kg	43.5	9.5	1	04/26/24 08:30	04/30/24 14:45	156-60-5	
Surrogates									
Toluene-d8 (S)	79	%	60-140		1	04/26/24 08:30	04/30/24 14:45	2037-26-5	
4-Bromofluorobenzene (S)	94	%	66-143		1	04/26/24 08:30	04/30/24 14:45	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	60-140		1	04/26/24 08:30	04/30/24 14:45	2199-69-1	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Sample: TB-03_20240422 **Lab ID: 40277236084** Collected: 04/22/24 15:30 Received: 04/23/24 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	04/26/24 08:30	04/29/24 21:01	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	04/26/24 08:30	04/29/24 21:01	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	04/26/24 08:30	04/29/24 21:01	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	04/26/24 08:30	04/29/24 21:01	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	04/26/24 08:30	04/29/24 21:01	78-93-3	v1
2-Hexanone	**<496**	ug/kg	1250	496	1	04/26/24 08:30	04/29/24 21:01	591-78-6	v1
2-Propanol	**<1590**	ug/kg	5000	1590	1	04/26/24 08:30	04/29/24 21:01	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	04/26/24 08:30	04/29/24 21:01	67-64-1	v1
Benzene	**<11.9**	ug/kg	20.0	11.9	1	04/26/24 08:30	04/29/24 21:01	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	04/26/24 08:30	04/29/24 21:01	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	04/26/24 08:30	04/29/24 21:01	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	04/26/24 08:30	04/29/24 21:01	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	04/26/24 08:30	04/29/24 21:01	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	04/26/24 08:30	04/29/24 21:01	74-87-3	
Dibromochloromethane	**<171**	ug/kg	250	171	1	04/26/24 08:30	04/29/24 21:01	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	04/26/24 08:30	04/29/24 21:01	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	04/26/24 08:30	04/29/24 21:01	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	04/26/24 08:30	04/29/24 21:01	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	04/26/24 08:30	04/29/24 21:01	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	04/26/24 08:30	04/29/24 21:01	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	04/26/24 08:30	04/29/24 21:01	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	04/26/24 08:30	04/29/24 21:01	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	04/26/24 08:30	04/29/24 21:01	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	04/26/24 08:30	04/29/24 21:01	156-60-5	
Surrogates									
Toluene-d8 (S)	88	%	60-140		1	04/26/24 08:30	04/29/24 21:01	2037-26-5	
4-Bromofluorobenzene (S)	98	%	66-143		1	04/26/24 08:30	04/29/24 21:01	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	60-140		1	04/26/24 08:30	04/29/24 21:01	2199-69-1	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

QC Batch: 472531
QC Batch Method: EPA 3546
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Med Level MAE
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40277236001, 40277236002, 40277236003, 40277236004, 40277236005, 40277236006, 40277236007, 40277236008, 40277236009, 40277236010, 40277236011, 40277236012, 40277236013, 40277236014, 40277236015, 40277236016, 40277236017, 40277236018, 40277236019, 40277236025

METHOD BLANK: 2706291
Matrix: Solid
Associated Lab Samples: 40277236001, 40277236002, 40277236003, 40277236004, 40277236005, 40277236006, 40277236007, 40277236008, 40277236009, 40277236010, 40277236011, 40277236012, 40277236013, 40277236014, 40277236015, 40277236016, 40277236017, 40277236018, 40277236019, 40277236025

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/kg	<12.8	50.0	12.8	04/25/24 09:24	
1,1,2-Trichlorotrifluoroethane	ug/kg	<16.3	50.0	16.3	04/25/24 09:24	
1,1-Dichloroethene	ug/kg	<16.6	50.0	16.6	04/25/24 09:24	
1,2-Dichloroethane	ug/kg	<11.5	50.0	11.5	04/25/24 09:24	
2-Butanone (MEK)	ug/kg	<158	1250	158	04/25/24 09:24	v1
2-Hexanone	ug/kg	<496	1250	496	04/25/24 09:24	
2-Propanol	ug/kg	<1590	5000	1590	04/25/24 09:24	
Acetone	ug/kg	<304	1250	304	04/25/24 09:24	v1
Benzene	ug/kg	<11.9	20.0	11.9	04/25/24 09:24	
Bromodichloromethane	ug/kg	<11.9	50.0	11.9	04/25/24 09:24	
Bromoform	ug/kg	<220	250	220	04/25/24 09:24	
Chlorobenzene	ug/kg	<6.0	50.0	6.0	04/25/24 09:24	
Chloroform	ug/kg	<35.8	250	35.8	04/25/24 09:24	
Chloromethane	ug/kg	<19.0	50.0	19.0	04/25/24 09:24	
Dibromochloromethane	ug/kg	<171	250	171	04/25/24 09:24	
Dichlorofluoromethane	ug/kg	<14.1	50.0	14.1	04/25/24 09:24	
m&p-Xylene	ug/kg	<21.1	100	21.1	04/25/24 09:24	
Methyl-tert-butyl ether	ug/kg	<14.7	50.0	14.7	04/25/24 09:24	
Methylene Chloride	ug/kg	<13.9	50.0	13.9	04/25/24 09:24	
Tetrachloroethene	ug/kg	<19.4	50.0	19.4	04/25/24 09:24	
Toluene	ug/kg	<12.6	50.0	12.6	04/25/24 09:24	
trans-1,2-Dichloroethene	ug/kg	<10.9	50.0	10.9	04/25/24 09:24	
Trichloroethene	ug/kg	<18.7	50.0	18.7	04/25/24 09:24	
Trichlorofluoromethane	ug/kg	<14.5	50.0	14.5	04/25/24 09:24	
1,2-Dichlorobenzene-d4 (S)	%	115	60-140		04/25/24 09:24	
4-Bromofluorobenzene (S)	%	108	66-143		04/25/24 09:24	
Toluene-d8 (S)	%	105	60-140		04/25/24 09:24	

LABORATORY CONTROL SAMPLE: 2706292

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2370	95	60-140	
1,1,2-Trichlorotrifluoroethane	ug/kg	2500	2150	86	60-140	
1,1-Dichloroethene	ug/kg	2500	2050	82	62.9-142	
1,2-Dichloroethane	ug/kg	2500	2350	94	51.5-138	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

LABORATORY CONTROL SAMPLE: 2706292

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	2500	2380	95	60-140	
Bromodichloromethane	ug/kg	2500	2250	90	60-140	
Bromoform	ug/kg	2500	2090	84	60-140	
Chlorobenzene	ug/kg	2500	2520	101	85.8-121	
Chloroform	ug/kg	2500	2440	98	78.4-117	
Chloromethane	ug/kg	2500	1350	54	60-140	L2
Dibromochloromethane	ug/kg	2500	2360	95	60-140	
m&p-Xylene	ug/kg	5000	5080	102	60-140	
Methyl-tert-butyl ether	ug/kg	2500	1960	79	60-140	
Methylene Chloride	ug/kg	2500	2380	95	60-140	
Tetrachloroethene	ug/kg	2500	2560	103	76.3-149	
Toluene	ug/kg	2500	2470	99	60-140	
trans-1,2-Dichloroethene	ug/kg	2500	2280	91	60.9-136	
Trichloroethene	ug/kg	2500	2860	115	79.8-128	
Trichlorofluoromethane	ug/kg	2500	2050	82	49-141	
1,2-Dichlorobenzene-d4 (S)	%			113	60-140	
4-Bromofluorobenzene (S)	%			107	66-143	
Toluene-d8 (S)	%			108	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2706293 2706294

Parameter	Units	40277236025 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/kg	<10.8	876	673	768	602	88	89	60-140	24	50	
1,1,2-Trichlorotrifluoroethane	ug/kg	<13.8	876	673	676	468	77	70	60-140	36	50	
1,1-Dichloroethene	ug/kg	<14.0	876	673	701	500	80	74	62.9-142	34	50	
1,2-Dichloroethane	ug/kg	<9.7	876	673	848	620	97	92	51.5-138	31	50	
Benzene	ug/kg	<10.0	876	673	825	621	94	92	60-140	28	50	
Bromodichloromethane	ug/kg	<10.0	876	673	766	550	88	82	60-140	33	50	
Bromoform	ug/kg	<186	876	673	776	502	89	75	60-140	43	50	
Chlorobenzene	ug/kg	<5.1	876	673	948	680	108	101	85.8-121	33	50	
Chloroform	ug/kg	<30.2	876	673	859	646	98	96	78.4-117	28	50	
Chloromethane	ug/kg	<16.0	876	673	455	297	52	44	60-140	42	50	M0
Dibromochloromethane	ug/kg	<144	876	673	868	571	99	85	60-140	41	50	
m&p-Xylene	ug/kg	<17.8	1750	1350	1880	1350	108	100	60-140	33	50	
Methyl-tert-butyl ether	ug/kg	<12.4	876	673	711	499	81	74	60-140	35	50	
Methylene Chloride	ug/kg	<11.7	876	673	822	584	94	87	60-140	34	50	
Tetrachloroethene	ug/kg	<16.4	876	673	935	726	107	108	76.3-149	25	50	
Toluene	ug/kg	<10.6	876	673	896	655	102	97	60-140	31	50	
trans-1,2-Dichloroethene	ug/kg	<9.2	876	673	757	590	86	88	60.9-136	25	50	
Trichloroethene	ug/kg	<15.8	876	673	995	753	114	112	79.8-128	28	50	
Trichlorofluoromethane	ug/kg	<12.2	876	673	679	464	78	69	21-141	38	28	
1,2-Dichlorobenzene-d4 (S)	%						115	109	60-140			
4-Bromofluorobenzene (S)	%						108	104	66-143			

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Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2706293 2706294

Parameter	Units	40277236025 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Toluene-d8 (S)	%						110	107	60-140			

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

QC Batch: 472541
QC Batch Method: EPA 3546
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Med Level MAE
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40277236020, 40277236021, 40277236022, 40277236023, 40277236024, 40277236026, 40277236027, 40277236028, 40277236029, 40277236030, 40277236031, 40277236032, 40277236033, 40277236034, 40277236035, 40277236036, 40277236037, 40277236038, 40277236039, 40277236046

METHOD BLANK: 2706326
Matrix: Solid
Associated Lab Samples: 40277236020, 40277236021, 40277236022, 40277236023, 40277236024, 40277236026, 40277236027, 40277236028, 40277236029, 40277236030, 40277236031, 40277236032, 40277236033, 40277236034, 40277236035, 40277236036, 40277236037, 40277236038, 40277236039, 40277236046

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/kg	<12.8	50.0	12.8	04/26/24 11:04	
1,1,2-Trichlorotrifluoroethane	ug/kg	<16.3	50.0	16.3	04/26/24 11:04	
1,1-Dichloroethene	ug/kg	<16.6	50.0	16.6	04/26/24 11:04	
1,2-Dichloroethane	ug/kg	<11.5	50.0	11.5	04/26/24 11:04	
2-Butanone (MEK)	ug/kg	<158	1250	158	04/26/24 11:04	
2-Hexanone	ug/kg	<496	1250	496	04/26/24 11:04	v1
2-Propanol	ug/kg	<1590	5000	1590	04/26/24 11:04	
Acetone	ug/kg	<304	1250	304	04/26/24 11:04	v1
Benzene	ug/kg	<11.9	20.0	11.9	04/26/24 11:04	
Bromodichloromethane	ug/kg	<11.9	50.0	11.9	04/26/24 11:04	
Bromoform	ug/kg	<220	250	220	04/26/24 11:04	
Chlorobenzene	ug/kg	<6.0	50.0	6.0	04/26/24 11:04	
Chloroform	ug/kg	<35.8	250	35.8	04/26/24 11:04	
Chloromethane	ug/kg	<19.0	50.0	19.0	04/26/24 11:04	
Dibromochloromethane	ug/kg	<171	250	171	04/26/24 11:04	
Dichlorofluoromethane	ug/kg	<14.1	50.0	14.1	04/26/24 11:04	
m&p-Xylene	ug/kg	<21.1	100	21.1	04/26/24 11:04	
Methyl-tert-butyl ether	ug/kg	<14.7	50.0	14.7	04/26/24 11:04	
Methylene Chloride	ug/kg	<13.9	50.0	13.9	04/26/24 11:04	
Tetrachloroethene	ug/kg	<19.4	50.0	19.4	04/26/24 11:04	
Toluene	ug/kg	<12.6	50.0	12.6	04/26/24 11:04	
trans-1,2-Dichloroethene	ug/kg	<10.9	50.0	10.9	04/26/24 11:04	
Trichloroethene	ug/kg	<18.7	50.0	18.7	04/26/24 11:04	
Trichlorofluoromethane	ug/kg	<14.5	50.0	14.5	04/26/24 11:04	
1,2-Dichlorobenzene-d4 (S)	%	114	60-140		04/26/24 11:04	
4-Bromofluorobenzene (S)	%	113	66-143		04/26/24 11:04	
Toluene-d8 (S)	%	111	60-140		04/26/24 11:04	

LABORATORY CONTROL SAMPLE: 2706327

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2420	97	60-140	
1,1,2-Trichlorotrifluoroethane	ug/kg	2500	2730	109	60-140	
1,1-Dichloroethene	ug/kg	2500	2290	92	62.9-142	
1,2-Dichloroethane	ug/kg	2500	2470	99	51.5-138	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

LABORATORY CONTROL SAMPLE: 2706327

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	2500	2430	97	60-140	
Bromodichloromethane	ug/kg	2500	2300	92	60-140	
Bromoform	ug/kg	2500	2430	97	60-140	
Chlorobenzene	ug/kg	2500	2780	111	85.8-121	
Chloroform	ug/kg	2500	2440	98	78.4-117	
Chloromethane	ug/kg	2500	1420	57	60-140	L2
Dibromochloromethane	ug/kg	2500	2580	103	60-140	
m&p-Xylene	ug/kg	5000	5390	108	60-140	
Methyl-tert-butyl ether	ug/kg	2500	2050	82	60-140	
Methylene Chloride	ug/kg	2500	2520	101	60-140	
Tetrachloroethene	ug/kg	2500	2890	116	76.3-149	
Toluene	ug/kg	2500	2650	106	60-140	
trans-1,2-Dichloroethene	ug/kg	2500	2350	94	60.9-136	
Trichloroethene	ug/kg	2500	2850	114	79.8-128	
Trichlorofluoromethane	ug/kg	2500	2400	96	49-141	
1,2-Dichlorobenzene-d4 (S)	%			120	60-140	
4-Bromofluorobenzene (S)	%			117	66-143	
Toluene-d8 (S)	%			116	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2706328 2706329

Parameter	Units	40277236046 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/kg	<9.0	690	809	552	747	80	92	60-140	30	50	
1,1,2-Trichlorotrifluoroethane	ug/kg	<11.5	690	809	467	788	68	97	60-140	51	50	R1
1,1-Dichloroethene	ug/kg	<11.7	690	809	519	690	75	85	62.9-142	28	50	
1,2-Dichloroethane	ug/kg	<8.1	690	809	606	764	88	94	51.5-138	23	50	
Benzene	ug/kg	<8.4	690	809	597	733	87	91	60-140	20	50	
Bromodichloromethane	ug/kg	<8.4	690	809	554	674	80	83	60-140	20	50	
Bromoform	ug/kg	<155	690	809	542	717	79	89	60-140	28	50	
Chlorobenzene	ug/kg	<4.2	690	809	690	867	100	107	85.8-121	23	50	
Chloroform	ug/kg	<25.2	690	809	622	774	90	96	78.4-117	22	50	
Chloromethane	ug/kg	<13.4	690	809	309	399	45	49	60-140	25	50	M0
Dibromochloromethane	ug/kg	<120	690	809	619	774	90	96	60-140	22	50	
m&p-Xylene	ug/kg	<14.9	1380	1620	1350	1730	98	107	60-140	25	50	
Methyl-tert-butyl ether	ug/kg	<10.4	690	809	484	632	70	78	60-140	27	50	
Methylene Chloride	ug/kg	<9.8	690	809	603	753	87	93	60-140	22	50	
Tetrachloroethene	ug/kg	<13.7	690	809	708	899	103	111	76.3-149	24	50	
Toluene	ug/kg	<8.9	690	809	642	832	93	103	60-140	26	50	
trans-1,2-Dichloroethene	ug/kg	<7.7	690	809	550	687	80	85	60.9-136	22	50	
Trichloroethene	ug/kg	<13.2	690	809	681	903	99	112	79.8-128	28	50	
Trichlorofluoromethane	ug/kg	<10.2	690	809	482	672	70	83	21-141	33	28	R1
1,2-Dichlorobenzene-d4 (S)	%						104	114	60-140			
4-Bromofluorobenzene (S)	%						103	115	66-143			

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(920)469-2436

QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2706328 2706329

Parameter	Units	40277236046 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Toluene-d8 (S)	%						102	109	60-140			

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

QC Batch: 472668
QC Batch Method: EPA 3546
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Med Level MAE
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40277236040, 40277236041, 40277236042, 40277236043, 40277236044, 40277236045, 40277236047, 40277236048, 40277236049, 40277236050, 40277236051, 40277236052, 40277236053, 40277236054, 40277236067

METHOD BLANK: 2707096 Matrix: Solid
Associated Lab Samples: 40277236040, 40277236041, 40277236042, 40277236043, 40277236044, 40277236045, 40277236047, 40277236048, 40277236049, 40277236050, 40277236051, 40277236052, 40277236053, 40277236054, 40277236067

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/kg	<12.8	50.0	12.8	04/26/24 17:29	
1,1,2-Trichlorotrifluoroethane	ug/kg	<16.3	50.0	16.3	04/26/24 17:29	v1
1,1-Dichloroethene	ug/kg	<16.6	50.0	16.6	04/26/24 17:29	
1,2-Dichloroethane	ug/kg	<11.5	50.0	11.5	04/26/24 17:29	
2-Butanone (MEK)	ug/kg	<158	1250	158	04/26/24 17:29	
2-Hexanone	ug/kg	<496	1250	496	04/26/24 17:29	v1
2-Propanol	ug/kg	<1590	5000	1590	04/26/24 17:29	v2
Acetone	ug/kg	<304	1250	304	04/26/24 17:29	v1
Benzene	ug/kg	<11.9	20.0	11.9	04/26/24 17:29	
Bromodichloromethane	ug/kg	<11.9	50.0	11.9	04/26/24 17:29	
Bromoform	ug/kg	<220	250	220	04/26/24 17:29	
Chlorobenzene	ug/kg	<6.0	50.0	6.0	04/26/24 17:29	
Chloroform	ug/kg	<35.8	250	35.8	04/26/24 17:29	
Chloromethane	ug/kg	<19.0	50.0	19.0	04/26/24 17:29	
Dibromochloromethane	ug/kg	<171	250	171	04/26/24 17:29	
Dichlorofluoromethane	ug/kg	<14.1	50.0	14.1	04/26/24 17:29	
m&p-Xylene	ug/kg	<21.1	100	21.1	04/26/24 17:29	
Methyl-tert-butyl ether	ug/kg	<14.7	50.0	14.7	04/26/24 17:29	
Methylene Chloride	ug/kg	<13.9	50.0	13.9	04/26/24 17:29	
Tetrachloroethene	ug/kg	<19.4	50.0	19.4	04/26/24 17:29	
Toluene	ug/kg	<12.6	50.0	12.6	04/26/24 17:29	
trans-1,2-Dichloroethene	ug/kg	<10.9	50.0	10.9	04/26/24 17:29	
Trichloroethene	ug/kg	<18.7	50.0	18.7	04/26/24 17:29	
Trichlorofluoromethane	ug/kg	<14.5	50.0	14.5	04/26/24 17:29	
1,2-Dichlorobenzene-d4 (S)	%	117	60-140		04/26/24 17:29	
4-Bromofluorobenzene (S)	%	110	66-143		04/26/24 17:29	
Toluene-d8 (S)	%	113	60-140		04/26/24 17:29	

LABORATORY CONTROL SAMPLE: 2707097

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	1680	67	60-140	
1,1,2-Trichlorotrifluoroethane	ug/kg	2500	1910	76	60-140	v1
1,1-Dichloroethene	ug/kg	2500	1680	67	62.9-142	
1,2-Dichloroethane	ug/kg	2500	1950	78	51.5-138	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

LABORATORY CONTROL SAMPLE: 2707097

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	2500	1790	72	60-140	
Bromodichloromethane	ug/kg	2500	1630	65	60-140	
Bromoform	ug/kg	2500	2160	86	60-140	
Chlorobenzene	ug/kg	2500	2160	86	85.8-121	
Chloroform	ug/kg	2500	1770	71	78.4-117	L2
Chloromethane	ug/kg	2500	1550	62	60-140	
Dibromochloromethane	ug/kg	2500	2210	89	60-140	
m&p-Xylene	ug/kg	5000	4150	83	60-140	
Methyl-tert-butyl ether	ug/kg	2500	1760	70	60-140	
Methylene Chloride	ug/kg	2500	1900	76	60-140	
Tetrachloroethene	ug/kg	2500	2090	84	76.3-149	
Toluene	ug/kg	2500	2110	84	60-140	
trans-1,2-Dichloroethene	ug/kg	2500	1780	71	60.9-136	
Trichloroethene	ug/kg	2500	2080	83	79.8-128	
Trichlorofluoromethane	ug/kg	2500	1830	73	49-141	
1,2-Dichlorobenzene-d4 (S)	%			99	60-140	
4-Bromofluorobenzene (S)	%			95	66-143	
Toluene-d8 (S)	%			89	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2707098 2707099

Parameter	Units	40277236067 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/kg	<10.0	785	878	700	824	89	94	60-140	16	50	
1,1,2-Trichlorotrifluoroethane	ug/kg	<12.7	785	878	713	829	91	95	60-140	15	50	v1
1,1-Dichloroethene	ug/kg	<13.0	785	878	671	784	86	89	62.9-142	15	50	
1,2-Dichloroethane	ug/kg	<9.0	785	878	769	884	98	101	51.5-138	14	50	
Benzene	ug/kg	<9.3	785	878	766	856	98	97	60-140	11	50	
Bromodichloromethane	ug/kg	<9.3	785	878	676	764	86	87	60-140	12	50	
Bromoform	ug/kg	<172	785	878	624	693	80	79	60-140	10	50	
Chlorobenzene	ug/kg	<4.7	785	878	820	919	104	105	85.8-121	11	50	
Chloroform	ug/kg	<28.0	785	878	781	883	100	101	78.4-117	12	50	
Chloromethane	ug/kg	<14.9	785	878	619	741	79	84	60-140	18	50	
Dibromochloromethane	ug/kg	<134	785	878	705	821	90	94	60-140	15	50	
m&p-Xylene	ug/kg	<16.5	1570	1760	1620	1840	103	105	60-140	13	50	
Methyl-tert-butyl ether	ug/kg	<11.5	785	878	631	719	80	82	60-140	13	50	
Methylene Chloride	ug/kg	15.6J	785	878	762	909	95	102	60-140	18	50	
Tetrachloroethene	ug/kg	<15.2	785	878	908	967	116	110	76.3-149	6	50	
Toluene	ug/kg	<9.9	785	878	797	884	102	101	60-140	10	50	
trans-1,2-Dichloroethene	ug/kg	<8.5	785	878	722	855	92	97	60.9-136	17	50	
Trichloroethene	ug/kg	<14.6	785	878	1060	1050	136	119	79.8-128	2	50	M1
Trichlorofluoromethane	ug/kg	<11.3	785	878	713	851	91	97	21-141	18	28	
1,2-Dichlorobenzene-d4 (S)	%						107	110	60-140			
4-Bromofluorobenzene (S)	%						102	103	66-143			

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2707098 2707099

Parameter	Units	40277236067 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Toluene-d8 (S)	%						103	107	60-140			

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

QC Batch: 472669
QC Batch Method: EPA 3546
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Med Level MAE
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40277236055, 40277236056, 40277236057, 40277236058, 40277236059, 40277236060, 40277236061, 40277236062, 40277236063, 40277236064, 40277236065, 40277236066, 40277236068, 40277236082

METHOD BLANK: 2707100 Matrix: Solid
Associated Lab Samples: 40277236055, 40277236056, 40277236057, 40277236058, 40277236059, 40277236060, 40277236061, 40277236062, 40277236063, 40277236064, 40277236065, 40277236066, 40277236068, 40277236082

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/kg	<12.8	50.0	12.8	04/29/24 11:19	
1,1,2-Trichlorotrifluoroethane	ug/kg	<16.3	50.0	16.3	04/29/24 11:19	
1,1-Dichloroethene	ug/kg	<16.6	50.0	16.6	04/29/24 11:19	
1,2-Dichloroethane	ug/kg	<11.5	50.0	11.5	04/29/24 11:19	
2-Butanone (MEK)	ug/kg	<158	1250	158	04/29/24 11:19	
2-Hexanone	ug/kg	<496	1250	496	04/29/24 11:19	
2-Propanol	ug/kg	<1590	5000	1590	04/29/24 11:19	
Acetone	ug/kg	<304	1250	304	04/29/24 11:19	v1
Benzene	ug/kg	<11.9	20.0	11.9	04/29/24 11:19	
Bromodichloromethane	ug/kg	<11.9	50.0	11.9	04/29/24 11:19	
Bromoform	ug/kg	<220	250	220	04/29/24 11:19	
Chlorobenzene	ug/kg	<6.0	50.0	6.0	04/29/24 11:19	
Chloroform	ug/kg	<35.8	250	35.8	04/29/24 11:19	
Chloromethane	ug/kg	<19.0	50.0	19.0	04/29/24 11:19	
Dibromochloromethane	ug/kg	<171	250	171	04/29/24 11:19	
Dichlorofluoromethane	ug/kg	<14.1	50.0	14.1	04/29/24 11:19	
m&p-Xylene	ug/kg	<21.1	100	21.1	04/29/24 11:19	
Methyl-tert-butyl ether	ug/kg	<14.7	50.0	14.7	04/29/24 11:19	
Methylene Chloride	ug/kg	<13.9	50.0	13.9	04/29/24 11:19	
Tetrachloroethene	ug/kg	<19.4	50.0	19.4	04/29/24 11:19	
Toluene	ug/kg	<12.6	50.0	12.6	04/29/24 11:19	
trans-1,2-Dichloroethene	ug/kg	<10.9	50.0	10.9	04/29/24 11:19	
Trichloroethene	ug/kg	<18.7	50.0	18.7	04/29/24 11:19	
Trichlorofluoromethane	ug/kg	<14.5	50.0	14.5	04/29/24 11:19	
1,2-Dichlorobenzene-d4 (S)	%	114	60-140		04/29/24 11:19	
4-Bromofluorobenzene (S)	%	109	66-143		04/29/24 11:19	
Toluene-d8 (S)	%	102	60-140		04/29/24 11:19	

LABORATORY CONTROL SAMPLE: 2707101

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2110	85	60-140	
1,1,2-Trichlorotrifluoroethane	ug/kg	2500	2190	88	60-140	
1,1-Dichloroethene	ug/kg	2500	2120	85	62.9-142	
1,2-Dichloroethane	ug/kg	2500	2310	92	51.5-138	
Benzene	ug/kg	2500	2230	89	60-140	
Bromodichloromethane	ug/kg	2500	2150	86	60-140	

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(920)469-2436

QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

LABORATORY CONTROL SAMPLE: 2707101

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromoform	ug/kg	2500	2260	90	60-140	
Chlorobenzene	ug/kg	2500	2420	97	85.8-121	
Chloroform	ug/kg	2500	2270	91	78.4-117	
Chloromethane	ug/kg	2500	2080	83	60-140	
Dibromochloromethane	ug/kg	2500	2510	100	60-140	
m&p-Xylene	ug/kg	5000	4720	94	60-140	
Methyl-tert-butyl ether	ug/kg	2500	1990	80	60-140	
Methylene Chloride	ug/kg	2500	2310	92	60-140	
Tetrachloroethene	ug/kg	2500	2410	96	76.3-149	
Toluene	ug/kg	2500	2380	95	60-140	
trans-1,2-Dichloroethene	ug/kg	2500	2150	86	60.9-136	
Trichloroethene	ug/kg	2500	2610	104	79.8-128	
Trichlorofluoromethane	ug/kg	2500	2120	85	49-141	
1,2-Dichlorobenzene-d4 (S)	%			108	60-140	
4-Bromofluorobenzene (S)	%			106	66-143	
Toluene-d8 (S)	%			99	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2707102 2707103

Parameter	Units	40277236082 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/kg	<10.3	727	868	557	707	77	81	60-140	24	50	
1,1,2-Trichlorotrifluoroethane	ug/kg	<13.1	727	868	564	708	78	82	60-140	23	50	
1,1-Dichloroethene	ug/kg	<13.3	727	868	551	656	76	76	62.9-142	17	50	
1,2-Dichloroethane	ug/kg	<9.2	727	868	625	814	86	94	51.5-138	26	50	
Benzene	ug/kg	<9.6	727	868	610	743	84	86	60-140	20	50	
Bromodichloromethane	ug/kg	<9.6	727	868	549	694	76	80	60-140	23	50	
Bromoform	ug/kg	<177	727	868	567	669	78	77	60-140	16	50	
Chlorobenzene	ug/kg	<4.8	727	868	699	859	96	99	85.8-121	21	50	
Chloroform	ug/kg	<28.8	727	868	636	775	87	89	78.4-117	20	50	
Chloromethane	ug/kg	<15.3	727	868	524	605	72	70	60-140	14	50	
Dibromochloromethane	ug/kg	<137	727	868	661	770	91	89	60-140	15	50	
m&p-Xylene	ug/kg	<17.0	1450	1740	1340	1700	92	98	60-140	23	50	
Methyl-tert-butyl ether	ug/kg	<11.8	727	868	538	659	74	76	60-140	20	50	
Methylene Chloride	ug/kg	<11.2	727	868	636	780	88	90	60-140	20	50	
Tetrachloroethene	ug/kg	<15.6	727	868	732	829	101	95	76.3-149	12	50	
Toluene	ug/kg	<10.1	727	868	648	805	89	93	60-140	22	50	
trans-1,2-Dichloroethene	ug/kg	<8.8	727	868	600	746	82	86	60.9-136	22	50	
Trichloroethene	ug/kg	<15.0	727	868	730	890	100	103	79.8-128	20	50	
Trichlorofluoromethane	ug/kg	<11.7	727	868	576	655	79	75	21-141	13	28	
1,2-Dichlorobenzene-d4 (S)	%						102	102	60-140			
4-Bromofluorobenzene (S)	%						95	99	66-143			
Toluene-d8 (S)	%						92	95	60-140			

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(920)469-2436

QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

QC Batch: 472812
QC Batch Method: EPA 3546
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Med Level MAE
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40277236069, 40277236070, 40277236071, 40277236072, 40277236073, 40277236074, 40277236075, 40277236076, 40277236077, 40277236078, 40277236079, 40277236080, 40277236081, 40277236083, 40277236084

METHOD BLANK: 2707774
Matrix: Solid
Associated Lab Samples: 40277236069, 40277236070, 40277236071, 40277236072, 40277236073, 40277236074, 40277236075, 40277236076, 40277236077, 40277236078, 40277236079, 40277236080, 40277236081, 40277236083, 40277236084

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/kg	<12.8	50.0	12.8	04/29/24 19:20	
1,1,2-Trichlorotrifluoroethane	ug/kg	<16.3	50.0	16.3	04/29/24 19:20	
1,1-Dichloroethene	ug/kg	<16.6	50.0	16.6	04/29/24 19:20	
1,2-Dichloroethane	ug/kg	<11.5	50.0	11.5	04/29/24 19:20	
2-Butanone (MEK)	ug/kg	<158	1250	158	04/29/24 19:20	v1
2-Hexanone	ug/kg	<496	1250	496	04/29/24 19:20	v1
2-Propanol	ug/kg	<1590	5000	1590	04/29/24 19:20	
Acetone	ug/kg	<304	1250	304	04/29/24 19:20	v1
Benzene	ug/kg	<11.9	20.0	11.9	04/29/24 19:20	
Bromodichloromethane	ug/kg	<11.9	50.0	11.9	04/29/24 19:20	
Bromoform	ug/kg	<220	250	220	04/29/24 19:20	
Chlorobenzene	ug/kg	<6.0	50.0	6.0	04/29/24 19:20	
Chloroform	ug/kg	<35.8	250	35.8	04/29/24 19:20	
Chloromethane	ug/kg	<19.0	50.0	19.0	04/29/24 19:20	
Dibromochloromethane	ug/kg	<171	250	171	04/29/24 19:20	
Dichlorofluoromethane	ug/kg	<14.1	50.0	14.1	04/29/24 19:20	
m&p-Xylene	ug/kg	<21.1	100	21.1	04/29/24 19:20	
Methyl-tert-butyl ether	ug/kg	<14.7	50.0	14.7	04/29/24 19:20	
Methylene Chloride	ug/kg	<13.9	50.0	13.9	04/29/24 19:20	
Tetrachloroethene	ug/kg	<19.4	50.0	19.4	04/29/24 19:20	
Toluene	ug/kg	<12.6	50.0	12.6	04/29/24 19:20	
trans-1,2-Dichloroethene	ug/kg	<10.9	50.0	10.9	04/29/24 19:20	
Trichloroethene	ug/kg	<18.7	50.0	18.7	04/29/24 19:20	
Trichlorofluoromethane	ug/kg	<14.5	50.0	14.5	04/29/24 19:20	
1,2-Dichlorobenzene-d4 (S)	%	121	60-140		04/29/24 19:20	
4-Bromofluorobenzene (S)	%	114	66-143		04/29/24 19:20	
Toluene-d8 (S)	%	105	60-140		04/29/24 19:20	

LABORATORY CONTROL SAMPLE & LCSD: 2707775 2707776

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2170	2190	87	88	60-140	1	30	
1,1,2-Trichlorotrifluoroethane	ug/kg	2500	2090	1970	84	79	60-140	6	30	
1,1-Dichloroethene	ug/kg	2500	2060	2070	83	83	62.9-142	0	30	
1,2-Dichloroethane	ug/kg	2500	2410	2440	96	98	51.5-138	1	30	

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(920)469-2436

QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

LABORATORY CONTROL SAMPLE & LCSD: 2707775 2707776

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Benzene	ug/kg	2500	2330	2400	93	96	60-140	3	30	
Bromodichloromethane	ug/kg	2500	2280	2330	91	93	60-140	2	30	
Bromoform	ug/kg	2500	2400	2390	96	96	60-140	0	30	
Chlorobenzene	ug/kg	2500	2560	2650	102	106	85.8-121	4	30	
Chloroform	ug/kg	2500	2380	2450	95	98	78.4-117	3	30	
Chloromethane	ug/kg	2500	1810	1780	72	71	60-140	2	30	
Dibromochloromethane	ug/kg	2500	2510	2580	101	103	60-140	2	30	
m&p-Xylene	ug/kg	5000	5160	5020	103	100	60-140	3	30	
Methyl-tert-butyl ether	ug/kg	2500	2160	2180	86	87	60-140	1	30	
Methylene Chloride	ug/kg	2500	2480	2450	99	98	60-140	1	30	
Tetrachloroethene	ug/kg	2500	2650	2570	106	103	76.3-149	3	30	
Toluene	ug/kg	2500	2530	2530	101	101	60-140	0	30	
trans-1,2-Dichloroethene	ug/kg	2500	2210	2270	88	91	60.9-136	3	30	
Trichloroethene	ug/kg	2500	2630	2530	105	101	79.8-128	4	30	
Trichlorofluoromethane	ug/kg	2500	2040	1940	81	78	49-141	5	20	
1,2-Dichlorobenzene-d4 (S)	%				115	113	60-140			
4-Bromofluorobenzene (S)	%				112	107	66-143			
Toluene-d8 (S)	%				105	105	60-140			

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QUALIFIERS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.
v1	The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.
v2	The continuing calibration verification was below the method acceptance limit. The analyte was not detected in the associated samples and the sensitivity of the instrument was verified with a reporting limit check standard.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40277236001	**MB-01_20240416**	EPA 3546	472531	EPA 8260	472577
40277236002	**EB-01_20240417**	EPA 3546	472531	EPA 8260	472577
40277236003	**EB-02_20240419**	EPA 3546	472531	EPA 8260	472577
40277236004	**EB-03_20240420**	EPA 3546	472531	EPA 8260	472577
40277236005	**EB-04_20240421**	EPA 3546	472531	EPA 8260	472577
40277236006	**EB-05_20240422**	EPA 3546	472531	EPA 8260	472577
40277236007	**300-002-GSV-89.4-VOC_20240417**	EPA 3546	472531	EPA 8260	472577
40277236008	**300-002-GSV-90.17-VOC_20240417**	EPA 3546	472531	EPA 8260	472577
40277236009	**300-002-GSV-92.65-VOC_20240417**	EPA 3546	472531	EPA 8260	472577
40277236010	**300-002-GSV-96.8-VOC_20240417**	EPA 3546	472531	EPA 8260	472577
40277236011	**300-002-GSV-100.8-VOC_20240417**	EPA 3546	472531	EPA 8260	472577
40277236012	**300-002-GSV-102.1-VOC_20240417**	EPA 3546	472531	EPA 8260	472577
40277236013	**300-002-GSV-104.6-VOC_20240418**	EPA 3546	472531	EPA 8260	472577
40277236014	**300-002-GSV-104.85-VOC_240418**	EPA 3546	472531	EPA 8260	472577
40277236015	**300-002-GSV-106.5-VOC_20240418**	EPA 3546	472531	EPA 8260	472577
40277236016	**300-002-GSV-107.3-VOC_20240418**	EPA 3546	472531	EPA 8260	472577
40277236017	**300-002-GSV-112.35-VOC_240418**	EPA 3546	472531	EPA 8260	472577
40277236018	**300-002-GSV-113.75-VOC_240419**	EPA 3546	472531	EPA 8260	472577
40277236019	**300-002-GSV-114-VOC_20240419**	EPA 3546	472531	EPA 8260	472577
40277236020	**300-002-GSV-118.75-VOC_240419**	EPA 3546	472541	EPA 8260	472599
40277236021	**300-002-GSV-120.25-VOC_240419**	EPA 3546	472541	EPA 8260	472599
40277236022	**300-002-GSV-124.7-VOC_20240419**	EPA 3546	472541	EPA 8260	472599
40277236023	**300-002-GSV-125.2-VOC_20240419**	EPA 3546	472541	EPA 8260	472599
40277236024	**300-002-GSV-125.5-VOC_20240419**	EPA 3546	472541	EPA 8260	472599
40277236025	**300-002-GSV-130.3-VOC_20240419**	EPA 3546	472531	EPA 8260	472577
40277236026	**300-002-GSV-130.3-VOC-DUP_0419**	EPA 3546	472541	EPA 8260	472599
40277236027	**300-002-GSV-130.43-VOC_240419**	EPA 3546	472541	EPA 8260	472599
40277236028	**300-002-GSV-134.1-VOC_240419**	EPA 3546	472541	EPA 8260	472599
40277236029	**300-002-GSV-136.5-VOC_240419**	EPA 3546	472541	EPA 8260	472599
40277236030	**300-002-GSV-140.7-VOC_240419**	EPA 3546	472541	EPA 8260	472599
40277236031	**TB-01_20240422**	EPA 3546	472541	EPA 8260	472599
40277236032	**300-002-GSV-141.5-VOC_20240419**	EPA 3546	472541	EPA 8260	472599
40277236033	**300-002-GSV-144.37-VOC_240419**	EPA 3546	472541	EPA 8260	472599
40277236034	**300-002-GSV-145.8-VOC_20240419**	EPA 3546	472541	EPA 8260	472599
40277236035	**300-002-GSV-146.3-VOC_20240419**	EPA 3546	472541	EPA 8260	472599
40277236036	**300-002-GSV-150.35-VOC_240420**	EPA 3546	472541	EPA 8260	472599

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40277236037	300-002-GSV-152.3-VOC_20240420	EPA 3546	472541	EPA 8260	472599
40277236038	300-002-GSV-154.2-VOC_20240420	EPA 3546	472541	EPA 8260	472599
40277236039	300-002-GSV-154.5-VOC_20240420	EPA 3546	472541	EPA 8260	472599
40277236040	300-002-GSV-156.25-VOC_240420	EPA 3546	472668	EPA 8260	472728
40277236041	300-002-GSV-161.45-VOC_240420	EPA 3546	472668	EPA 8260	472728
40277236042	300-002-GSV-164.9-VOC_20240420	EPA 3546	472668	EPA 8260	472728
40277236043	300-002-GSV-165.8-VOC_20240420	EPA 3546	472668	EPA 8260	472728
40277236044	300-002-GSV-167-VOC_20240420	EPA 3546	472668	EPA 8260	472728
40277236045	300-002-GSV-170.6-VOC_20240420	EPA 3546	472668	EPA 8260	472728
40277236046	300-002-GSV-171-VOC_20240420	EPA 3546	472541	EPA 8260	472599
40277236047	300-002-GSV-171-VOC-DUP_240420	EPA 3546	472668	EPA 8260	472728
40277236048	300-002-GSV-174.8-VOC_20240420	EPA 3546	472668	EPA 8260	472728
40277236049	300-002-GSV-176.4-VOC_20240420	EPA 3546	472668	EPA 8260	472728
40277236050	300-002-GSV-180.2-VOC_20240420	EPA 3546	472668	EPA 8260	472728
40277236051	300-002-GSV-182.5-VOC_20240420	EPA 3546	472668	EPA 8260	472728
40277236052	300-002-GSV-183.1-VOC_20240420	EPA 3546	472668	EPA 8260	472728
40277236053	300-002-GSV-187.5-VOC_20240420	EPA 3546	472668	EPA 8260	472728
40277236054	300-002-GSV-188.85-VOC_240420	EPA 3546	472668	EPA 8260	472728
40277236055	300-002-GSV-192.8-VOC_20240420	EPA 3546	472669	EPA 8260	472729
40277236056	300-002-GSV-194.2-VOC_20240421	EPA 3546	472669	EPA 8260	472729
40277236057	300-002-GSV-196.7-VOC_20240421	EPA 3546	472669	EPA 8260	472729
40277236058	300-002-GSV-197.1-VOC_20240421	EPA 3546	472669	EPA 8260	472729
40277236059	300-002-GSV-200-VOC_20240421	EPA 3546	472669	EPA 8260	472729
40277236060	300-002-GSV-202-VOC_20240421	EPA 3546	472669	EPA 8260	472729
40277236061	300-002-GSV-205.4-VOC_20240421	EPA 3546	472669	EPA 8260	472729
40277236062	TB-02_20240422	EPA 3546	472669	EPA 8260	472729
40277236063	300-002-GSV-207.8-VOC_20240421	EPA 3546	472669	EPA 8260	472729
40277236064	300-002-GSV-210.2-VOC_20240421	EPA 3546	472669	EPA 8260	472729
40277236065	300-002-GSV-214.95-VOC_240421	EPA 3546	472669	EPA 8260	472729
40277236066	300-002-GSV-216.35-VOC_240421	EPA 3546	472669	EPA 8260	472729
40277236067	300-002-GSV-219.7-VOC_20240421	EPA 3546	472668	EPA 8260	472728

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40277236

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40277236068	**300-002-GSV-219.7-VOC-DUP_0421**	EPA 3546	472669	EPA 8260	472729
40277236069	**300-002-GSV-226.2-VOC_20240421**	EPA 3546	472812	EPA 8260	472838
40277236070	**300-002-GSV-229.6-VOC_20240422**	EPA 3546	472812	EPA 8260	472838
40277236071	**300-002-GSV-229.7-VOC_20240422**	EPA 3546	472812	EPA 8260	472838
40277236072	**300-002-GSV-230.45-VOC_240422**	EPA 3546	472812	EPA 8260	472838
40277236073	**300-002-GSV-233.6-VOC_20240422**	EPA 3546	472812	EPA 8260	472838
40277236074	**300-002-GSV-236.4-VOC_20240422**	EPA 3546	472812	EPA 8260	472838
40277236075	**300-002-GSV-236.6-VOC_20240422**	EPA 3546	472812	EPA 8260	472838
40277236076	**300-002-GSV-238.1-VOC_20240422**	EPA 3546	472812	EPA 8260	472838
40277236077	**300-002-GSV-241.9-VOC_20240422**	EPA 3546	472812	EPA 8260	472838
40277236078	**300-002-GSV-242.05-VOC_240422**	EPA 3546	472812	EPA 8260	472838
40277236079	**300-002-GSV-243.55-VOC_240422**	EPA 3546	472812	EPA 8260	472838
40277236080	**300-002-GSV-245.15-VOC_240422**	EPA 3546	472812	EPA 8260	472838
40277236081	**300-002-GSV-247-VOC_20240422**	EPA 3546	472812	EPA 8260	472838
40277236082	**300-002-GSV-248.65-VOC_240422**	EPA 3546	472669	EPA 8260	472729
40277236083	**300-002-GSV-248.65-VOC-DUP_422**	EPA 3546	472812	EPA 8260	472838
40277236084	**TB-03_20240422**	EPA 3546	472812	EPA 8260	472838

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SANBORN HEAD

CHAIN OF CUSTODY FORM

Client Name/Address:	Project ID:	Analyses Required
Sanborn Head & Associates 6 Bedford Farms Drive, Suite 201 Bedford, NH 03110	6119.00.020	
Project Manager:	**Phone Number:**	
Jessica Bulova	+1 802 279 7698	
Sampler:	**Fax Number:**	
P. Pryor		

Lab ID	Sample No.	Sample Description	Sample Matrix	Rock Mass (g)	Container Type	# of Containers	Sample Date/Time	Preservative	VOCs ECD			Comments
001	VOC-0001	MB-01_20240416	MeOH	NA	VOA	1	4/16/2024 12:35	MeOH	X			
002	VOC-0002	EB-01_20240417	MeOH	NA	VOA	1	4/17/2024 12:17	MeOH	X			
003	VOC-0003	EB-02_20240419	MeOH	NA	VOA	1	4/19/2024 13:32	MeOH	X			
004	VOC-0004	EB-03_20240420	MeOH	NA	VOA	1	4/20/2024 13:59	MeOH	X			
005	VOC-0005	EB-04_20240421	MeOH	NA	VOA	1	4/21/2024 10:41	MeOH	X			
006	VOC-0006	EB-05_20240422	MeOH	NA	VOA	1	4/22/24 13:49	MeOH	X			
007	VOC-0008	300-002-GSV-89.4-VOC_20240417	Rock	29.92	VOA	1	4/17/24 13:01	MeOH	X			
008	VOC-0009	300-002-GSV-90.17-VOC_20240417	Rock	29.07	VOA	1	4/17/24 13:01	MeOH	X			
009	VOC-0010	300-002-GSV-92.65-VOC_20240417	Rock	30.98	VOA	1	4/17/24 13:01	MeOH	X			
010	VOC-0011	300-002-GSV-96.8-VOC_20240417	Rock	41.30	VOA	1	4/17/24 14:56	MeOH	X			
011	VOC-0012	300-002-GSV-100.8-VOC_20240417	Rock	30.16	VOA	1	4/17/24 15:33	MeOH	X			
012	VOC-0013	300-002-GSV-102.1-VOC_20240417	Rock	31.30	VOA	1	4/17/24 15:34	MeOH	X			
013	VOC-0014	300-002-GSV-104.6-VOC_20240418	Rock	26.54	VOA	1	4/18/24 9:25	MeOH	X			
014	VOC-0015	300-002-GSV-104.85-VOC_20240418	Rock	38.01	VOA	1	4/18/24 9:26	MeOH	X			
015	VOC-0016	300-002-GSV-106.5-VOC_20240418	Rock	25.67	VOA	1	4/18/24 9:58	MeOH	X			
016	VOC-0017	300-002-GSV-107.3-VOC_20240418	Rock	29.32	VOA	1	4/18/24 9:59	MeOH	X			

Relinquished by: Dan Pace	Date: 4/22/24	Time: 1644	Received by:	Date:	Time:
Relinquished by: Fedex	Date: 4/23/24	Time: 0930	Received by:	Date: 4/23/24	Time: 0930
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

SANBORN HEAD						CHAIN OF CUSTODY FORM						
Client Name/Address:						**Project ID:**			**Analyses Required**			
Sanborn Head & Associates 6 Bedford Farms Drive, Suite 201 Bedford, NH 03110						6119.00.020						
Project Manager:						**Phone Number:**						
Jessica Bulova						+1 802 279 7698						
Sampler:						**Fax Number:**						
P. Pryor												
Lab ID	**Sample No.**	**Sample Description**	**Sample Matrix**	**Rock Mass (g)**	**Container Type**	**# of Containers**	**Sample Date/Time**	**Preservative**	**VOCs ECD**			**Comments**
017	VOC-0018	300-002-GSV-112.35-VOC_20240418	Rock	27.92	VOA	1	4/18/24 13:45	MeOH	X			
018	VOC-0019	300-002-GSV-113.75-VOC_20240419	Rock	30.28	VOA	1	4/19/24 11:43	MeOH	X			
019	VOC-0020	300-002-GSV-114-VOC_20240419	Rock	29.35	VOA	1	4/19/24 11:44	MeOH	X			
020	VOC-0021	300-002-GSV-118.75-VOC_20240419	Rock	31.58	VOA	1	4/19/24 12:25	MeOH	X			
021	VOC-0022	300-002-GSV-120.25-VOC_20240419	Rock	31.91	VOA	1	4/19/24 12:26	MeOH	X			
022	VOC-0023	300-002-GSV-124.7-VOC_20240419	Rock	25.59	VOA	1	4/19/24 13:05	MeOH	X			
023	VOC-0024	300-002-GSV-125.2-VOC_20240419	Rock	30.73	VOA	1	4/19/24 13:06	MeOH	X			
024	VOC-0025	300-002-GSV-125.5-VOC_20240419	Rock	29.31	VOA	1	4/19/24 13:07	MeOH	X			
025	VOC-0026	300-002-GSV-130.3-VOC_20240419	Rock	23.70	VOA	1	4/19/24 13:42	MeOH	X			
026	VOC-0027	300-002-GSV-130.3-VOC-DUP_20240419	Rock	29.49	VOA	1	4/19/24 13:42	MeOH	X			
025	VOC-0028	300-002-GSV-130.3-VOC-MS_20240419	Rock	22.84	VOA	1	4/19/24 13:42	MeOH	X			
025	VOC-0029	300-002-GSV-130.3-VOC-MSD_20240419	Rock	29.71	VOA	1	4/19/24 13:42	MeOH	X			
027	VOC-0030	300-002-GSV-130.43-VOC_20240419	Rock	29.48	VOA	1	4/19/24 13:43	MeOH	X			
028	VOC-0031	300-002-GSV-134.1-VOC_20240419	Rock	30.21	VOA	1	4/19/24 15:02	MeOH	X			
029	VOC-0032	300-002-GSV-136.5-VOC_20240419	Rock	33.98	VOA	1	4/19/24 15:03	MeOH	X			
030	VOC-0033	300-002-GSV-140.7-VOC_20240419	Rock	34.68	VOA	1	4/19/24 15:35	MeOH	X			
031	VOC-0092	TB-01_20240422	MeOH	NA	VOA	1	4/22/24 15:30	MeOH	X			

Relinquished by: Dan Rees	Date: 4/22/24	Time: 1644	Received by:	Date:	Time:
Relinquished by: Fedex	Date: 4/23/24	Time: 0930	Received by: Sean Rees	Date: 4/23/24	Time: 0930
Relinquished by	Date:	Time:	Received by:	Date:	Time

SANBORN HEAD

CHAIN OF CUSTODY FORM

Client Name/Address:	Project ID:	Analyses Required
Sanborn Head & Associates 6 Bedford Farms Drive, Suite 201 Bedford, NH 03110	6119.00.020	
Project Manager:	**Phone Number:**	
Jessica Bulova	+1 802 279 7698	
Sampler:	**Fax Number:**	
P. Pryor		

Lab ID	Sample No.	Sample Description	Sample Matrix	Rock Mass (g)	Container Type	# of Containers	Sample Date/Time	Preservative	VOCs ECD			Comments
032	VOC-0034	300-002-GSV-141.5-VOC_20240419	Rock	28.29	VOA	1	4/19/24 15:36	MeOH	X			
033	VOC-0035	300-002-GSV-144.37-VOC_20240419	Rock	32.39	VOA	1	4/19/24 16:18	MeOH	X			
034	VOC-0036	300-002-GSV-145.8-VOC_20240419	Rock	29.93	VOA	1	4/19/24 16:19	MeOH	X			
035	VOC-0037	300-002-GSV-146.3-VOC_20240419	Rock	32.00	VOA	1	4/19/24 16:20	MeOH	X			
036	VOC-0038	300-002-GSV-150.35-VOC_20240420	Rock	26.95	VOA	1	4/20/24 9:52	MeOH	X			
037	VOC-0039	300-002-GSV-152.3-VOC_20240420	Rock	23.13	VOA	1	4/20/24 9:53	MeOH	X			
038	VOC-0040	300-002-GSV-154.2-VOC_20240420	Rock	26.41	VOA	1	4/20/24 10:30	MeOH	X			
039	VOC-0041	300-002-GSV-154.5-VOC_20240420	Rock	31.61	VOA	1	4/20/24 10:31	MeOH	X			
040	VOC-0042	300-002-GSV-156.25-VOC_20240420	Rock	27.22	VOA	1	4/20/24 10:32	MeOH	X			
041	VOC-0043	300-002-GSV-161.45-VOC_20240420	Rock	24.78	VOA	1	4/20/24 11:34	MeOH	X			
042	VOC-0044	300-002-GSV-164.9-VOC_20240420	Rock	23.38	VOA	1	4/20/24 12:47	MeOH	X			
043	VOC-0045	300-002-GSV-165.8-VOC_20240420	Rock	21.96	VOA	1	4/20/24 12:48	MeOH	X			
044	VOC-0046	300-002-GSV-167-VOC_20240420	Rock	26.93	VOA	1	4/20/24 12:49	MeOH	X			
045	VOC-0047	300-002-GSV-170.6-VOC_20240420	Rock	27.65	VOA	1	4/20/24 13:45	MeOH	X			
046	VOC-0048	300-002-GSV-171-VOC_20240420	Rock	28.40	VOA	1	4/20/24 13:46	MeOH	X			

Relinquished by:	Date: 4/22/24	Time: 1644	Received by:	Date:	Time:
Relinquished by: Felix	Date: 4/23/24	Time: 0930	Received by:	Date: 4/23/24	Time: 0930
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

SANBORN HEAD

CHAIN OF CUSTODY FORM

Client Name/Address:	Project ID:	Analyses Required
Sanborn Head & Associates 6 Bedford Farms Drive, Suite 201 Bedford, NH 03110	6119.00.020	
Project Manager:	**Phone Number:**	
Jessica Bulova	+1 802 279 7698	
Sampler:	**Fax Number:**	
P. Pryor		

Lab ID	Sample No.	Sample Description	Sample Matrix	Rock Mass (g)	Container Type	# of Containers	Sample Date/Time	Preservative	VOCs ECD			Comments
047	VOC-0049	300-002-GSV-171-VOC-DUP_20240420	Rock	28.35	VOA	1	4/20/24 13:46	MeOH	X			
046	VOC-0050	300-002-GSV-171-VOC-MS_20240420	Rock	29.00	VOA	1	4/20/24 13:46	MeOH	X			
046	VOC-0051	300-002-GSV-171-VOC-MSD_20240420	Rock	24.73	VOA	1	4/20/24 13:46	MeOH	X			
046	VOC-0052	300-002-GSV-174.8-VOC_20240420	Rock	24.61	VOA	1	4/20/24 14:17	MeOH	X			
049	VOC-0053	300-002-GSV-176.4-VOC_20240420	Rock	26.02	VOA	1	4/20/24 14:18	MeOH	X			
050	VOC-0054	300-002-GSV-180.2-VOC_20240420	Rock	32.19	VOA	1	4/20/24 14:52	MeOH	X			
051	VOC-0055	300-002-GSV-182.5-VOC_20240420	Rock	32.58	VOA	1	4/20/24 14:53	MeOH	X			
052	VOC-0056	300-002-GSV-183.1-VOC_20240420	Rock	26.47	VOA	1	4/20/24 15:30	MeOH	X			
053	VOC-0057	300-002-GSV-187.5-VOC_20240420	Rock	35.58	VOA	1	4/20/24 15:31	MeOH	X			
054	VOC-0058	300-002-GSV-188.85-VOC_20240420	Rock	30.09	VOA	1	4/20/24 16:17	MeOH	X			
055	VOC-0059	300-002-GSV-192.8-VOC_20240420	Rock	35.13	VOA	1	4/20/24 16:18	MeOH	X			
056	VOC-0060	300-002-GSV-194.2-VOC_20240421	Rock	30.24	VOA	1	4/21/24 8:55	MeOH	X			
057	VOC-0061	300-002-GSV-196.7-VOC_20240421	Rock	27.94	VOA	1	4/21/24 8:56	MeOH	X			
058	VOC-0062	300-002-GSV-197.1-VOC_20240421	Rock	28.87	VOA	1	4/21/24 8:57	MeOH	X			
059	VOC-0063	300-002-GSV-200-VOC_20240421	Rock	27.29	VOA	1	4/21/24 9:30	MeOH	X			
060	VOC-0064	300-002-GSV-202-VOC_20240421	Rock	27.93	VOA	1	4/21/24 9:31	MeOH	X			
061	VOC-0065	300-002-GSV-205.4-VOC_20240421	Rock	26.62	VOA	1	4/21/24 10:30	MeOH	X			
062	VOC-0093	TB-02_20240422	MeOH	NA	VOA	1	4/22/24 15:30	MeOH	X			

Relinquished by: Dan Reese	Date: 4/22/24	Time: 1644	Received by:	Date:	Time:
Relinquished by: Feelon	Date: 4/23/24	Time: 0930	Received by:	Date: 4/23/24	Time: 0930
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

SANBORN HEAD

CHAIN OF CUSTODY FORM

Client Name/Address:
Sanborn Head & Associates
6 Bedford Farms Drive, Suite 201
Bedford, NH 03110

Project Manager:
Jessica Bulova

Sampler:
P. Pryor

Project ID:
6119.00.020

Phone Number:
+1 802 279 7698

Fax Number:

Lab ID	Sample No.	Sample Description	Sample Matrix	Rock Mass (g)	Container Type	# of Containers	Sample Date/Time	Preservative	Analyses Required: VOCs ECD			Comments
063	VOC-0066	300-002-GSV-207.8-VOC_20240421	Rock	26.85	VOA	1	4/21/24 10:31	MeOH	X			
064	VOC-0067	300-002-GSV-210.2-VOC_20240421	Rock	28.65	VOA	1	4/21/24 11:53	MeOH	X			
065	VOC-0068	300-002-GSV-214.95-VOC_20240421	Rock	34.15	VOA	1	4/21/24 13:42	MeOH	X			
066	VOC-0069	300-002-GSV-216.35-VOC_20240421	Rock	32.05	VOA	1	4/21/24 13:43	MeOH	X			
067	VOC-0071	300-002-GSV-219.7-VOC_20240421	Rock	25.58	VOA	1	4/21/24 15:46	MeOH	X			
068	VOC-0072	300-002-GSV-219.7-VOC-DUP_20240421	Rock	36.92	VOA	1	4/21/24 15:46	MeOH	X			
067	VOC-0073	300-002-GSV-219.7-VOC-MS_20240421	Rock	25.49	VOA	1	4/21/24 15:46	MeOH	X			
067	VOC-0074	300-002-GSV-219.7-VOC-MSD_20240421	Rock	22.79	VOA	1	4/21/24 15:46	MeOH	X			
069	VOC-0075	300-002-GSV-226.2-VOC_20240421	Rock	25.80	VOA	1	4/21/24 16:25	MeOH	X			
070	VOC-0076	300-002-GSV-229.6-VOC_20240422	Rock	32.93	VOA	1	4/22/24 9:55	MeOH	X			

Relinquished by:	Date: 4/22/24 Time: 1644	Received by:	Date: Time:
Relinquished by: Fedex	Date: 4/23/24 Time: 0930	Received by:	Date: 4/23/24 Time: 0930
Relinquished by:	Date: Time:	Received by:	Date: Time:

SANBORN HEAD

CHAIN OF CUSTODY FORM

Client Name/Address:	Project ID:	Analyses Required
Sanborn Head & Associates 6 Bedford Farms Drive, Suite 201 Bedford, NH 03110	6119.00.020	
Project Manager:	**Phone Number:**	
Jessica Bulova	+1 802 279 7698	
Sampler:	**Fax Number:**	
P. Pryor		

Lab ID	Sample No.	Sample Description	Sample Matrix	Rock Mass (g)	Container Type	# of Containers	Sample Date/Time	Preservative	VOCs ECD			Comments
071	VOC-0077	300-002-GSV-229.7-VOC_20240422	Rock	23.43	VOA	1	4/22/24 9:56	MeOH	X			
072	VOC-0078	300-002-GSV-230.45-VOC_20240422	Rock	26.49	VOA	1	4/22/24 9:57	MeOH	X			
073	VOC-0079	300-002-GSV-233.6-VOC_20240422	Rock	33.54	VOA	1	4/22/24 10:30	MeOH	X			
074	VOC-0080	300-002-GSV-236.4-VOC_20240422	Rock	30.32	VOA	1	4/22/24 10:31	MeOH	X			
075	VOC-0081	300-002-GSV-236.6-VOC_20240422	Rock	33.20	VOA	1	4/22/24 10:32	MeOH	X			
076	VOC-0082	300-002-GSV-238.1-VOC_20240422	Rock	30.24	VOA	1	4/22/24 11:11	MeOH	X			
077	VOC-0083	300-002-GSV-241.9-VOC_20240422	Rock	25.35	VOA	1	4/22/24 11:12	MeOH	X			
078	VOC-0084	300-002-GSV-242.05-VOC_20240422	Rock	37.65	VOA	1	4/22/24 11:13	MeOH	X			
079	VOC-0085	300-002-GSV-243.55-VOC_20240422	Rock	24.08	VOA	1	4/22/24 12:20	MeOH	X			
080	VOC-0086	300-002-GSV-245.15-VOC_20240422	Rock	24.59	VOA	1	4/22/24 12:21	MeOH	X			
081	VOC-0087	300-002-GSV-247-VOC_20240422	Rock	24.77	VOA	1	4/22/24 12:22	MeOH	X			
082	VOC-0088	300-002-GSV-248.65-VOC_20240422	Rock	24.89	VOA	1	4/22/24 13:36	MeOH	X			
083	VOC-0089	300-002-GSV-248.65-VOC-DUP_20240422	Rock	22.99	VOA	1	4/22/24 13:36	MeOH	X			
084	VOC-0090	300-002-GSV-248.65-VOC-MS_20240422	Rock	27.51	VOA	1	4/22/24 13:36	MeOH	X			
085	VOC-0091	300-002-GSV-248.65-VOC-MSD_20240422	Rock	23.04	VOA	1	4/22/24 13:36	MeOH	X			
086	VOC-0094	TB-03_20240422	MeOH	NA	VOA	1	4/22/24 15:30	MeOH	X			

Relinquished by: Dan Lee	Date: 4/22/24	Time: 1644	Received by:	Date:	Time:
Relinquished by: FedEx	Date: 4/23/24	Time: 0930	Received by: Sarah Moore	Date: 4/23/24	Time: 0930
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

Client Name: Sanborn

All containers needing preservation have been checked and noted below. Lab Lot# of pH paper

Sample Preservation Receipt Form

Project # 402772316

☐Yes ☐No ☒N/A

Lab Std #ID of preservation (if pH adjusted)

Pace Lab #	Glass							Plastic						Vials						Jars				General				VOA Vials (>6mm) *	Initial when completed: H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	Date/ Time: pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2							
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019																																	2.5 / 5
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Exceptions to preservation check VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other:

Headspace in VOA Vials (>6mm) ☐Yes ☐No ☒N/A *If yes look in headspace column

AG1U	1 liter amber glass
BG1U	1 liter clear glass
AG1H	1 liter amber glass HCL
AG4S	125 mL amber glass H2SO4
AG5U	100 mL amber glass unpres
AG2S	500 mL amber glass H2SO4
BG3U	250 mL clear glass unpres

BP1U	1 liter plastic unpres
BP3U	250 mL plastic unpres
BP3B	250 mL plastic NaOH
BP3N	250 mL plastic HNO3
BP3S	250 mL plastic H2SO4
BP2Z	500 mL plastic NaOH + Zn

VG9C	40 mL clear ascorbic w/ HCl
DG9T	40 mL amber Na Thio
VG9U	40 mL clear vial unpres
VG9H	40 mL clear vial HCL
VG9M	40 mL clear vial MeOH
VG9D	40 mL clear vial DI

JGFU	4 oz amber jar unpres
JG9U	9 oz amber jar unpres
WGFU	4 oz clear jar unpres
WPFU	4 oz plastic jar unpres
SP5T	120 mL plastic Na Thiosulfate
ZPLC	ziploc bag
GN 1	
GN 2	

Page 1 of 5

Client Name: Sanborn

Sample Preservation Receipt Form

Project #: 40277236

Pace Lab #	Glass							Plastic						Vials						Jars				General				VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2							
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Sample Preservation Receipt Form

Client Name: Sonbern Project #: 402772316

Pace Lab #	Glass							Plastic						Vials						Jars				General				VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2							
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Sample Preservation Receipt Form

Client Name: Sinhorn Project #: 40277236

Pace Lab #	Glass							Plastic						Vials						Jars				General				VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2							
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Sample Condition Upon Receipt Form (SCUR)

Project #:

WO# : 40277236

40277236

Client Name: Sanborn

Courier: ☐ CS Logistics ☑ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco
☐ Client ☐ Pace Other.

Tracking #: 2737 4027 4780

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Packing Material: ☑ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other

Thermometer Used SR - 139 **Type of Ice:** (Wet) Blue Dry None ☐ Meltwater Only

Cooler Temperature Uncorr 1.0 /Corr. 1.0

Temp Blank Present: ☐ yes ☑ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Person examining contents:
Date: 4/13/24 /Initials: SC

Labeled By Initials: MW

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☐Yes ☑No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No	5.
- DI VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time
Short Hold Time Analysis (<72hr):	☐Yes ☑No	6.
Rush Turn Around Time Requested:	☐Yes ☑No	7.
Sufficient Volume. For Analysis: ☑Yes ☐No MS/MSD: ☐Yes ☑No ☐N/A		8. Nodry weight volume 4/13/24 SC
Correct Containers Used: Correct Type: Pace Green Bay, Pace IR, (Non-Pace)	☑Yes ☐No	9.
Containers Intact:	☑Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC -Includes date/time/ID/Analysis Matrix SC	☐Yes ☑No ☐N/A	12. No dates or times 4/13/24 SC
Trip Blank Present.	☐Yes ☐No ☑N/A	13.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: Date/Time:

Comments/ Resolution:

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample login

Page 5 of 5

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

May 30, 2024

Jessica Bulova
Sanborn, Head & Associates
20 Foundry Street
Concord, NH 03301

RE: Project: 6119.00.020
Pace Project No.: 40278528

Dear Jessica Bulova:

Enclosed are the analytical results for sample(s) received by the laboratory on May 21, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Green Bay

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tod Noltemeyer

Tod Noltemeyer
tod.noltemeyer@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Jeff Austin, NASA
Goeff Giles, NASA-WSTF-Navarro

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: 6119.00.020
Pace Project No.: 40278528

Pace Analytical Services Green Bay
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
Texas Certification #: T104704529-21-8
Virginia VELAP Certification ID: 11873
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-21-00008
Federal Fish & Wildlife Permit #: 51774A

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: 6119.00.020
Pace Project No.: 40278528

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40278528001	300-001-GSV-76.6_20240514	Solid	05/14/24 13:05	05/21/24 08:55
40278528002	300-001-GSV-76.9_20240514	Solid	05/14/24 13:05	05/21/24 08:55
40278528003	300-001-GSV-77.55_20240514	Solid	05/14/24 13:52	05/21/24 08:55
40278528004	300-001-GSV-77.77_20240514	Solid	05/14/24 13:52	05/21/24 08:55
40278528005	300-001-GSV-96.1_20240514	Solid	05/14/24 16:30	05/21/24 08:55
40278528006	300-001-GSV-104.4_20240515	Solid	05/15/24 09:53	05/21/24 08:55
40278528007	300-001-GSV-106.5_20240515	Solid	05/15/24 09:55	05/21/24 08:55
40278528008	300-001-GSV-107.75_20240515	Solid	05/15/24 10:30	05/21/24 08:55
40278528009	300-001-GSV-108_20240515	Solid	05/15/24 10:32	05/21/24 08:55
40278528010	300-001-GSV-113.3_20240515	Solid	05/15/24 10:34	05/21/24 08:55
40278528011	300-001-GSV-112.9_20240515	Solid	05/15/24 11:03	05/21/24 08:55
40278528012	300-001-GSV-114.95_20240515	Solid	05/15/24 11:05	05/21/24 08:55
40278528013	300-001-GSV-117.4_20240515	Solid	05/15/24 11:45	05/21/24 08:55
40278528014	300-001-GSV-119.3_20240515	Solid	05/15/24 11:46	05/21/24 08:55
40278528015	300-001-GSV-120.55_20240515	Solid	05/15/24 11:47	05/21/24 08:55
40278528016	300-001-GSV-124_20240515	Solid	05/15/24 12:11	05/21/24 08:55
40278528017	300-001-GSV-124.7_20240515	Solid	05/15/24 12:12	05/21/24 08:55
40278528018	300-001-GSV-126_20240515	Solid	05/15/24 12:13	05/21/24 08:55
40278528019	300-001-GSV-128.2_20240515	Solid	05/15/24 13:20	05/21/24 08:55
40278528020	300-001-GSV-128.2-DUP_20240515	Solid	05/15/24 13:20	05/21/24 08:55
40278528021	300-001-GSV-129.6_20240515	Solid	05/15/24 13:21	05/21/24 08:55
40278528022	300-001-GSV-134.8_20240515	Solid	05/15/24 13:55	05/21/24 08:55
40278528023	300-001-GSV-136.5_20240515	Solid	05/15/24 13:57	05/21/24 08:55
40278528024	300-001-GSV-139_20240515	Solid	05/15/24 14:57	05/21/24 08:55
40278528025	300-001-GSV-139.6_20240515	Solid	05/15/24 14:58	05/21/24 08:55
40278528026	300-001-GSV-140.5_20240515	Solid	05/15/24 14:59	05/21/24 08:55
40278528027	300-001-GSV-144.3_20240515	Solid	05/15/24 16:50	05/21/24 08:55
40278528028	300-001-GSV-146.05_20240515	Solid	05/15/24 16:51	05/21/24 08:55
40278528029	300-001-GSV-148_20240516	Solid	05/16/24 09:33	05/21/24 08:55
40278528030	300-001-GSV-149.7_20240516	Solid	05/16/24 10:35	05/21/24 08:55
40278528031	TB-04	Solid	05/19/24 08:45	05/21/24 08:55
40278528032	300-001-GSV-158.75_20240516	Solid	05/16/24 15:12	05/21/24 08:55
40278528033	300-001-GSV-162.4_20240516	Solid	05/16/24 15:38	05/21/24 08:55
40278528034	300-001-GSV-162.7_20240516	Solid	05/16/24 15:39	05/21/24 08:55
40278528035	300-001-GSV-165.35_20240516	Solid	05/16/24 15:40	05/21/24 08:55
40278528036	300-001-GSV-168.05_20240517	Solid	05/17/24 09:20	05/21/24 08:55
40278528037	300-001-GSV-170.3_20240517	Solid	05/17/24 09:21	05/21/24 08:55

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: 6119.00.020
Pace Project No.: 40278528

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40278528038	**300-001-GSV-171.4_20240517**	Solid	05/17/24 09:22	05/21/24 08:55
40278528039	**300-001-GSV-173.2_20240517**	Solid	05/17/24 10:15	05/21/24 08:55
40278528040	**300-001-GSV-173.2-DUP_20240517**	Solid	05/17/24 10:15	05/21/24 08:55
40278528041	**300-001-GSV-174.05_20240517**	Solid	05/17/24 10:17	05/21/24 08:55
40278528042	**300-001-GSV-181.5_20240517**	Solid	05/17/24 11:15	05/21/24 08:55
40278528043	**300-001-GSV-182.8_20240517**	Solid	05/17/24 12:11	05/21/24 08:55
40278528044	**300-001-GSV-184.9_20240517**	Solid	05/17/24 12:12	05/21/24 08:55
40278528045	**300-001-GSV-185.85_20240517**	Solid	05/17/24 12:13	05/21/24 08:55
40278528046	**300-001-GSV-189.45_20240517**	Solid	05/17/24 14:20	05/21/24 08:55
40278528047	**300-001-GSV-189.55_20240517**	Solid	05/17/24 14:21	05/21/24 08:55
40278528048	**300-001-GSV-189.9_20240517**	Solid	05/17/24 14:22	05/21/24 08:55
40278528049	**300-001-GSV-194.9_20240517**	Solid	05/17/24 15:15	05/21/24 08:55
40278528050	**300-001-GSV-195.5_20240517**	Solid	05/17/24 15:16	05/21/24 08:55
40278528051	**300-001-GSV-196.1_20240517**	Solid	05/17/24 15:17	05/21/24 08:55
40278528052	**300-001-GSV-197.55_20240517**	Solid	05/17/24 16:02	05/21/24 08:55
40278528053	**300-001-GSV-198.4_20240517**	Solid	05/17/24 16:03	05/21/24 08:55
40278528054	**300-001-GSV-201.4_20240517**	Solid	05/17/24 16:04	05/21/24 08:55
40278528055	**300-001-GSV-204.6_20240517**	Solid	05/17/24 16:50	05/21/24 08:55
40278528056	**300-001-GSV-205.9_20240517**	Solid	05/17/24 16:51	05/21/24 08:55
40278528057	**300-001-GSV-209.45_20240518**	Solid	05/18/24 08:25	05/21/24 08:55
40278528058	**300-001-GSV-210.65_20240518**	Solid	05/18/24 08:26	05/21/24 08:55
40278528059	**300-001-GSV-211.65_20240518**	Solid	05/18/24 08:27	05/21/24 08:55
40278528060	**300-001-GSV-212.8_20240518**	Solid	05/18/24 08:50	05/21/24 08:55
40278528061	**300-001-GSV-212.8-DUP_20240518**	Solid	05/18/24 08:50	05/21/24 08:55
40278528062	**TB-05**	Solid	05/19/24 08:45	05/21/24 08:55
40278528063	**300-001-GSV-214.85_20240518**	Solid	05/18/24 08:51	05/21/24 08:55
40278528064	**300-001-GSV-216.9_20240518**	Solid	05/18/24 09:15	05/21/24 08:55
40278528065	**300-001-GSV-220.35_20240518**	Solid	05/18/24 09:51	05/21/24 08:55
40278528066	**300-001-GSV-220.9_20240518**	Solid	05/18/24 10:32	05/21/24 08:55
40278528067	**300-001-GSV-224.4_20240518**	Solid	05/18/24 11:05	05/21/24 08:55
40278528068	**300-001-GSV-225.6_20240518**	Solid	05/18/24 11:06	05/21/24 08:55
40278528069	**300-001-GSV-226.55_20240518**	Solid	05/18/24 11:07	05/21/24 08:55
40278528070	**300-001-GSV-230.75_20240518**	Solid	05/18/24 12:16	05/21/24 08:55
40278528071	**300-001-GSV-233.25_20240518**	Solid	05/18/24 13:25	05/21/24 08:55
40278528072	**300-001-GSV-234.4_20240518**	Solid	05/18/24 13:26	05/21/24 08:55
40278528073	**300-001-GSV-236.25_20240518**	Solid	05/18/24 13:27	05/21/24 08:55
40278528074	**300-001-GSV-238.1_20240518**	Solid	05/18/24 14:32	05/21/24 08:55

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: 6119.00.020
Pace Project No.: 40278528

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40278528075	**300-001-GSV-240_20240518**	Solid	05/18/24 14:33	05/21/24 08:55
40278528076	**300-001-GSV-240.3_20240518**	Solid	05/18/24 14:34	05/21/24 08:55
40278528077	**300-001-GSV-249.5_20240518**	Solid	05/18/24 16:55	05/21/24 08:55
40278528078	**300-001-GSV-250.3_20240518**	Solid	05/18/24 16:56	05/21/24 08:55
40278528079	**300-001-GSV-251.8_20240518**	Solid	05/18/24 16:57	05/21/24 08:55
40278528080	**300-001-GSV-251.8-DUP_20240518**	Solid	05/18/24 16:57	05/21/24 08:55
40278528081	**EB-06**	Solid	05/14/24 10:49	05/21/24 08:55
40278528082	**EB-07**	Solid	05/15/24 13:31	05/21/24 08:55
40278528083	**EB-08**	Solid	05/17/24 09:44	05/21/24 08:55
40278528084	**EB-09**	Solid	05/18/24 08:42	05/21/24 08:55
40278528085	**EB-10**	Solid	05/18/24 17:13	05/21/24 08:55
40278528086	**TB-06**	Solid	05/19/24 08:45	05/21/24 08:55
40278528087	**MB-02**	Solid	05/14/24 08:45	05/21/24 08:55
40278528088	**MB-03**	Solid	05/19/24 08:45	05/21/24 08:55

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1241 Bellevue Street - Suite 9
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SAMPLE ANALYTE COUNT

Project: 6119.00.020
Pace Project No.: 40278528

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40278528001	300-001-GSV-76.6_20240514	EPA 8260	ALD	27
40278528002	300-001-GSV-76.9_20240514	EPA 8260	ALD	27
40278528003	300-001-GSV-77.55_20240514	EPA 8260	ALD	27
40278528004	300-001-GSV-77.77_20240514	EPA 8260	ALD	27
40278528005	300-001-GSV-96.1_20240514	EPA 8260	ALD	27
40278528006	300-001-GSV-104.4_20240515	EPA 8260	ALD	27
40278528007	300-001-GSV-106.5_20240515	EPA 8260	ALD	27
40278528008	300-001-GSV-107.75_20240515	EPA 8260	ALD	27
40278528009	300-001-GSV-108_20240515	EPA 8260	ALD	27
40278528010	300-001-GSV-113.3_20240515	EPA 8260	ALD	27
40278528011	300-001-GSV-112.9_20240515	EPA 8260	ALD	27
40278528012	300-001-GSV-114.95_20240515	EPA 8260	ALD	27
40278528013	300-001-GSV-117.4_20240515	EPA 8260	ALD	27
40278528014	300-001-GSV-119.3_20240515	EPA 8260	ALD	27
40278528015	300-001-GSV-120.55_20240515	EPA 8260	ALD	27
40278528016	300-001-GSV-124_20240515	EPA 8260	ALD	27
40278528017	300-001-GSV-124.7_20240515	EPA 8260	ALD	27
40278528018	300-001-GSV-126_20240515	EPA 8260	ALD	27
40278528019	300-001-GSV-128.2_20240515	EPA 8260	ALD	27
40278528020	300-001-GSV-128.2-DUP_20240515	EPA 8260	ALD	27
40278528021	300-001-GSV-129.6_20240515	EPA 8260	ALD	27
40278528022	300-001-GSV-134.8_20240515	EPA 8260	ALD	27
40278528023	300-001-GSV-136.5_20240515	EPA 8260	ALD	27
40278528024	300-001-GSV-139_20240515	EPA 8260	ALD	27
40278528025	300-001-GSV-139.6_20240515	EPA 8260	ALD	27
40278528026	300-001-GSV-140.5_20240515	EPA 8260	ALD	27
40278528027	300-001-GSV-144.3_20240515	EPA 8260	ALD	27
40278528028	300-001-GSV-146.05_20240515	EPA 8260	ALD	27
40278528029	300-001-GSV-148_20240516	EPA 8260	ALD	27
40278528030	300-001-GSV-149.7_20240516	EPA 8260	ALD	27
40278528031	TB-04	EPA 8260	ALD	27
40278528032	300-001-GSV-158.75_20240516	EPA 8260	ALD	27
40278528033	300-001-GSV-162.4_20240516	EPA 8260	ALD	27
40278528034	300-001-GSV-162.7_20240516	EPA 8260	ALD	27
40278528035	300-001-GSV-165.35_20240516	EPA 8260	ALD	27
40278528036	300-001-GSV-168.05_20240517	EPA 8260	ALD	27
40278528037	300-001-GSV-170.3_20240517	EPA 8260	ALD	27

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SAMPLE ANALYTE COUNT

Project: 6119.00.020
Pace Project No.: 40278528

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40278528038	**300-001-GSV-171.4_20240517**	EPA 8260	ALD	27
40278528039	**300-001-GSV-173.2_20240517**	EPA 8260	ALD	27
40278528040	**300-001-GSV-173.2-DUP_20240517**	EPA 8260	ALD	27
40278528041	**300-001-GSV-174.05_20240517**	EPA 8260	ALD	27
40278528042	**300-001-GSV-181.5_20240517**	EPA 8260	ALD	27
40278528043	**300-001-GSV-182.8_20240517**	EPA 8260	ALD	27
40278528044	**300-001-GSV-184.9_20240517**	EPA 8260	ALD	27
40278528045	**300-001-GSV-185.85_20240517**	EPA 8260	ALD	27
40278528046	**300-001-GSV-189.45_20240517**	EPA 8260	ALD	27
40278528047	**300-001-GSV-189.55_20240517**	EPA 8260	ALD	27
40278528048	**300-001-GSV-189.9_20240517**	EPA 8260	ALD	27
40278528049	**300-001-GSV-194.9_20240517**	EPA 8260	ALD	27
40278528050	**300-001-GSV-195.5_20240517**	EPA 8260	ALD	27
40278528051	**300-001-GSV-196.1_20240517**	EPA 8260	ALD	27
40278528052	**300-001-GSV-197.55_20240517**	EPA 8260	ALD	27
40278528053	**300-001-GSV-198.4_20240517**	EPA 8260	ALD	27
40278528054	**300-001-GSV-201.4_20240517**	EPA 8260	ALD	27
40278528055	**300-001-GSV-204.6_20240517**	EPA 8260	ALD	27
40278528056	**300-001-GSV-205.9_20240517**	EPA 8260	ALD	27
40278528057	**300-001-GSV-209.45_20240518**	EPA 8260	ALD	27
40278528058	**300-001-GSV-210.65_20240518**	EPA 8260	ALD	27
40278528059	**300-001-GSV-211.65_20240518**	EPA 8260	ALD	27
40278528060	**300-001-GSV-212.8_20240518**	EPA 8260	ALD	27
40278528061	**300-001-GSV-212.8-DUP_20240518**	EPA 8260	ALD	27
40278528062	**TB-05**	EPA 8260	ALD	27
40278528063	**300-001-GSV-214.85_20240518**	EPA 8260	ALD	27
40278528064	**300-001-GSV-216.9_20240518**	EPA 8260	ALD	27
40278528065	**300-001-GSV-220.35_20240518**	EPA 8260	ALD	27
40278528066	**300-001-GSV-220.9_20240518**	EPA 8260	ALD	27
40278528067	**300-001-GSV-224.4_20240518**	EPA 8260	ALD	27
40278528068	**300-001-GSV-225.6_20240518**	EPA 8260	ALD	27
40278528069	**300-001-GSV-226.55_20240518**	EPA 8260	ALD	27
40278528070	**300-001-GSV-230.75_20240518**	EPA 8260	ALD	27
40278528071	**300-001-GSV-233.25_20240518**	EPA 8260	ALD	27
40278528072	**300-001-GSV-234.4_20240518**	EPA 8260	ALD	27
40278528073	**300-001-GSV-236.25_20240518**	EPA 8260	ALD	27
40278528074	**300-001-GSV-238.1_20240518**	EPA 8260	ALD	27

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: 6119.00.020
Pace Project No.: 40278528

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40278528075	**300-001-GSV-240_20240518**	EPA 8260	ALD	27
40278528076	**300-001-GSV-240.3_20240518**	EPA 8260	ALD	27
40278528077	**300-001-GSV-249.5_20240518**	EPA 8260	ALD	27
40278528078	**300-001-GSV-250.3_20240518**	EPA 8260	ALD	27
40278528079	**300-001-GSV-251.8_20240518**	EPA 8260	ALD	27
40278528080	**300-001-GSV-251.8-DUP_20240518**	EPA 8260	ALD	27
40278528081	**EB-06**	EPA 8260	ALD	27
40278528082	**EB-07**	EPA 8260	ALD	27
40278528083	**EB-08**	EPA 8260	ALD	27
40278528084	**EB-09**	EPA 8260	ALD	27
40278528085	**EB-10**	EPA 8260	ALD	27
40278528086	**TB-06**	EPA 8260	ALD	27
40278528087	**MB-02**	EPA 8260	ALD	27
40278528088	**MB-03**	EPA 8260	ALD	27

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PROJECT NARRATIVE

Project: 6119.00.020
Pace Project No.: 40278528

Method: **EPA 8260**
Description: 8260 MSV Med Level MAE
Client: Sanborn, Head & Associates
Date: May 30, 2024

General Information:
88 samples were analyzed for EPA 8260 by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 475115

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- 300-001-GSV-174.05_20240517 (Lab ID: 40278528041)
  - 2-Propanol
- 300-001-GSV-181.5_20240517 (Lab ID: 40278528042)
  - 2-Propanol
- 300-001-GSV-182.8_20240517 (Lab ID: 40278528043)
  - 2-Propanol
- 300-001-GSV-184.9_20240517 (Lab ID: 40278528044)
  - 2-Propanol
- 300-001-GSV-185.85_20240517 (Lab ID: 40278528045)
  - 2-Propanol
- 300-001-GSV-189.45_20240517 (Lab ID: 40278528046)
  - 2-Propanol
- 300-001-GSV-189.55_20240517 (Lab ID: 40278528047)
  - 2-Propanol
- 300-001-GSV-189.9_20240517 (Lab ID: 40278528048)
  - 2-Propanol
- 300-001-GSV-194.9_20240517 (Lab ID: 40278528049)
  - 2-Propanol
- 300-001-GSV-195.5_20240517 (Lab ID: 40278528050)
  - 2-Propanol
- 300-001-GSV-196.1_20240517 (Lab ID: 40278528051)
  - 2-Hexanone
  - 2-Propanol
  - Trichlorofluoromethane
- 300-001-GSV-197.55_20240517 (Lab ID: 40278528052)

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PROJECT NARRATIVE

Project: 6119.00.020
Pace Project No.: 40278528

Method: **EPA 8260**
Description: 8260 MSV Med Level MAE
Client: Sanborn, Head & Associates
Date: May 30, 2024

QC Batch: 475115

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- 2-Hexanone
- 2-Propanol
- Trichlorofluoromethane

- 300-001-GSV-198.4_20240517 (Lab ID: 40278528053)
  - 2-Hexanone
  - 2-Propanol
  - Trichlorofluoromethane
- 300-001-GSV-212.8_20240518 (Lab ID: 40278528060)
  - 2-Propanol
- BLANK (Lab ID: 2721088)
  - 2-Propanol

QC Batch: 475242

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- 300-001-GSV-201.4_20240517 (Lab ID: 40278528054)
  - 2-Hexanone
  - 2-Propanol
- 300-001-GSV-204.6_20240517 (Lab ID: 40278528055)
  - 2-Hexanone
  - 2-Propanol
- 300-001-GSV-205.9_20240517 (Lab ID: 40278528056)
  - 2-Hexanone
  - 2-Propanol
- 300-001-GSV-209.45_20240518 (Lab ID: 40278528057)
  - 2-Hexanone
  - 2-Propanol
- 300-001-GSV-210.65_20240518 (Lab ID: 40278528058)
  - 2-Hexanone
  - 2-Propanol
- 300-001-GSV-211.65_20240518 (Lab ID: 40278528059)
  - 2-Hexanone
  - 2-Propanol
- 300-001-GSV-212.8-DUP_20240518 (Lab ID: 40278528061)
  - 2-Hexanone
  - 2-Propanol
- 300-001-GSV-214.85_20240518 (Lab ID: 40278528063)
  - 2-Hexanone
  - 2-Propanol
- 300-001-GSV-216.9_20240518 (Lab ID: 40278528064)
  - 2-Hexanone
  - 2-Propanol
- 300-001-GSV-220.35_20240518 (Lab ID: 40278528065)
  - 2-Hexanone

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PROJECT NARRATIVE

Project: 6119.00.020
Pace Project No.: 40278528

Method: **EPA 8260**
Description: 8260 MSV Med Level MAE
Client: Sanborn, Head & Associates
Date: May 30, 2024

QC Batch: 475242

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- 2-Propanol
- 300-001-GSV-220.9_20240518 (Lab ID: 40278528066)
  - 2-Hexanone
  - 2-Propanol
- 300-001-GSV-224.4_20240518 (Lab ID: 40278528067)
  - 2-Hexanone
  - 2-Propanol
- 300-001-GSV-251.8_20240518 (Lab ID: 40278528079)
  - 2-Hexanone
  - 2-Propanol
- BLANK (Lab ID: 2721928)
  - 2-Hexanone
  - 2-Propanol
- TB-05 (Lab ID: 40278528062)
  - 2-Hexanone
  - 2-Propanol

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 475000

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.

- LCS (Lab ID: 2720563)
  - Chloromethane

QC Batch: 475089

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.

- LCS (Lab ID: 2721015)
  - Chloromethane

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

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PROJECT NARRATIVE

Project: 6119.00.020
Pace Project No.: 40278528

Method: **EPA 8260**
Description: 8260 MSV Med Level MAE
Client: Sanborn, Head & Associates
Date: May 30, 2024

QC Batch: 475000

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40278528019

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 2720564)
  - Chloromethane
- MSD (Lab ID: 2720565)
  - Chloromethane

QC Batch: 475089

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40278528039

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 2721016)
  - Chloromethane
- MSD (Lab ID: 2721017)
  - Chloromethane

QC Batch: 475242

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40278528079

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MSD (Lab ID: 2721931)
  - Trichloroethene

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-76.6_20240514 **Lab ID: 40278528001** Collected: 05/14/24 13:05 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.9**	ug/kg	34.6	8.9	1	05/22/24 12:30	05/23/24 12:55	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.3**	ug/kg	34.6	11.3	1	05/22/24 12:30	05/23/24 12:55	76-13-1	
1,1-Dichloroethene	**<11.5**	ug/kg	34.6	11.5	1	05/22/24 12:30	05/23/24 12:55	75-35-4	
1,2-Dichloroethane	**<8.0**	ug/kg	34.6	8.0	1	05/22/24 12:30	05/23/24 12:55	107-06-2	
2-Butanone (MEK)	**<109**	ug/kg	864	109	1	05/22/24 12:30	05/23/24 12:55	78-93-3	
2-Hexanone	**<343**	ug/kg	864	343	1	05/22/24 12:30	05/23/24 12:55	591-78-6	
2-Propanol	**<1100**	ug/kg	3460	1100	1	05/22/24 12:30	05/23/24 12:55	67-63-0	
Acetone	**<210**	ug/kg	864	210	1	05/22/24 12:30	05/23/24 12:55	67-64-1	
Benzene	**<8.2**	ug/kg	13.8	8.2	1	05/22/24 12:30	05/23/24 12:55	71-43-2	
Bromodichloromethane	**<8.2**	ug/kg	34.6	8.2	1	05/22/24 12:30	05/23/24 12:55	75-27-4	
Bromoform	**<152**	ug/kg	173	152	1	05/22/24 12:30	05/23/24 12:55	75-25-2	
Chlorobenzene	**<4.1**	ug/kg	34.6	4.1	1	05/22/24 12:30	05/23/24 12:55	108-90-7	
Chloroform	**<24.8**	ug/kg	173	24.8	1	05/22/24 12:30	05/23/24 12:55	67-66-3	
Chloromethane	**<13.1**	ug/kg	34.6	13.1	1	05/22/24 12:30	05/23/24 12:55	74-87-3	L2
Dibromochloromethane	**<118**	ug/kg	173	118	1	05/22/24 12:30	05/23/24 12:55	124-48-1	
Dichlorofluoromethane	**<9.8**	ug/kg	34.6	9.8	1	05/22/24 12:30	05/23/24 12:55	75-43-4	
Methyl-tert-butyl ether	**<10.2**	ug/kg	34.6	10.2	1	05/22/24 12:30	05/23/24 12:55	1634-04-4	
Methylene Chloride	**<9.6**	ug/kg	34.6	9.6	1	05/22/24 12:30	05/23/24 12:55	75-09-2	
Tetrachloroethene	**<13.4**	ug/kg	34.6	13.4	1	05/22/24 12:30	05/23/24 12:55	127-18-4	
Toluene	**<8.7**	ug/kg	34.6	8.7	1	05/22/24 12:30	05/23/24 12:55	108-88-3	
Trichloroethene	**<12.9**	ug/kg	34.6	12.9	1	05/22/24 12:30	05/23/24 12:55	79-01-6	
Trichlorofluoromethane	**<10.0**	ug/kg	34.6	10.0	1	05/22/24 12:30	05/23/24 12:55	75-69-4	
m&p-Xylene	**<14.6**	ug/kg	69.2	14.6	1	05/22/24 12:30	05/23/24 12:55	179601-23-1	
trans-1,2-Dichloroethene	**<7.6**	ug/kg	34.6	7.6	1	05/22/24 12:30	05/23/24 12:55	156-60-5	
Surrogates									
Toluene-d8 (S)	113	%	60-140		1	05/22/24 12:30	05/23/24 12:55	2037-26-5	
4-Bromofluorobenzene (S)	111	%	66-143		1	05/22/24 12:30	05/23/24 12:55	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	60-140		1	05/22/24 12:30	05/23/24 12:55	2199-69-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-76.9_20240514 **Lab ID: 40278528002** Collected: 05/14/24 13:05 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.4**	ug/kg	36.7	9.4	1	05/22/24 12:30	05/23/24 13:14	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.0**	ug/kg	36.7	12.0	1	05/22/24 12:30	05/23/24 13:14	76-13-1	
1,1-Dichloroethene	**<12.2**	ug/kg	36.7	12.2	1	05/22/24 12:30	05/23/24 13:14	75-35-4	
1,2-Dichloroethane	**<8.4**	ug/kg	36.7	8.4	1	05/22/24 12:30	05/23/24 13:14	107-06-2	
2-Butanone (MEK)	**<116**	ug/kg	917	116	1	05/22/24 12:30	05/23/24 13:14	78-93-3	
2-Hexanone	**<364**	ug/kg	917	364	1	05/22/24 12:30	05/23/24 13:14	591-78-6	
2-Propanol	**<1170**	ug/kg	3670	1170	1	05/22/24 12:30	05/23/24 13:14	67-63-0	
Acetone	**<223**	ug/kg	917	223	1	05/22/24 12:30	05/23/24 13:14	67-64-1	
Benzene	**<8.7**	ug/kg	14.7	8.7	1	05/22/24 12:30	05/23/24 13:14	71-43-2	
Bromodichloromethane	**<8.7**	ug/kg	36.7	8.7	1	05/22/24 12:30	05/23/24 13:14	75-27-4	
Bromoform	**<161**	ug/kg	183	161	1	05/22/24 12:30	05/23/24 13:14	75-25-2	
Chlorobenzene	**<4.4**	ug/kg	36.7	4.4	1	05/22/24 12:30	05/23/24 13:14	108-90-7	
Chloroform	**<26.3**	ug/kg	183	26.3	1	05/22/24 12:30	05/23/24 13:14	67-66-3	
Chloromethane	**<13.9**	ug/kg	36.7	13.9	1	05/22/24 12:30	05/23/24 13:14	74-87-3	L2
Dibromochloromethane	**<125**	ug/kg	183	125	1	05/22/24 12:30	05/23/24 13:14	124-48-1	
Dichlorofluoromethane	**<10.3**	ug/kg	36.7	10.3	1	05/22/24 12:30	05/23/24 13:14	75-43-4	
Methyl-tert-butyl ether	**<10.8**	ug/kg	36.7	10.8	1	05/22/24 12:30	05/23/24 13:14	1634-04-4	
Methylene Chloride	**<10.2**	ug/kg	36.7	10.2	1	05/22/24 12:30	05/23/24 13:14	75-09-2	
Tetrachloroethene	**<14.2**	ug/kg	36.7	14.2	1	05/22/24 12:30	05/23/24 13:14	127-18-4	
Toluene	**<9.2**	ug/kg	36.7	9.2	1	05/22/24 12:30	05/23/24 13:14	108-88-3	
Trichloroethene	**<13.7**	ug/kg	36.7	13.7	1	05/22/24 12:30	05/23/24 13:14	79-01-6	
Trichlorofluoromethane	**<10.6**	ug/kg	36.7	10.6	1	05/22/24 12:30	05/23/24 13:14	75-69-4	
m&p-Xylene	**<15.5**	ug/kg	73.3	15.5	1	05/22/24 12:30	05/23/24 13:14	179601-23-1	
trans-1,2-Dichloroethene	**<8.0**	ug/kg	36.7	8.0	1	05/22/24 12:30	05/23/24 13:14	156-60-5	
Surrogates									
Toluene-d8 (S)	100	%	60-140		1	05/22/24 12:30	05/23/24 13:14	2037-26-5	
4-Bromofluorobenzene (S)	98	%	66-143		1	05/22/24 12:30	05/23/24 13:14	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	60-140		1	05/22/24 12:30	05/23/24 13:14	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-77.55_20240514 **Lab ID: 40278528003** Collected: 05/14/24 13:52 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.5**	ug/kg	37.1	9.5	1	05/22/24 12:30	05/23/24 13:34	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.1**	ug/kg	37.1	12.1	1	05/22/24 12:30	05/23/24 13:34	76-13-1	
1,1-Dichloroethene	**<12.3**	ug/kg	37.1	12.3	1	05/22/24 12:30	05/23/24 13:34	75-35-4	
1,2-Dichloroethane	**<8.5**	ug/kg	37.1	8.5	1	05/22/24 12:30	05/23/24 13:34	107-06-2	
2-Butanone (MEK)	**<117**	ug/kg	927	117	1	05/22/24 12:30	05/23/24 13:34	78-93-3	
2-Hexanone	**<368**	ug/kg	927	368	1	05/22/24 12:30	05/23/24 13:34	591-78-6	
2-Propanol	**<1180**	ug/kg	3710	1180	1	05/22/24 12:30	05/23/24 13:34	67-63-0	
Acetone	**<226**	ug/kg	927	226	1	05/22/24 12:30	05/23/24 13:34	67-64-1	
Benzene	**<8.8**	ug/kg	14.8	8.8	1	05/22/24 12:30	05/23/24 13:34	71-43-2	
Bromodichloromethane	**<8.8**	ug/kg	37.1	8.8	1	05/22/24 12:30	05/23/24 13:34	75-27-4	
Bromoform	**<163**	ug/kg	185	163	1	05/22/24 12:30	05/23/24 13:34	75-25-2	
Chlorobenzene	**<4.4**	ug/kg	37.1	4.4	1	05/22/24 12:30	05/23/24 13:34	108-90-7	
Chloroform	**<26.5**	ug/kg	185	26.5	1	05/22/24 12:30	05/23/24 13:34	67-66-3	
Chloromethane	**<14.1**	ug/kg	37.1	14.1	1	05/22/24 12:30	05/23/24 13:34	74-87-3	L2
Dibromochloromethane	**<127**	ug/kg	185	127	1	05/22/24 12:30	05/23/24 13:34	124-48-1	
Dichlorofluoromethane	**<10.5**	ug/kg	37.1	10.5	1	05/22/24 12:30	05/23/24 13:34	75-43-4	
Methyl-tert-butyl ether	**<10.9**	ug/kg	37.1	10.9	1	05/22/24 12:30	05/23/24 13:34	1634-04-4	
Methylene Chloride	**<10.3**	ug/kg	37.1	10.3	1	05/22/24 12:30	05/23/24 13:34	75-09-2	
Tetrachloroethene	**<14.4**	ug/kg	37.1	14.4	1	05/22/24 12:30	05/23/24 13:34	127-18-4	
Toluene	**<9.3**	ug/kg	37.1	9.3	1	05/22/24 12:30	05/23/24 13:34	108-88-3	
Trichloroethene	**<13.9**	ug/kg	37.1	13.9	1	05/22/24 12:30	05/23/24 13:34	79-01-6	
Trichlorofluoromethane	**<10.7**	ug/kg	37.1	10.7	1	05/22/24 12:30	05/23/24 13:34	75-69-4	
m&p-Xylene	**<15.6**	ug/kg	74.1	15.6	1	05/22/24 12:30	05/23/24 13:34	179601-23-1	
trans-1,2-Dichloroethene	**<8.1**	ug/kg	37.1	8.1	1	05/22/24 12:30	05/23/24 13:34	156-60-5	
Surrogates									
Toluene-d8 (S)	100	%	60-140		1	05/22/24 12:30	05/23/24 13:34	2037-26-5	
4-Bromofluorobenzene (S)	101	%	66-143		1	05/22/24 12:30	05/23/24 13:34	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	60-140		1	05/22/24 12:30	05/23/24 13:34	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-77.77_20240514 **Lab ID: 40278528004** Collected: 05/14/24 13:52 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.5**	ug/kg	37.2	9.5	1	05/22/24 12:30	05/23/24 13:54	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.1**	ug/kg	37.2	12.1	1	05/22/24 12:30	05/23/24 13:54	76-13-1	
1,1-Dichloroethene	**<12.4**	ug/kg	37.2	12.4	1	05/22/24 12:30	05/23/24 13:54	75-35-4	
1,2-Dichloroethane	**<8.6**	ug/kg	37.2	8.6	1	05/22/24 12:30	05/23/24 13:54	107-06-2	
2-Butanone (MEK)	**<118**	ug/kg	931	118	1	05/22/24 12:30	05/23/24 13:54	78-93-3	
2-Hexanone	**<370**	ug/kg	931	370	1	05/22/24 12:30	05/23/24 13:54	591-78-6	
2-Propanol	**<1190**	ug/kg	3720	1190	1	05/22/24 12:30	05/23/24 13:54	67-63-0	
Acetone	**<227**	ug/kg	931	227	1	05/22/24 12:30	05/23/24 13:54	67-64-1	
Benzene	**<8.9**	ug/kg	14.9	8.9	1	05/22/24 12:30	05/23/24 13:54	71-43-2	
Bromodichloromethane	**<8.9**	ug/kg	37.2	8.9	1	05/22/24 12:30	05/23/24 13:54	75-27-4	
Bromoform	**<164**	ug/kg	186	164	1	05/22/24 12:30	05/23/24 13:54	75-25-2	
Chlorobenzene	**<4.5**	ug/kg	37.2	4.5	1	05/22/24 12:30	05/23/24 13:54	108-90-7	
Chloroform	**<26.7**	ug/kg	186	26.7	1	05/22/24 12:30	05/23/24 13:54	67-66-3	
Chloromethane	**<14.2**	ug/kg	37.2	14.2	1	05/22/24 12:30	05/23/24 13:54	74-87-3	L2
Dibromochloromethane	**<127**	ug/kg	186	127	1	05/22/24 12:30	05/23/24 13:54	124-48-1	
Dichlorofluoromethane	**<10.5**	ug/kg	37.2	10.5	1	05/22/24 12:30	05/23/24 13:54	75-43-4	
Methyl-tert-butyl ether	**<10.9**	ug/kg	37.2	10.9	1	05/22/24 12:30	05/23/24 13:54	1634-04-4	
Methylene Chloride	**<10.4**	ug/kg	37.2	10.4	1	05/22/24 12:30	05/23/24 13:54	75-09-2	
Tetrachloroethene	**<14.5**	ug/kg	37.2	14.5	1	05/22/24 12:30	05/23/24 13:54	127-18-4	
Toluene	**<9.4**	ug/kg	37.2	9.4	1	05/22/24 12:30	05/23/24 13:54	108-88-3	
Trichloroethene	**<13.9**	ug/kg	37.2	13.9	1	05/22/24 12:30	05/23/24 13:54	79-01-6	
Trichlorofluoromethane	**<10.8**	ug/kg	37.2	10.8	1	05/22/24 12:30	05/23/24 13:54	75-69-4	
m&p-Xylene	**<15.7**	ug/kg	74.5	15.7	1	05/22/24 12:30	05/23/24 13:54	179601-23-1	
trans-1,2-Dichloroethene	**<8.1**	ug/kg	37.2	8.1	1	05/22/24 12:30	05/23/24 13:54	156-60-5	
Surrogates									
Toluene-d8 (S)	105	%	60-140		1	05/22/24 12:30	05/23/24 13:54	2037-26-5	
4-Bromofluorobenzene (S)	105	%	66-143		1	05/22/24 12:30	05/23/24 13:54	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	60-140		1	05/22/24 12:30	05/23/24 13:54	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-96.1_20240514 **Lab ID: 40278528005** Collected: 05/14/24 16:30 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.8**	ug/kg	38.3	9.8	1	05/22/24 12:30	05/23/24 14:13	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.5**	ug/kg	38.3	12.5	1	05/22/24 12:30	05/23/24 14:13	76-13-1	
1,1-Dichloroethene	**<12.7**	ug/kg	38.3	12.7	1	05/22/24 12:30	05/23/24 14:13	75-35-4	
1,2-Dichloroethane	**<8.8**	ug/kg	38.3	8.8	1	05/22/24 12:30	05/23/24 14:13	107-06-2	
2-Butanone (MEK)	**<121**	ug/kg	956	121	1	05/22/24 12:30	05/23/24 14:13	78-93-3	
2-Hexanone	**<380**	ug/kg	956	380	1	05/22/24 12:30	05/23/24 14:13	591-78-6	
2-Propanol	**<1220**	ug/kg	3830	1220	1	05/22/24 12:30	05/23/24 14:13	67-63-0	
Acetone	**<233**	ug/kg	956	233	1	05/22/24 12:30	05/23/24 14:13	67-64-1	
Benzene	**<9.1**	ug/kg	15.3	9.1	1	05/22/24 12:30	05/23/24 14:13	71-43-2	
Bromodichloromethane	**<9.1**	ug/kg	38.3	9.1	1	05/22/24 12:30	05/23/24 14:13	75-27-4	
Bromoform	**<168**	ug/kg	191	168	1	05/22/24 12:30	05/23/24 14:13	75-25-2	
Chlorobenzene	**<4.6**	ug/kg	38.3	4.6	1	05/22/24 12:30	05/23/24 14:13	108-90-7	
Chloroform	**<27.4**	ug/kg	191	27.4	1	05/22/24 12:30	05/23/24 14:13	67-66-3	
Chloromethane	**<14.5**	ug/kg	38.3	14.5	1	05/22/24 12:30	05/23/24 14:13	74-87-3	L2
Dibromochloromethane	**<131**	ug/kg	191	131	1	05/22/24 12:30	05/23/24 14:13	124-48-1	
Dichlorofluoromethane	**<10.8**	ug/kg	38.3	10.8	1	05/22/24 12:30	05/23/24 14:13	75-43-4	
Methyl-tert-butyl ether	**<11.2**	ug/kg	38.3	11.2	1	05/22/24 12:30	05/23/24 14:13	1634-04-4	
Methylene Chloride	**<10.6**	ug/kg	38.3	10.6	1	05/22/24 12:30	05/23/24 14:13	75-09-2	
Tetrachloroethene	**<14.8**	ug/kg	38.3	14.8	1	05/22/24 12:30	05/23/24 14:13	127-18-4	
Toluene	**<9.6**	ug/kg	38.3	9.6	1	05/22/24 12:30	05/23/24 14:13	108-88-3	
Trichloroethene	**<14.3**	ug/kg	38.3	14.3	1	05/22/24 12:30	05/23/24 14:13	79-01-6	
Trichlorofluoromethane	**<11.1**	ug/kg	38.3	11.1	1	05/22/24 12:30	05/23/24 14:13	75-69-4	
m&p-Xylene	**<16.1**	ug/kg	76.5	16.1	1	05/22/24 12:30	05/23/24 14:13	179601-23-1	
trans-1,2-Dichloroethene	**<8.4**	ug/kg	38.3	8.4	1	05/22/24 12:30	05/23/24 14:13	156-60-5	
Surrogates									
Toluene-d8 (S)	109	%	60-140		1	05/22/24 12:30	05/23/24 14:13	2037-26-5	
4-Bromofluorobenzene (S)	109	%	66-143		1	05/22/24 12:30	05/23/24 14:13	460-00-4	
1,2-Dichlorobenzene-d4 (S)	111	%	60-140		1	05/22/24 12:30	05/23/24 14:13	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-104.4_20240515 **Lab ID: 40278528006** Collected: 05/15/24 09:53 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.2**	ug/kg	31.9	8.2	1	05/22/24 12:30	05/23/24 14:33	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.4**	ug/kg	31.9	10.4	1	05/22/24 12:30	05/23/24 14:33	76-13-1	
1,1-Dichloroethene	**<10.6**	ug/kg	31.9	10.6	1	05/22/24 12:30	05/23/24 14:33	75-35-4	
1,2-Dichloroethane	**<7.3**	ug/kg	31.9	7.3	1	05/22/24 12:30	05/23/24 14:33	107-06-2	
2-Butanone (MEK)	**<101**	ug/kg	798	101	1	05/22/24 12:30	05/23/24 14:33	78-93-3	
2-Hexanone	**<317**	ug/kg	798	317	1	05/22/24 12:30	05/23/24 14:33	591-78-6	
2-Propanol	**<1020**	ug/kg	3190	1020	1	05/22/24 12:30	05/23/24 14:33	67-63-0	
Acetone	**<194**	ug/kg	798	194	1	05/22/24 12:30	05/23/24 14:33	67-64-1	
Benzene	**<7.6**	ug/kg	12.8	7.6	1	05/22/24 12:30	05/23/24 14:33	71-43-2	
Bromodichloromethane	**<7.6**	ug/kg	31.9	7.6	1	05/22/24 12:30	05/23/24 14:33	75-27-4	
Bromoform	**<140**	ug/kg	160	140	1	05/22/24 12:30	05/23/24 14:33	75-25-2	
Chlorobenzene	**<3.8**	ug/kg	31.9	3.8	1	05/22/24 12:30	05/23/24 14:33	108-90-7	
Chloroform	**<22.8**	ug/kg	160	22.8	1	05/22/24 12:30	05/23/24 14:33	67-66-3	
Chloromethane	**<12.1**	ug/kg	31.9	12.1	1	05/22/24 12:30	05/23/24 14:33	74-87-3	L2
Dibromochloromethane	**<109**	ug/kg	160	109	1	05/22/24 12:30	05/23/24 14:33	124-48-1	
Dichlorofluoromethane	**<9.0**	ug/kg	31.9	9.0	1	05/22/24 12:30	05/23/24 14:33	75-43-4	
Methyl-tert-butyl ether	**<9.4**	ug/kg	31.9	9.4	1	05/22/24 12:30	05/23/24 14:33	1634-04-4	
Methylene Chloride	**<8.9**	ug/kg	31.9	8.9	1	05/22/24 12:30	05/23/24 14:33	75-09-2	
Tetrachloroethene	**<12.4**	ug/kg	31.9	12.4	1	05/22/24 12:30	05/23/24 14:33	127-18-4	
Toluene	**<8.0**	ug/kg	31.9	8.0	1	05/22/24 12:30	05/23/24 14:33	108-88-3	
Trichloroethene	**<11.9**	ug/kg	31.9	11.9	1	05/22/24 12:30	05/23/24 14:33	79-01-6	
Trichlorofluoromethane	**<9.3**	ug/kg	31.9	9.3	1	05/22/24 12:30	05/23/24 14:33	75-69-4	
m&p-Xylene	**<13.5**	ug/kg	63.8	13.5	1	05/22/24 12:30	05/23/24 14:33	179601-23-1	
trans-1,2-Dichloroethene	**<7.0**	ug/kg	31.9	7.0	1	05/22/24 12:30	05/23/24 14:33	156-60-5	
Surrogates									
Toluene-d8 (S)	110	%	60-140		1	05/22/24 12:30	05/23/24 14:33	2037-26-5	
4-Bromofluorobenzene (S)	105	%	66-143		1	05/22/24 12:30	05/23/24 14:33	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	60-140		1	05/22/24 12:30	05/23/24 14:33	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-106.5_20240515 **Lab ID: 40278528007** Collected: 05/15/24 09:55 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.6**	ug/kg	33.6	8.6	1	05/22/24 12:30	05/23/24 14:52	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.9**	ug/kg	33.6	10.9	1	05/22/24 12:30	05/23/24 14:52	76-13-1	
1,1-Dichloroethene	**<11.1**	ug/kg	33.6	11.1	1	05/22/24 12:30	05/23/24 14:52	75-35-4	
1,2-Dichloroethane	**<7.7**	ug/kg	33.6	7.7	1	05/22/24 12:30	05/23/24 14:52	107-06-2	
2-Butanone (MEK)	**<106**	ug/kg	839	106	1	05/22/24 12:30	05/23/24 14:52	78-93-3	
2-Hexanone	**<333**	ug/kg	839	333	1	05/22/24 12:30	05/23/24 14:52	591-78-6	
2-Propanol	**<1070**	ug/kg	3360	1070	1	05/22/24 12:30	05/23/24 14:52	67-63-0	
Acetone	**<204**	ug/kg	839	204	1	05/22/24 12:30	05/23/24 14:52	67-64-1	
Benzene	**<8.0**	ug/kg	13.4	8.0	1	05/22/24 12:30	05/23/24 14:52	71-43-2	
Bromodichloromethane	**<8.0**	ug/kg	33.6	8.0	1	05/22/24 12:30	05/23/24 14:52	75-27-4	
Bromoform	**<148**	ug/kg	168	148	1	05/22/24 12:30	05/23/24 14:52	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.6	4.0	1	05/22/24 12:30	05/23/24 14:52	108-90-7	
Chloroform	**<24.0**	ug/kg	168	24.0	1	05/22/24 12:30	05/23/24 14:52	67-66-3	
Chloromethane	**<12.8**	ug/kg	33.6	12.8	1	05/22/24 12:30	05/23/24 14:52	74-87-3	L2
Dibromochloromethane	**<115**	ug/kg	168	115	1	05/22/24 12:30	05/23/24 14:52	124-48-1	
Dichlorofluoromethane	**<9.5**	ug/kg	33.6	9.5	1	05/22/24 12:30	05/23/24 14:52	75-43-4	
Methyl-tert-butyl ether	**<9.9**	ug/kg	33.6	9.9	1	05/22/24 12:30	05/23/24 14:52	1634-04-4	
Methylene Chloride	**<9.3**	ug/kg	33.6	9.3	1	05/22/24 12:30	05/23/24 14:52	75-09-2	
Tetrachloroethene	**<13.0**	ug/kg	33.6	13.0	1	05/22/24 12:30	05/23/24 14:52	127-18-4	
Toluene	**<8.5**	ug/kg	33.6	8.5	1	05/22/24 12:30	05/23/24 14:52	108-88-3	
Trichloroethene	**<12.6**	ug/kg	33.6	12.6	1	05/22/24 12:30	05/23/24 14:52	79-01-6	
Trichlorofluoromethane	**<9.7**	ug/kg	33.6	9.7	1	05/22/24 12:30	05/23/24 14:52	75-69-4	
m&p-Xylene	**<14.2**	ug/kg	67.2	14.2	1	05/22/24 12:30	05/23/24 14:52	179601-23-1	
trans-1,2-Dichloroethene	**<7.3**	ug/kg	33.6	7.3	1	05/22/24 12:30	05/23/24 14:52	156-60-5	
Surrogates									
Toluene-d8 (S)	107	%	60-140		1	05/22/24 12:30	05/23/24 14:52	2037-26-5	
4-Bromofluorobenzene (S)	104	%	66-143		1	05/22/24 12:30	05/23/24 14:52	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	60-140		1	05/22/24 12:30	05/23/24 14:52	2199-69-1	

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(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-107.75_20240515 **Lab ID: 40278528008** Collected: 05/15/24 10:30 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.0**	ug/kg	35.1	9.0	1	05/22/24 12:30	05/23/24 15:12	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.5**	ug/kg	35.1	11.5	1	05/22/24 12:30	05/23/24 15:12	76-13-1	
1,1-Dichloroethene	**<11.7**	ug/kg	35.1	11.7	1	05/22/24 12:30	05/23/24 15:12	75-35-4	
1,2-Dichloroethane	**<8.1**	ug/kg	35.1	8.1	1	05/22/24 12:30	05/23/24 15:12	107-06-2	
2-Butanone (MEK)	**<111**	ug/kg	878	111	1	05/22/24 12:30	05/23/24 15:12	78-93-3	
2-Hexanone	**<349**	ug/kg	878	349	1	05/22/24 12:30	05/23/24 15:12	591-78-6	
2-Propanol	**<1120**	ug/kg	3510	1120	1	05/22/24 12:30	05/23/24 15:12	67-63-0	
Acetone	**<214**	ug/kg	878	214	1	05/22/24 12:30	05/23/24 15:12	67-64-1	
Benzene	**<8.4**	ug/kg	14.0	8.4	1	05/22/24 12:30	05/23/24 15:12	71-43-2	
Bromodichloromethane	**<8.4**	ug/kg	35.1	8.4	1	05/22/24 12:30	05/23/24 15:12	75-27-4	
Bromoform	**<155**	ug/kg	176	155	1	05/22/24 12:30	05/23/24 15:12	75-25-2	
Chlorobenzene	**<4.2**	ug/kg	35.1	4.2	1	05/22/24 12:30	05/23/24 15:12	108-90-7	
Chloroform	**<25.1**	ug/kg	176	25.1	1	05/22/24 12:30	05/23/24 15:12	67-66-3	
Chloromethane	**<13.3**	ug/kg	35.1	13.3	1	05/22/24 12:30	05/23/24 15:12	74-87-3	L2
Dibromochloromethane	**<120**	ug/kg	176	120	1	05/22/24 12:30	05/23/24 15:12	124-48-1	
Dichlorofluoromethane	**<9.9**	ug/kg	35.1	9.9	1	05/22/24 12:30	05/23/24 15:12	75-43-4	
Methyl-tert-butyl ether	**<10.3**	ug/kg	35.1	10.3	1	05/22/24 12:30	05/23/24 15:12	1634-04-4	
Methylene Chloride	**<9.8**	ug/kg	35.1	9.8	1	05/22/24 12:30	05/23/24 15:12	75-09-2	
Tetrachloroethene	**<13.6**	ug/kg	35.1	13.6	1	05/22/24 12:30	05/23/24 15:12	127-18-4	
Toluene	**<8.9**	ug/kg	35.1	8.9	1	05/22/24 12:30	05/23/24 15:12	108-88-3	
Trichloroethene	**<13.1**	ug/kg	35.1	13.1	1	05/22/24 12:30	05/23/24 15:12	79-01-6	
Trichlorofluoromethane	**<10.2**	ug/kg	35.1	10.2	1	05/22/24 12:30	05/23/24 15:12	75-69-4	
m&p-Xylene	**<14.8**	ug/kg	70.2	14.8	1	05/22/24 12:30	05/23/24 15:12	179601-23-1	
trans-1,2-Dichloroethene	**<7.7**	ug/kg	35.1	7.7	1	05/22/24 12:30	05/23/24 15:12	156-60-5	
Surrogates									
Toluene-d8 (S)	105	%	60-140		1	05/22/24 12:30	05/23/24 15:12	2037-26-5	
4-Bromofluorobenzene (S)	105	%	66-143		1	05/22/24 12:30	05/23/24 15:12	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	60-140		1	05/22/24 12:30	05/23/24 15:12	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-108_20240515 **Lab ID: 40278528009** Collected: 05/15/24 10:32 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.6**	ug/kg	37.6	9.6	1	05/22/24 12:30	05/23/24 15:31	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.3**	ug/kg	37.6	12.3	1	05/22/24 12:30	05/23/24 15:31	76-13-1	
1,1-Dichloroethene	**<12.5**	ug/kg	37.6	12.5	1	05/22/24 12:30	05/23/24 15:31	75-35-4	
1,2-Dichloroethane	**<8.6**	ug/kg	37.6	8.6	1	05/22/24 12:30	05/23/24 15:31	107-06-2	
2-Butanone (MEK)	**<119**	ug/kg	939	119	1	05/22/24 12:30	05/23/24 15:31	78-93-3	
2-Hexanone	**<373**	ug/kg	939	373	1	05/22/24 12:30	05/23/24 15:31	591-78-6	
2-Propanol	**<1200**	ug/kg	3760	1200	1	05/22/24 12:30	05/23/24 15:31	67-63-0	
Acetone	**<229**	ug/kg	939	229	1	05/22/24 12:30	05/23/24 15:31	67-64-1	
Benzene	**<8.9**	ug/kg	15.0	8.9	1	05/22/24 12:30	05/23/24 15:31	71-43-2	
Bromodichloromethane	**<8.9**	ug/kg	37.6	8.9	1	05/22/24 12:30	05/23/24 15:31	75-27-4	
Bromoform	**<165**	ug/kg	188	165	1	05/22/24 12:30	05/23/24 15:31	75-25-2	
Chlorobenzene	**<4.5**	ug/kg	37.6	4.5	1	05/22/24 12:30	05/23/24 15:31	108-90-7	
Chloroform	**<26.9**	ug/kg	188	26.9	1	05/22/24 12:30	05/23/24 15:31	67-66-3	
Chloromethane	**<14.3**	ug/kg	37.6	14.3	1	05/22/24 12:30	05/23/24 15:31	74-87-3	L2
Dibromochloromethane	**<128**	ug/kg	188	128	1	05/22/24 12:30	05/23/24 15:31	124-48-1	
Dichlorofluoromethane	**<10.6**	ug/kg	37.6	10.6	1	05/22/24 12:30	05/23/24 15:31	75-43-4	
Methyl-tert-butyl ether	**<11.0**	ug/kg	37.6	11.0	1	05/22/24 12:30	05/23/24 15:31	1634-04-4	
Methylene Chloride	**<10.4**	ug/kg	37.6	10.4	1	05/22/24 12:30	05/23/24 15:31	75-09-2	
Tetrachloroethene	**<14.6**	ug/kg	37.6	14.6	1	05/22/24 12:30	05/23/24 15:31	127-18-4	
Toluene	**<9.5**	ug/kg	37.6	9.5	1	05/22/24 12:30	05/23/24 15:31	108-88-3	
Trichloroethene	**<14.1**	ug/kg	37.6	14.1	1	05/22/24 12:30	05/23/24 15:31	79-01-6	
Trichlorofluoromethane	**<10.9**	ug/kg	37.6	10.9	1	05/22/24 12:30	05/23/24 15:31	75-69-4	
m&p-Xylene	**<15.9**	ug/kg	75.2	15.9	1	05/22/24 12:30	05/23/24 15:31	179601-23-1	
trans-1,2-Dichloroethene	**<8.2**	ug/kg	37.6	8.2	1	05/22/24 12:30	05/23/24 15:31	156-60-5	
Surrogates									
Toluene-d8 (S)	114	%	60-140		1	05/22/24 12:30	05/23/24 15:31	2037-26-5	
4-Bromofluorobenzene (S)	112	%	66-143		1	05/22/24 12:30	05/23/24 15:31	460-00-4	
1,2-Dichlorobenzene-d4 (S)	114	%	60-140		1	05/22/24 12:30	05/23/24 15:31	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-113.3_20240515 **Lab ID: 40278528010** Collected: 05/15/24 10:34 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.3**	ug/kg	40.2	10.3	1	05/22/24 12:30	05/23/24 15:51	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<13.1**	ug/kg	40.2	13.1	1	05/22/24 12:30	05/23/24 15:51	76-13-1	
1,1-Dichloroethene	**<13.3**	ug/kg	40.2	13.3	1	05/22/24 12:30	05/23/24 15:51	75-35-4	
1,2-Dichloroethane	**<9.2**	ug/kg	40.2	9.2	1	05/22/24 12:30	05/23/24 15:51	107-06-2	
2-Butanone (MEK)	**<127**	ug/kg	1000	127	1	05/22/24 12:30	05/23/24 15:51	78-93-3	
2-Hexanone	**<399**	ug/kg	1000	399	1	05/22/24 12:30	05/23/24 15:51	591-78-6	
2-Propanol	**<1280**	ug/kg	4020	1280	1	05/22/24 12:30	05/23/24 15:51	67-63-0	
Acetone	**<244**	ug/kg	1000	244	1	05/22/24 12:30	05/23/24 15:51	67-64-1	
Benzene	**<9.6**	ug/kg	16.1	9.6	1	05/22/24 12:30	05/23/24 15:51	71-43-2	
Bromodichloromethane	**<9.6**	ug/kg	40.2	9.6	1	05/22/24 12:30	05/23/24 15:51	75-27-4	
Bromoform	**<177**	ug/kg	201	177	1	05/22/24 12:30	05/23/24 15:51	75-25-2	
Chlorobenzene	**<4.8**	ug/kg	40.2	4.8	1	05/22/24 12:30	05/23/24 15:51	108-90-7	
Chloroform	**<28.8**	ug/kg	201	28.8	1	05/22/24 12:30	05/23/24 15:51	67-66-3	
Chloromethane	**<15.3**	ug/kg	40.2	15.3	1	05/22/24 12:30	05/23/24 15:51	74-87-3	L2
Dibromochloromethane	**<137**	ug/kg	201	137	1	05/22/24 12:30	05/23/24 15:51	124-48-1	
Dichlorofluoromethane	**<11.3**	ug/kg	40.2	11.3	1	05/22/24 12:30	05/23/24 15:51	75-43-4	
Methyl-tert-butyl ether	**<11.8**	ug/kg	40.2	11.8	1	05/22/24 12:30	05/23/24 15:51	1634-04-4	
Methylene Chloride	**<11.2**	ug/kg	40.2	11.2	1	05/22/24 12:30	05/23/24 15:51	75-09-2	
Tetrachloroethene	**<15.6**	ug/kg	40.2	15.6	1	05/22/24 12:30	05/23/24 15:51	127-18-4	
Toluene	**<10.1**	ug/kg	40.2	10.1	1	05/22/24 12:30	05/23/24 15:51	108-88-3	
Trichloroethene	**<15.0**	ug/kg	40.2	15.0	1	05/22/24 12:30	05/23/24 15:51	79-01-6	
Trichlorofluoromethane	**<11.6**	ug/kg	40.2	11.6	1	05/22/24 12:30	05/23/24 15:51	75-69-4	
m&p-Xylene	**<16.9**	ug/kg	80.3	16.9	1	05/22/24 12:30	05/23/24 15:51	179601-23-1	
trans-1,2-Dichloroethene	**<8.8**	ug/kg	40.2	8.8	1	05/22/24 12:30	05/23/24 15:51	156-60-5	
Surrogates									
Toluene-d8 (S)	113	%	60-140		1	05/22/24 12:30	05/23/24 15:51	2037-26-5	
4-Bromofluorobenzene (S)	110	%	66-143		1	05/22/24 12:30	05/23/24 15:51	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	60-140		1	05/22/24 12:30	05/23/24 15:51	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-112.9_20240515 **Lab ID: 40278528011** Collected: 05/15/24 11:03 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.6**	ug/kg	33.5	8.6	1	05/22/24 12:30	05/23/24 16:11	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.9**	ug/kg	33.5	10.9	1	05/22/24 12:30	05/23/24 16:11	76-13-1	
1,1-Dichloroethene	**<11.1**	ug/kg	33.5	11.1	1	05/22/24 12:30	05/23/24 16:11	75-35-4	
1,2-Dichloroethane	**<7.7**	ug/kg	33.5	7.7	1	05/22/24 12:30	05/23/24 16:11	107-06-2	
2-Butanone (MEK)	**<106**	ug/kg	838	106	1	05/22/24 12:30	05/23/24 16:11	78-93-3	
2-Hexanone	**<333**	ug/kg	838	333	1	05/22/24 12:30	05/23/24 16:11	591-78-6	
2-Propanol	**<1070**	ug/kg	3350	1070	1	05/22/24 12:30	05/23/24 16:11	67-63-0	
Acetone	**<204**	ug/kg	838	204	1	05/22/24 12:30	05/23/24 16:11	67-64-1	
Benzene	**<8.0**	ug/kg	13.4	8.0	1	05/22/24 12:30	05/23/24 16:11	71-43-2	
Bromodichloromethane	**<8.0**	ug/kg	33.5	8.0	1	05/22/24 12:30	05/23/24 16:11	75-27-4	
Bromoform	**<147**	ug/kg	168	147	1	05/22/24 12:30	05/23/24 16:11	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.5	4.0	1	05/22/24 12:30	05/23/24 16:11	108-90-7	
Chloroform	**<24.0**	ug/kg	168	24.0	1	05/22/24 12:30	05/23/24 16:11	67-66-3	
Chloromethane	**<12.7**	ug/kg	33.5	12.7	1	05/22/24 12:30	05/23/24 16:11	74-87-3	L2
Dibromochloromethane	**<115**	ug/kg	168	115	1	05/22/24 12:30	05/23/24 16:11	124-48-1	
Dichlorofluoromethane	**<9.4**	ug/kg	33.5	9.4	1	05/22/24 12:30	05/23/24 16:11	75-43-4	
Methyl-tert-butyl ether	**<9.8**	ug/kg	33.5	9.8	1	05/22/24 12:30	05/23/24 16:11	1634-04-4	
Methylene Chloride	**<9.3**	ug/kg	33.5	9.3	1	05/22/24 12:30	05/23/24 16:11	75-09-2	
Tetrachloroethene	**<13.0**	ug/kg	33.5	13.0	1	05/22/24 12:30	05/23/24 16:11	127-18-4	
Toluene	**<8.4**	ug/kg	33.5	8.4	1	05/22/24 12:30	05/23/24 16:11	108-88-3	
Trichloroethene	**<12.5**	ug/kg	33.5	12.5	1	05/22/24 12:30	05/23/24 16:11	79-01-6	
Trichlorofluoromethane	**<9.7**	ug/kg	33.5	9.7	1	05/22/24 12:30	05/23/24 16:11	75-69-4	
m&p-Xylene	**<14.1**	ug/kg	67.0	14.1	1	05/22/24 12:30	05/23/24 16:11	179601-23-1	
trans-1,2-Dichloroethene	**<7.3**	ug/kg	33.5	7.3	1	05/22/24 12:30	05/23/24 16:11	156-60-5	
Surrogates									
Toluene-d8 (S)	121	%	60-140		1	05/22/24 12:30	05/23/24 16:11	2037-26-5	
4-Bromofluorobenzene (S)	112	%	66-143		1	05/22/24 12:30	05/23/24 16:11	460-00-4	
1,2-Dichlorobenzene-d4 (S)	116	%	60-140		1	05/22/24 12:30	05/23/24 16:11	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-114.95_20240515 **Lab ID: 40278528012** Collected: 05/15/24 11:05 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.4**	ug/kg	40.7	10.4	1	05/22/24 12:30	05/23/24 16:30	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<13.3**	ug/kg	40.7	13.3	1	05/22/24 12:30	05/23/24 16:30	76-13-1	
1,1-Dichloroethene	**<13.5**	ug/kg	40.7	13.5	1	05/22/24 12:30	05/23/24 16:30	75-35-4	
1,2-Dichloroethane	**<9.4**	ug/kg	40.7	9.4	1	05/22/24 12:30	05/23/24 16:30	107-06-2	
2-Butanone (MEK)	**<129**	ug/kg	1020	129	1	05/22/24 12:30	05/23/24 16:30	78-93-3	
2-Hexanone	**<404**	ug/kg	1020	404	1	05/22/24 12:30	05/23/24 16:30	591-78-6	
2-Propanol	**<1300**	ug/kg	4070	1300	1	05/22/24 12:30	05/23/24 16:30	67-63-0	
Acetone	**<248**	ug/kg	1020	248	1	05/22/24 12:30	05/23/24 16:30	67-64-1	
Benzene	**<9.7**	ug/kg	16.3	9.7	1	05/22/24 12:30	05/23/24 16:30	71-43-2	
Bromodichloromethane	**<9.7**	ug/kg	40.7	9.7	1	05/22/24 12:30	05/23/24 16:30	75-27-4	
Bromoform	**<179**	ug/kg	204	179	1	05/22/24 12:30	05/23/24 16:30	75-25-2	
Chlorobenzene	**<4.9**	ug/kg	40.7	4.9	1	05/22/24 12:30	05/23/24 16:30	108-90-7	
Chloroform	**<29.1**	ug/kg	204	29.1	1	05/22/24 12:30	05/23/24 16:30	67-66-3	
Chloromethane	**<15.5**	ug/kg	40.7	15.5	1	05/22/24 12:30	05/23/24 16:30	74-87-3	L2
Dibromochloromethane	**<139**	ug/kg	204	139	1	05/22/24 12:30	05/23/24 16:30	124-48-1	
Dichlorofluoromethane	**<11.5**	ug/kg	40.7	11.5	1	05/22/24 12:30	05/23/24 16:30	75-43-4	
Methyl-tert-butyl ether	**<12.0**	ug/kg	40.7	12.0	1	05/22/24 12:30	05/23/24 16:30	1634-04-4	
Methylene Chloride	**<11.3**	ug/kg	40.7	11.3	1	05/22/24 12:30	05/23/24 16:30	75-09-2	
Tetrachloroethene	**<15.8**	ug/kg	40.7	15.8	1	05/22/24 12:30	05/23/24 16:30	127-18-4	
Toluene	**<10.3**	ug/kg	40.7	10.3	1	05/22/24 12:30	05/23/24 16:30	108-88-3	
Trichloroethene	**<15.2**	ug/kg	40.7	15.2	1	05/22/24 12:30	05/23/24 16:30	79-01-6	
Trichlorofluoromethane	**<11.8**	ug/kg	40.7	11.8	1	05/22/24 12:30	05/23/24 16:30	75-69-4	
m&p-Xylene	**<17.2**	ug/kg	81.4	17.2	1	05/22/24 12:30	05/23/24 16:30	179601-23-1	
trans-1,2-Dichloroethene	**<8.9**	ug/kg	40.7	8.9	1	05/22/24 12:30	05/23/24 16:30	156-60-5	
Surrogates									
Toluene-d8 (S)	114	%	60-140		1	05/22/24 12:30	05/23/24 16:30	2037-26-5	
4-Bromofluorobenzene (S)	111	%	66-143		1	05/22/24 12:30	05/23/24 16:30	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	60-140		1	05/22/24 12:30	05/23/24 16:30	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-117.4_20240515 **Lab ID: 40278528013** Collected: 05/15/24 11:45 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.2**	ug/kg	28.0	7.2	1	05/22/24 12:30	05/23/24 16:50	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<9.1**	ug/kg	28.0	9.1	1	05/22/24 12:30	05/23/24 16:50	76-13-1	
1,1-Dichloroethene	**<9.3**	ug/kg	28.0	9.3	1	05/22/24 12:30	05/23/24 16:50	75-35-4	
1,2-Dichloroethane	**<6.4**	ug/kg	28.0	6.4	1	05/22/24 12:30	05/23/24 16:50	107-06-2	
2-Butanone (MEK)	**<88.6**	ug/kg	701	88.6	1	05/22/24 12:30	05/23/24 16:50	78-93-3	
2-Hexanone	**<278**	ug/kg	701	278	1	05/22/24 12:30	05/23/24 16:50	591-78-6	
2-Propanol	**<893**	ug/kg	2800	893	1	05/22/24 12:30	05/23/24 16:50	67-63-0	
Acetone	**<171**	ug/kg	701	171	1	05/22/24 12:30	05/23/24 16:50	67-64-1	
Benzene	**<6.7**	ug/kg	11.2	6.7	1	05/22/24 12:30	05/23/24 16:50	71-43-2	
Bromodichloromethane	**<6.7**	ug/kg	28.0	6.7	1	05/22/24 12:30	05/23/24 16:50	75-27-4	
Bromoform	**<123**	ug/kg	140	123	1	05/22/24 12:30	05/23/24 16:50	75-25-2	
Chlorobenzene	**<3.4**	ug/kg	28.0	3.4	1	05/22/24 12:30	05/23/24 16:50	108-90-7	
Chloroform	**<20.1**	ug/kg	140	20.1	1	05/22/24 12:30	05/23/24 16:50	67-66-3	
Chloromethane	**<10.7**	ug/kg	28.0	10.7	1	05/22/24 12:30	05/23/24 16:50	74-87-3	L2
Dibromochloromethane	**<95.8**	ug/kg	140	95.8	1	05/22/24 12:30	05/23/24 16:50	124-48-1	
Dichlorofluoromethane	**<7.9**	ug/kg	28.0	7.9	1	05/22/24 12:30	05/23/24 16:50	75-43-4	
Methyl-tert-butyl ether	**<8.2**	ug/kg	28.0	8.2	1	05/22/24 12:30	05/23/24 16:50	1634-04-4	
Methylene Chloride	**<7.8**	ug/kg	28.0	7.8	1	05/22/24 12:30	05/23/24 16:50	75-09-2	
Tetrachloroethene	**<10.9**	ug/kg	28.0	10.9	1	05/22/24 12:30	05/23/24 16:50	127-18-4	
Toluene	**<7.1**	ug/kg	28.0	7.1	1	05/22/24 12:30	05/23/24 16:50	108-88-3	
Trichloroethene	**<10.5**	ug/kg	28.0	10.5	1	05/22/24 12:30	05/23/24 16:50	79-01-6	
Trichlorofluoromethane	**<8.1**	ug/kg	28.0	8.1	1	05/22/24 12:30	05/23/24 16:50	75-69-4	
m&p-Xylene	**<11.8**	ug/kg	56.1	11.8	1	05/22/24 12:30	05/23/24 16:50	179601-23-1	
trans-1,2-Dichloroethene	**<6.1**	ug/kg	28.0	6.1	1	05/22/24 12:30	05/23/24 16:50	156-60-5	
Surrogates									
Toluene-d8 (S)	99	%	60-140		1	05/22/24 12:30	05/23/24 16:50	2037-26-5	
4-Bromofluorobenzene (S)	91	%	66-143		1	05/22/24 12:30	05/23/24 16:50	460-00-4	
1,2-Dichlorobenzene-d4 (S)	93	%	60-140		1	05/22/24 12:30	05/23/24 16:50	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-119.3_20240515 **Lab ID: 40278528014** Collected: 05/15/24 11:46 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.5**	ug/kg	33.3	8.5	1	05/22/24 12:30	05/23/24 17:09	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.9**	ug/kg	33.3	10.9	1	05/22/24 12:30	05/23/24 17:09	76-13-1	
1,1-Dichloroethene	**<11.1**	ug/kg	33.3	11.1	1	05/22/24 12:30	05/23/24 17:09	75-35-4	
1,2-Dichloroethane	**<7.7**	ug/kg	33.3	7.7	1	05/22/24 12:30	05/23/24 17:09	107-06-2	
2-Butanone (MEK)	**<105**	ug/kg	832	105	1	05/22/24 12:30	05/23/24 17:09	78-93-3	
2-Hexanone	**<330**	ug/kg	832	330	1	05/22/24 12:30	05/23/24 17:09	591-78-6	
2-Propanol	**<1060**	ug/kg	3330	1060	1	05/22/24 12:30	05/23/24 17:09	67-63-0	
Acetone	**<203**	ug/kg	832	203	1	05/22/24 12:30	05/23/24 17:09	67-64-1	
Benzene	**<7.9**	ug/kg	13.3	7.9	1	05/22/24 12:30	05/23/24 17:09	71-43-2	
Bromodichloromethane	**<7.9**	ug/kg	33.3	7.9	1	05/22/24 12:30	05/23/24 17:09	75-27-4	
Bromoform	**<146**	ug/kg	166	146	1	05/22/24 12:30	05/23/24 17:09	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.3	4.0	1	05/22/24 12:30	05/23/24 17:09	108-90-7	
Chloroform	**<23.8**	ug/kg	166	23.8	1	05/22/24 12:30	05/23/24 17:09	67-66-3	
Chloromethane	**<12.6**	ug/kg	33.3	12.6	1	05/22/24 12:30	05/23/24 17:09	74-87-3	L2
Dibromochloromethane	**<114**	ug/kg	166	114	1	05/22/24 12:30	05/23/24 17:09	124-48-1	
Dichlorofluoromethane	**<9.4**	ug/kg	33.3	9.4	1	05/22/24 12:30	05/23/24 17:09	75-43-4	
Methyl-tert-butyl ether	**<9.8**	ug/kg	33.3	9.8	1	05/22/24 12:30	05/23/24 17:09	1634-04-4	
Methylene Chloride	**<9.3**	ug/kg	33.3	9.3	1	05/22/24 12:30	05/23/24 17:09	75-09-2	
Tetrachloroethene	**<12.9**	ug/kg	33.3	12.9	1	05/22/24 12:30	05/23/24 17:09	127-18-4	
Toluene	**<8.4**	ug/kg	33.3	8.4	1	05/22/24 12:30	05/23/24 17:09	108-88-3	
Trichloroethene	**<12.5**	ug/kg	33.3	12.5	1	05/22/24 12:30	05/23/24 17:09	79-01-6	
Trichlorofluoromethane	**<9.7**	ug/kg	33.3	9.7	1	05/22/24 12:30	05/23/24 17:09	75-69-4	
m&p-Xylene	**<14.0**	ug/kg	66.6	14.0	1	05/22/24 12:30	05/23/24 17:09	179601-23-1	
trans-1,2-Dichloroethene	**<7.3**	ug/kg	33.3	7.3	1	05/22/24 12:30	05/23/24 17:09	156-60-5	
Surrogates									
Toluene-d8 (S)	102	%	60-140		1	05/22/24 12:30	05/23/24 17:09	2037-26-5	
4-Bromofluorobenzene (S)	103	%	66-143		1	05/22/24 12:30	05/23/24 17:09	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	60-140		1	05/22/24 12:30	05/23/24 17:09	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-120.55_20240515 **Lab ID: 40278528015** Collected: 05/15/24 11:47 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.8**	ug/kg	38.2	9.8	1	05/22/24 12:30	05/23/24 17:29	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.4**	ug/kg	38.2	12.4	1	05/22/24 12:30	05/23/24 17:29	76-13-1	
1,1-Dichloroethene	**<12.7**	ug/kg	38.2	12.7	1	05/22/24 12:30	05/23/24 17:29	75-35-4	
1,2-Dichloroethane	**<8.8**	ug/kg	38.2	8.8	1	05/22/24 12:30	05/23/24 17:29	107-06-2	
2-Butanone (MEK)	**<121**	ug/kg	954	121	1	05/22/24 12:30	05/23/24 17:29	78-93-3	
2-Hexanone	**<379**	ug/kg	954	379	1	05/22/24 12:30	05/23/24 17:29	591-78-6	
2-Propanol	**<1220**	ug/kg	3820	1220	1	05/22/24 12:30	05/23/24 17:29	67-63-0	
Acetone	**<232**	ug/kg	954	232	1	05/22/24 12:30	05/23/24 17:29	67-64-1	
Benzene	**<9.1**	ug/kg	15.3	9.1	1	05/22/24 12:30	05/23/24 17:29	71-43-2	
Bromodichloromethane	**<9.1**	ug/kg	38.2	9.1	1	05/22/24 12:30	05/23/24 17:29	75-27-4	
Bromoform	**<168**	ug/kg	191	168	1	05/22/24 12:30	05/23/24 17:29	75-25-2	
Chlorobenzene	**<4.6**	ug/kg	38.2	4.6	1	05/22/24 12:30	05/23/24 17:29	108-90-7	
Chloroform	**<27.3**	ug/kg	191	27.3	1	05/22/24 12:30	05/23/24 17:29	67-66-3	
Chloromethane	**<14.5**	ug/kg	38.2	14.5	1	05/22/24 12:30	05/23/24 17:29	74-87-3	L2
Dibromochloromethane	**<130**	ug/kg	191	130	1	05/22/24 12:30	05/23/24 17:29	124-48-1	
Dichlorofluoromethane	**<10.8**	ug/kg	38.2	10.8	1	05/22/24 12:30	05/23/24 17:29	75-43-4	
Methyl-tert-butyl ether	**<11.2**	ug/kg	38.2	11.2	1	05/22/24 12:30	05/23/24 17:29	1634-04-4	
Methylene Chloride	**<10.6**	ug/kg	38.2	10.6	1	05/22/24 12:30	05/23/24 17:29	75-09-2	
Tetrachloroethene	**<14.8**	ug/kg	38.2	14.8	1	05/22/24 12:30	05/23/24 17:29	127-18-4	
Toluene	**<9.6**	ug/kg	38.2	9.6	1	05/22/24 12:30	05/23/24 17:29	108-88-3	
Trichloroethene	**<14.3**	ug/kg	38.2	14.3	1	05/22/24 12:30	05/23/24 17:29	79-01-6	
Trichlorofluoromethane	**<11.1**	ug/kg	38.2	11.1	1	05/22/24 12:30	05/23/24 17:29	75-69-4	
m&p-Xylene	**<16.1**	ug/kg	76.3	16.1	1	05/22/24 12:30	05/23/24 17:29	179601-23-1	
trans-1,2-Dichloroethene	**<8.3**	ug/kg	38.2	8.3	1	05/22/24 12:30	05/23/24 17:29	156-60-5	
Surrogates									
Toluene-d8 (S)	112	%	60-140		1	05/22/24 12:30	05/23/24 17:29	2037-26-5	
4-Bromofluorobenzene (S)	107	%	66-143		1	05/22/24 12:30	05/23/24 17:29	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	60-140		1	05/22/24 12:30	05/23/24 17:29	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-124_20240515 **Lab ID: 40278528016** Collected: 05/15/24 12:11 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.9**	ug/kg	34.8	8.9	1	05/22/24 12:30	05/23/24 17:48	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.4**	ug/kg	34.8	11.4	1	05/22/24 12:30	05/23/24 17:48	76-13-1	
1,1-Dichloroethene	**<11.6**	ug/kg	34.8	11.6	1	05/22/24 12:30	05/23/24 17:48	75-35-4	
1,2-Dichloroethane	**<8.0**	ug/kg	34.8	8.0	1	05/22/24 12:30	05/23/24 17:48	107-06-2	
2-Butanone (MEK)	**<110**	ug/kg	871	110	1	05/22/24 12:30	05/23/24 17:48	78-93-3	
2-Hexanone	**<346**	ug/kg	871	346	1	05/22/24 12:30	05/23/24 17:48	591-78-6	
2-Propanol	**<1110**	ug/kg	3480	1110	1	05/22/24 12:30	05/23/24 17:48	67-63-0	
Acetone	**<212**	ug/kg	871	212	1	05/22/24 12:30	05/23/24 17:48	67-64-1	
Benzene	**<8.3**	ug/kg	13.9	8.3	1	05/22/24 12:30	05/23/24 17:48	71-43-2	
Bromodichloromethane	**<8.3**	ug/kg	34.8	8.3	1	05/22/24 12:30	05/23/24 17:48	75-27-4	
Bromoform	**<153**	ug/kg	174	153	1	05/22/24 12:30	05/23/24 17:48	75-25-2	
Chlorobenzene	**<4.2**	ug/kg	34.8	4.2	1	05/22/24 12:30	05/23/24 17:48	108-90-7	
Chloroform	**<24.9**	ug/kg	174	24.9	1	05/22/24 12:30	05/23/24 17:48	67-66-3	
Chloromethane	**<13.2**	ug/kg	34.8	13.2	1	05/22/24 12:30	05/23/24 17:48	74-87-3	L2
Dibromochloromethane	**<119**	ug/kg	174	119	1	05/22/24 12:30	05/23/24 17:48	124-48-1	
Dichlorofluoromethane	**<9.8**	ug/kg	34.8	9.8	1	05/22/24 12:30	05/23/24 17:48	75-43-4	
Methyl-tert-butyl ether	**<10.2**	ug/kg	34.8	10.2	1	05/22/24 12:30	05/23/24 17:48	1634-04-4	
Methylene Chloride	**<9.7**	ug/kg	34.8	9.7	1	05/22/24 12:30	05/23/24 17:48	75-09-2	
Tetrachloroethene	**<13.5**	ug/kg	34.8	13.5	1	05/22/24 12:30	05/23/24 17:48	127-18-4	
Toluene	**<8.8**	ug/kg	34.8	8.8	1	05/22/24 12:30	05/23/24 17:48	108-88-3	
Trichloroethene	**<13.0**	ug/kg	34.8	13.0	1	05/22/24 12:30	05/23/24 17:48	79-01-6	
Trichlorofluoromethane	**<10.1**	ug/kg	34.8	10.1	1	05/22/24 12:30	05/23/24 17:48	75-69-4	
m&p-Xylene	**<14.7**	ug/kg	69.7	14.7	1	05/22/24 12:30	05/23/24 17:48	179601-23-1	
trans-1,2-Dichloroethene	**<7.6**	ug/kg	34.8	7.6	1	05/22/24 12:30	05/23/24 17:48	156-60-5	
Surrogates									
Toluene-d8 (S)	107	%	60-140		1	05/22/24 12:30	05/23/24 17:48	2037-26-5	
4-Bromofluorobenzene (S)	103	%	66-143		1	05/22/24 12:30	05/23/24 17:48	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	60-140		1	05/22/24 12:30	05/23/24 17:48	2199-69-1	

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(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-124.7_20240515 **Lab ID: 40278528017** Collected: 05/15/24 12:12 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.4**	ug/kg	28.8	7.4	1	05/22/24 12:30	05/23/24 18:08	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<9.4**	ug/kg	28.8	9.4	1	05/22/24 12:30	05/23/24 18:08	76-13-1	
1,1-Dichloroethene	**<9.6**	ug/kg	28.8	9.6	1	05/22/24 12:30	05/23/24 18:08	75-35-4	
1,2-Dichloroethane	**<6.6**	ug/kg	28.8	6.6	1	05/22/24 12:30	05/23/24 18:08	107-06-2	
2-Butanone (MEK)	**<91.1**	ug/kg	721	91.1	1	05/22/24 12:30	05/23/24 18:08	78-93-3	
2-Hexanone	**<286**	ug/kg	721	286	1	05/22/24 12:30	05/23/24 18:08	591-78-6	
2-Propanol	**<919**	ug/kg	2880	919	1	05/22/24 12:30	05/23/24 18:08	67-63-0	
Acetone	**<175**	ug/kg	721	175	1	05/22/24 12:30	05/23/24 18:08	67-64-1	
Benzene	**<6.9**	ug/kg	11.5	6.9	1	05/22/24 12:30	05/23/24 18:08	71-43-2	
Bromodichloromethane	**<6.9**	ug/kg	28.8	6.9	1	05/22/24 12:30	05/23/24 18:08	75-27-4	
Bromoform	**<127**	ug/kg	144	127	1	05/22/24 12:30	05/23/24 18:08	75-25-2	
Chlorobenzene	**<3.5**	ug/kg	28.8	3.5	1	05/22/24 12:30	05/23/24 18:08	108-90-7	
Chloroform	**<20.6**	ug/kg	144	20.6	1	05/22/24 12:30	05/23/24 18:08	67-66-3	
Chloromethane	**<11.0**	ug/kg	28.8	11.0	1	05/22/24 12:30	05/23/24 18:08	74-87-3	L2
Dibromochloromethane	**<98.6**	ug/kg	144	98.6	1	05/22/24 12:30	05/23/24 18:08	124-48-1	
Dichlorofluoromethane	**<8.1**	ug/kg	28.8	8.1	1	05/22/24 12:30	05/23/24 18:08	75-43-4	
Methyl-tert-butyl ether	**<8.5**	ug/kg	28.8	8.5	1	05/22/24 12:30	05/23/24 18:08	1634-04-4	
Methylene Chloride	**<8.0**	ug/kg	28.8	8.0	1	05/22/24 12:30	05/23/24 18:08	75-09-2	
Tetrachloroethene	**<11.2**	ug/kg	28.8	11.2	1	05/22/24 12:30	05/23/24 18:08	127-18-4	
Toluene	**<7.3**	ug/kg	28.8	7.3	1	05/22/24 12:30	05/23/24 18:08	108-88-3	
Trichloroethene	**<10.8**	ug/kg	28.8	10.8	1	05/22/24 12:30	05/23/24 18:08	79-01-6	
Trichlorofluoromethane	**<8.4**	ug/kg	28.8	8.4	1	05/22/24 12:30	05/23/24 18:08	75-69-4	
m&p-Xylene	**<12.2**	ug/kg	57.7	12.2	1	05/22/24 12:30	05/23/24 18:08	179601-23-1	
trans-1,2-Dichloroethene	**<6.3**	ug/kg	28.8	6.3	1	05/22/24 12:30	05/23/24 18:08	156-60-5	
Surrogates									
Toluene-d8 (S)	109	%	60-140		1	05/22/24 12:30	05/23/24 18:08	2037-26-5	
4-Bromofluorobenzene (S)	106	%	66-143		1	05/22/24 12:30	05/23/24 18:08	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	60-140		1	05/22/24 12:30	05/23/24 18:08	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-126_20240515 **Lab ID: 40278528018** Collected: 05/15/24 12:13 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.6**	ug/kg	37.4	9.6	1	05/22/24 12:30	05/23/24 18:27	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.2**	ug/kg	37.4	12.2	1	05/22/24 12:30	05/23/24 18:27	76-13-1	
1,1-Dichloroethene	**<12.4**	ug/kg	37.4	12.4	1	05/22/24 12:30	05/23/24 18:27	75-35-4	
1,2-Dichloroethane	**<8.6**	ug/kg	37.4	8.6	1	05/22/24 12:30	05/23/24 18:27	107-06-2	
2-Butanone (MEK)	**<118**	ug/kg	934	118	1	05/22/24 12:30	05/23/24 18:27	78-93-3	
2-Hexanone	**<371**	ug/kg	934	371	1	05/22/24 12:30	05/23/24 18:27	591-78-6	
2-Propanol	**<1190**	ug/kg	3740	1190	1	05/22/24 12:30	05/23/24 18:27	67-63-0	
Acetone	**<227**	ug/kg	934	227	1	05/22/24 12:30	05/23/24 18:27	67-64-1	
Benzene	**<8.9**	ug/kg	14.9	8.9	1	05/22/24 12:30	05/23/24 18:27	71-43-2	
Bromodichloromethane	**<8.9**	ug/kg	37.4	8.9	1	05/22/24 12:30	05/23/24 18:27	75-27-4	
Bromoform	**<164**	ug/kg	187	164	1	05/22/24 12:30	05/23/24 18:27	75-25-2	
Chlorobenzene	**<4.5**	ug/kg	37.4	4.5	1	05/22/24 12:30	05/23/24 18:27	108-90-7	
Chloroform	**<26.7**	ug/kg	187	26.7	1	05/22/24 12:30	05/23/24 18:27	67-66-3	
Chloromethane	**<14.2**	ug/kg	37.4	14.2	1	05/22/24 12:30	05/23/24 18:27	74-87-3	L2
Dibromochloromethane	**<128**	ug/kg	187	128	1	05/22/24 12:30	05/23/24 18:27	124-48-1	
Dichlorofluoromethane	**<10.5**	ug/kg	37.4	10.5	1	05/22/24 12:30	05/23/24 18:27	75-43-4	
Methyl-tert-butyl ether	**<11.0**	ug/kg	37.4	11.0	1	05/22/24 12:30	05/23/24 18:27	1634-04-4	
Methylene Chloride	**<10.4**	ug/kg	37.4	10.4	1	05/22/24 12:30	05/23/24 18:27	75-09-2	
Tetrachloroethene	**<14.5**	ug/kg	37.4	14.5	1	05/22/24 12:30	05/23/24 18:27	127-18-4	
Toluene	**<9.4**	ug/kg	37.4	9.4	1	05/22/24 12:30	05/23/24 18:27	108-88-3	
Trichloroethene	**<14.0**	ug/kg	37.4	14.0	1	05/22/24 12:30	05/23/24 18:27	79-01-6	
Trichlorofluoromethane	**<10.8**	ug/kg	37.4	10.8	1	05/22/24 12:30	05/23/24 18:27	75-69-4	
m&p-Xylene	**<15.8**	ug/kg	74.7	15.8	1	05/22/24 12:30	05/23/24 18:27	179601-23-1	
trans-1,2-Dichloroethene	**<8.2**	ug/kg	37.4	8.2	1	05/22/24 12:30	05/23/24 18:27	156-60-5	
Surrogates									
Toluene-d8 (S)	106	%	60-140		1	05/22/24 12:30	05/23/24 18:27	2037-26-5	
4-Bromofluorobenzene (S)	104	%	66-143		1	05/22/24 12:30	05/23/24 18:27	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	60-140		1	05/22/24 12:30	05/23/24 18:27	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-128.2_20240515 **Lab ID: 40278528019** Collected: 05/15/24 13:20 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.4**	ug/kg	29.0	7.4	1	05/22/24 12:30	05/23/24 12:36	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<9.4**	ug/kg	29.0	9.4	1	05/22/24 12:30	05/23/24 12:36	76-13-1	
1,1-Dichloroethene	**<9.6**	ug/kg	29.0	9.6	1	05/22/24 12:30	05/23/24 12:36	75-35-4	
1,2-Dichloroethane	**<6.7**	ug/kg	29.0	6.7	1	05/22/24 12:30	05/23/24 12:36	107-06-2	
2-Butanone (MEK)	**<91.5**	ug/kg	724	91.5	1	05/22/24 12:30	05/23/24 12:36	78-93-3	
2-Hexanone	**<288**	ug/kg	724	288	1	05/22/24 12:30	05/23/24 12:36	591-78-6	
2-Propanol	**<923**	ug/kg	2900	923	1	05/22/24 12:30	05/23/24 12:36	67-63-0	
Acetone	**<176**	ug/kg	724	176	1	05/22/24 12:30	05/23/24 12:36	67-64-1	
Benzene	**<6.9**	ug/kg	11.6	6.9	1	05/22/24 12:30	05/23/24 12:36	71-43-2	
Bromodichloromethane	**<6.9**	ug/kg	29.0	6.9	1	05/22/24 12:30	05/23/24 12:36	75-27-4	
Bromoform	**<127**	ug/kg	145	127	1	05/22/24 12:30	05/23/24 12:36	75-25-2	
Chlorobenzene	**<3.5**	ug/kg	29.0	3.5	1	05/22/24 12:30	05/23/24 12:36	108-90-7	
Chloroform	**<20.7**	ug/kg	145	20.7	1	05/22/24 12:30	05/23/24 12:36	67-66-3	
Chloromethane	**<11.0**	ug/kg	29.0	11.0	1	05/22/24 12:30	05/23/24 12:36	74-87-3	L2,M0
Dibromochloromethane	**<99.0**	ug/kg	145	99.0	1	05/22/24 12:30	05/23/24 12:36	124-48-1	
Dichlorofluoromethane	**<8.2**	ug/kg	29.0	8.2	1	05/22/24 12:30	05/23/24 12:36	75-43-4	
Methyl-tert-butyl ether	**<8.5**	ug/kg	29.0	8.5	1	05/22/24 12:30	05/23/24 12:36	1634-04-4	
Methylene Chloride	**<8.1**	ug/kg	29.0	8.1	1	05/22/24 12:30	05/23/24 12:36	75-09-2	
Tetrachloroethene	**<11.2**	ug/kg	29.0	11.2	1	05/22/24 12:30	05/23/24 12:36	127-18-4	
Toluene	**<7.3**	ug/kg	29.0	7.3	1	05/22/24 12:30	05/23/24 12:36	108-88-3	
Trichloroethene	**<10.8**	ug/kg	29.0	10.8	1	05/22/24 12:30	05/23/24 12:36	79-01-6	
Trichlorofluoromethane	**<8.4**	ug/kg	29.0	8.4	1	05/22/24 12:30	05/23/24 12:36	75-69-4	
m&p-Xylene	**<12.2**	ug/kg	57.9	12.2	1	05/22/24 12:30	05/23/24 12:36	179601-23-1	
trans-1,2-Dichloroethene	**<6.3**	ug/kg	29.0	6.3	1	05/22/24 12:30	05/23/24 12:36	156-60-5	
Surrogates									
Toluene-d8 (S)	106	%	60-140		1	05/22/24 12:30	05/23/24 12:36	2037-26-5	
4-Bromofluorobenzene (S)	105	%	66-143		1	05/22/24 12:30	05/23/24 12:36	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	60-140		1	05/22/24 12:30	05/23/24 12:36	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-128.2-DUP_20240515 **Lab ID: 40278528020** Collected: 05/15/24 13:20 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.1**	ug/kg	35.5	9.1	1	05/22/24 12:30	05/23/24 18:47	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.6**	ug/kg	35.5	11.6	1	05/22/24 12:30	05/23/24 18:47	76-13-1	
1,1-Dichloroethene	**<11.8**	ug/kg	35.5	11.8	1	05/22/24 12:30	05/23/24 18:47	75-35-4	
1,2-Dichloroethane	**<8.2**	ug/kg	35.5	8.2	1	05/22/24 12:30	05/23/24 18:47	107-06-2	
2-Butanone (MEK)	**<112**	ug/kg	888	112	1	05/22/24 12:30	05/23/24 18:47	78-93-3	
2-Hexanone	**<353**	ug/kg	888	353	1	05/22/24 12:30	05/23/24 18:47	591-78-6	
2-Propanol	**<1130**	ug/kg	3550	1130	1	05/22/24 12:30	05/23/24 18:47	67-63-0	
Acetone	**<216**	ug/kg	888	216	1	05/22/24 12:30	05/23/24 18:47	67-64-1	
Benzene	**<8.5**	ug/kg	14.2	8.5	1	05/22/24 12:30	05/23/24 18:47	71-43-2	
Bromodichloromethane	**<8.5**	ug/kg	35.5	8.5	1	05/22/24 12:30	05/23/24 18:47	75-27-4	
Bromoform	**<156**	ug/kg	178	156	1	05/22/24 12:30	05/23/24 18:47	75-25-2	
Chlorobenzene	**<4.3**	ug/kg	35.5	4.3	1	05/22/24 12:30	05/23/24 18:47	108-90-7	
Chloroform	**<25.4**	ug/kg	178	25.4	1	05/22/24 12:30	05/23/24 18:47	67-66-3	
Chloromethane	**<13.5**	ug/kg	35.5	13.5	1	05/22/24 12:30	05/23/24 18:47	74-87-3	L2
Dibromochloromethane	**<121**	ug/kg	178	121	1	05/22/24 12:30	05/23/24 18:47	124-48-1	
Dichlorofluoromethane	**<10.0**	ug/kg	35.5	10.0	1	05/22/24 12:30	05/23/24 18:47	75-43-4	
Methyl-tert-butyl ether	**<10.4**	ug/kg	35.5	10.4	1	05/22/24 12:30	05/23/24 18:47	1634-04-4	
Methylene Chloride	**<9.9**	ug/kg	35.5	9.9	1	05/22/24 12:30	05/23/24 18:47	75-09-2	
Tetrachloroethene	**<13.8**	ug/kg	35.5	13.8	1	05/22/24 12:30	05/23/24 18:47	127-18-4	
Toluene	**<9.0**	ug/kg	35.5	9.0	1	05/22/24 12:30	05/23/24 18:47	108-88-3	
Trichloroethene	**<13.3**	ug/kg	35.5	13.3	1	05/22/24 12:30	05/23/24 18:47	79-01-6	
Trichlorofluoromethane	**<10.3**	ug/kg	35.5	10.3	1	05/22/24 12:30	05/23/24 18:47	75-69-4	
m&p-Xylene	**<15.0**	ug/kg	71.1	15.0	1	05/22/24 12:30	05/23/24 18:47	179601-23-1	
trans-1,2-Dichloroethene	**<7.8**	ug/kg	35.5	7.8	1	05/22/24 12:30	05/23/24 18:47	156-60-5	
Surrogates									
Toluene-d8 (S)	105	%	60-140		1	05/22/24 12:30	05/23/24 18:47	2037-26-5	
4-Bromofluorobenzene (S)	103	%	66-143		1	05/22/24 12:30	05/23/24 18:47	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	60-140		1	05/22/24 12:30	05/23/24 18:47	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-129.6_20240515 **Lab ID: 40278528021** Collected: 05/15/24 13:21 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.4**	ug/kg	40.8	10.4	1	05/23/24 07:00	05/24/24 13:50	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<13.3**	ug/kg	40.8	13.3	1	05/23/24 07:00	05/24/24 13:50	76-13-1	
1,1-Dichloroethene	**<13.5**	ug/kg	40.8	13.5	1	05/23/24 07:00	05/24/24 13:50	75-35-4	
1,2-Dichloroethane	**<9.4**	ug/kg	40.8	9.4	1	05/23/24 07:00	05/24/24 13:50	107-06-2	
2-Butanone (MEK)	**<129**	ug/kg	1020	129	1	05/23/24 07:00	05/24/24 13:50	78-93-3	
2-Hexanone	**<405**	ug/kg	1020	405	1	05/23/24 07:00	05/24/24 13:50	591-78-6	
2-Propanol	**<1300**	ug/kg	4080	1300	1	05/23/24 07:00	05/24/24 13:50	67-63-0	
Acetone	**<248**	ug/kg	1020	248	1	05/23/24 07:00	05/24/24 13:50	67-64-1	
Benzene	**<9.7**	ug/kg	16.3	9.7	1	05/23/24 07:00	05/24/24 13:50	71-43-2	
Bromodichloromethane	**<9.7**	ug/kg	40.8	9.7	1	05/23/24 07:00	05/24/24 13:50	75-27-4	
Bromoform	**<180**	ug/kg	204	180	1	05/23/24 07:00	05/24/24 13:50	75-25-2	
Chlorobenzene	**<4.9**	ug/kg	40.8	4.9	1	05/23/24 07:00	05/24/24 13:50	108-90-7	
Chloroform	**<29.2**	ug/kg	204	29.2	1	05/23/24 07:00	05/24/24 13:50	67-66-3	
Chloromethane	**<15.5**	ug/kg	40.8	15.5	1	05/23/24 07:00	05/24/24 13:50	74-87-3	L2
Dibromochloromethane	**<139**	ug/kg	204	139	1	05/23/24 07:00	05/24/24 13:50	124-48-1	
Dichlorofluoromethane	**<11.5**	ug/kg	40.8	11.5	1	05/23/24 07:00	05/24/24 13:50	75-43-4	
Methyl-tert-butyl ether	**<12.0**	ug/kg	40.8	12.0	1	05/23/24 07:00	05/24/24 13:50	1634-04-4	
Methylene Chloride	**<11.3**	ug/kg	40.8	11.3	1	05/23/24 07:00	05/24/24 13:50	75-09-2	
Tetrachloroethene	**<15.8**	ug/kg	40.8	15.8	1	05/23/24 07:00	05/24/24 13:50	127-18-4	
Toluene	**<10.3**	ug/kg	40.8	10.3	1	05/23/24 07:00	05/24/24 13:50	108-88-3	
Trichloroethene	**<15.3**	ug/kg	40.8	15.3	1	05/23/24 07:00	05/24/24 13:50	79-01-6	
Trichlorofluoromethane	**<11.8**	ug/kg	40.8	11.8	1	05/23/24 07:00	05/24/24 13:50	75-69-4	
m&p-Xylene	**<17.2**	ug/kg	81.6	17.2	1	05/23/24 07:00	05/24/24 13:50	179601-23-1	
trans-1,2-Dichloroethene	**<8.9**	ug/kg	40.8	8.9	1	05/23/24 07:00	05/24/24 13:50	156-60-5	
Surrogates									
Toluene-d8 (S)	109	%	60-140		1	05/23/24 07:00	05/24/24 13:50	2037-26-5	
4-Bromofluorobenzene (S)	106	%	66-143		1	05/23/24 07:00	05/24/24 13:50	460-00-4	
1,2-Dichlorobenzene-d4 (S)	111	%	60-140		1	05/23/24 07:00	05/24/24 13:50	2199-69-1	

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(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-134.8_20240515 **Lab ID: 40278528022** Collected: 05/15/24 13:55 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<6.4**	ug/kg	25.1	6.4	1	05/23/24 07:00	05/24/24 14:09	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<8.2**	ug/kg	25.1	8.2	1	05/23/24 07:00	05/24/24 14:09	76-13-1	
1,1-Dichloroethene	**<8.3**	ug/kg	25.1	8.3	1	05/23/24 07:00	05/24/24 14:09	75-35-4	
1,2-Dichloroethane	**<5.8**	ug/kg	25.1	5.8	1	05/23/24 07:00	05/24/24 14:09	107-06-2	
2-Butanone (MEK)	**<79.4**	ug/kg	628	79.4	1	05/23/24 07:00	05/24/24 14:09	78-93-3	
2-Hexanone	**<250**	ug/kg	628	250	1	05/23/24 07:00	05/24/24 14:09	591-78-6	
2-Propanol	**<801**	ug/kg	2510	801	1	05/23/24 07:00	05/24/24 14:09	67-63-0	
Acetone	**<153**	ug/kg	628	153	1	05/23/24 07:00	05/24/24 14:09	67-64-1	
Benzene	**<6.0**	ug/kg	10.1	6.0	1	05/23/24 07:00	05/24/24 14:09	71-43-2	
Bromodichloromethane	**<6.0**	ug/kg	25.1	6.0	1	05/23/24 07:00	05/24/24 14:09	75-27-4	
Bromoform	**<111**	ug/kg	126	111	1	05/23/24 07:00	05/24/24 14:09	75-25-2	
Chlorobenzene	**<3.0**	ug/kg	25.1	3.0	1	05/23/24 07:00	05/24/24 14:09	108-90-7	
Chloroform	**<18.0**	ug/kg	126	18.0	1	05/23/24 07:00	05/24/24 14:09	67-66-3	
Chloromethane	**<9.6**	ug/kg	25.1	9.6	1	05/23/24 07:00	05/24/24 14:09	74-87-3	L2
Dibromochloromethane	**<85.9**	ug/kg	126	85.9	1	05/23/24 07:00	05/24/24 14:09	124-48-1	
Dichlorofluoromethane	**<7.1**	ug/kg	25.1	7.1	1	05/23/24 07:00	05/24/24 14:09	75-43-4	
Methyl-tert-butyl ether	**<7.4**	ug/kg	25.1	7.4	1	05/23/24 07:00	05/24/24 14:09	1634-04-4	
Methylene Chloride	**<7.0**	ug/kg	25.1	7.0	1	05/23/24 07:00	05/24/24 14:09	75-09-2	
Tetrachloroethene	**<9.8**	ug/kg	25.1	9.8	1	05/23/24 07:00	05/24/24 14:09	127-18-4	
Toluene	**<6.3**	ug/kg	25.1	6.3	1	05/23/24 07:00	05/24/24 14:09	108-88-3	
Trichloroethene	**<9.4**	ug/kg	25.1	9.4	1	05/23/24 07:00	05/24/24 14:09	79-01-6	
Trichlorofluoromethane	**<7.3**	ug/kg	25.1	7.3	1	05/23/24 07:00	05/24/24 14:09	75-69-4	
m&p-Xylene	**<10.6**	ug/kg	50.3	10.6	1	05/23/24 07:00	05/24/24 14:09	179601-23-1	
trans-1,2-Dichloroethene	**<5.5**	ug/kg	25.1	5.5	1	05/23/24 07:00	05/24/24 14:09	156-60-5	
Surrogates									
Toluene-d8 (S)	102	%	60-140		1	05/23/24 07:00	05/24/24 14:09	2037-26-5	
4-Bromofluorobenzene (S)	98	%	66-143		1	05/23/24 07:00	05/24/24 14:09	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	60-140		1	05/23/24 07:00	05/24/24 14:09	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-136.5_20240515 **Lab ID: 40278528023** Collected: 05/15/24 13:57 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<6.4**	ug/kg	25.0	6.4	1	05/23/24 07:00	05/24/24 14:29	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<8.1**	ug/kg	25.0	8.1	1	05/23/24 07:00	05/24/24 14:29	76-13-1	
1,1-Dichloroethene	**<8.3**	ug/kg	25.0	8.3	1	05/23/24 07:00	05/24/24 14:29	75-35-4	
1,2-Dichloroethane	**<5.7**	ug/kg	25.0	5.7	1	05/23/24 07:00	05/24/24 14:29	107-06-2	
2-Butanone (MEK)	**<79.0**	ug/kg	625	79.0	1	05/23/24 07:00	05/24/24 14:29	78-93-3	
2-Hexanone	**<248**	ug/kg	625	248	1	05/23/24 07:00	05/24/24 14:29	591-78-6	
2-Propanol	**<796**	ug/kg	2500	796	1	05/23/24 07:00	05/24/24 14:29	67-63-0	
Acetone	**<152**	ug/kg	625	152	1	05/23/24 07:00	05/24/24 14:29	67-64-1	
Benzene	**<5.9**	ug/kg	10	5.9	1	05/23/24 07:00	05/24/24 14:29	71-43-2	
Bromodichloromethane	**<5.9**	ug/kg	25.0	5.9	1	05/23/24 07:00	05/24/24 14:29	75-27-4	
Bromoform	**<110**	ug/kg	125	110	1	05/23/24 07:00	05/24/24 14:29	75-25-2	
Chlorobenzene	**<3.0**	ug/kg	25.0	3.0	1	05/23/24 07:00	05/24/24 14:29	108-90-7	
Chloroform	**<17.9**	ug/kg	125	17.9	1	05/23/24 07:00	05/24/24 14:29	67-66-3	
Chloromethane	**<9.5**	ug/kg	25.0	9.5	1	05/23/24 07:00	05/24/24 14:29	74-87-3	L2
Dibromochloromethane	**<85.4**	ug/kg	125	85.4	1	05/23/24 07:00	05/24/24 14:29	124-48-1	
Dichlorofluoromethane	**<7.0**	ug/kg	25.0	7.0	1	05/23/24 07:00	05/24/24 14:29	75-43-4	
Methyl-tert-butyl ether	**<7.3**	ug/kg	25.0	7.3	1	05/23/24 07:00	05/24/24 14:29	1634-04-4	
Methylene Chloride	**<6.9**	ug/kg	25.0	6.9	1	05/23/24 07:00	05/24/24 14:29	75-09-2	
Tetrachloroethene	**<9.7**	ug/kg	25.0	9.7	1	05/23/24 07:00	05/24/24 14:29	127-18-4	
Toluene	**<6.3**	ug/kg	25.0	6.3	1	05/23/24 07:00	05/24/24 14:29	108-88-3	
Trichloroethene	**<9.3**	ug/kg	25.0	9.3	1	05/23/24 07:00	05/24/24 14:29	79-01-6	
Trichlorofluoromethane	**8.7J**	ug/kg	25.0	7.2	1	05/23/24 07:00	05/24/24 14:29	75-69-4	
m&p-Xylene	**<10.5**	ug/kg	50.0	10.5	1	05/23/24 07:00	05/24/24 14:29	179601-23-1	
trans-1,2-Dichloroethene	**<5.5**	ug/kg	25.0	5.5	1	05/23/24 07:00	05/24/24 14:29	156-60-5	
Surrogates									
Toluene-d8 (S)	100	%	60-140		1	05/23/24 07:00	05/24/24 14:29	2037-26-5	
4-Bromofluorobenzene (S)	99	%	66-143		1	05/23/24 07:00	05/24/24 14:29	460-00-4	
1,2-Dichlorobenzene-d4 (S)	97	%	60-140		1	05/23/24 07:00	05/24/24 14:29	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-139_20240515 **Lab ID: 40278528024** Collected: 05/15/24 14:57 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	05/23/24 07:00	05/24/24 14:48	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	05/23/24 07:00	05/24/24 14:48	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	05/23/24 07:00	05/24/24 14:48	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	05/23/24 07:00	05/24/24 14:48	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	05/23/24 07:00	05/24/24 14:48	78-93-3	
2-Hexanone	**<496**	ug/kg	1250	496	1	05/23/24 07:00	05/24/24 14:48	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	05/23/24 07:00	05/24/24 14:48	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	05/23/24 07:00	05/24/24 14:48	67-64-1	
Benzene	**<11.9**	ug/kg	20.0	11.9	1	05/23/24 07:00	05/24/24 14:48	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	05/23/24 07:00	05/24/24 14:48	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	05/23/24 07:00	05/24/24 14:48	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	05/23/24 07:00	05/24/24 14:48	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	05/23/24 07:00	05/24/24 14:48	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	05/23/24 07:00	05/24/24 14:48	74-87-3	L2
Dibromochloromethane	**<171**	ug/kg	250	171	1	05/23/24 07:00	05/24/24 14:48	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	05/23/24 07:00	05/24/24 14:48	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	05/23/24 07:00	05/24/24 14:48	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	05/23/24 07:00	05/24/24 14:48	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	05/23/24 07:00	05/24/24 14:48	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	05/23/24 07:00	05/24/24 14:48	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	05/23/24 07:00	05/24/24 14:48	79-01-6	
Trichlorofluoromethane	**24.6J**	ug/kg	50.0	14.5	1	05/23/24 07:00	05/24/24 14:48	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	05/23/24 07:00	05/24/24 14:48	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	05/23/24 07:00	05/24/24 14:48	156-60-5	
Surrogates									
Toluene-d8 (S)	108	%	60-140		1	05/23/24 07:00	05/24/24 14:48	2037-26-5	
4-Bromofluorobenzene (S)	100	%	66-143		1	05/23/24 07:00	05/24/24 14:48	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	60-140		1	05/23/24 07:00	05/24/24 14:48	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-139.6_20240515 **Lab ID: 40278528025** Collected: 05/15/24 14:58 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.9**	ug/kg	42.4	10.9	1	05/23/24 07:00	05/24/24 15:08	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<13.8**	ug/kg	42.4	13.8	1	05/23/24 07:00	05/24/24 15:08	76-13-1	
1,1-Dichloroethene	**<14.1**	ug/kg	42.4	14.1	1	05/23/24 07:00	05/24/24 15:08	75-35-4	
1,2-Dichloroethane	**<9.8**	ug/kg	42.4	9.8	1	05/23/24 07:00	05/24/24 15:08	107-06-2	
2-Butanone (MEK)	**<134**	ug/kg	1060	134	1	05/23/24 07:00	05/24/24 15:08	78-93-3	
2-Hexanone	**<421**	ug/kg	1060	421	1	05/23/24 07:00	05/24/24 15:08	591-78-6	
2-Propanol	**<1350**	ug/kg	4240	1350	1	05/23/24 07:00	05/24/24 15:08	67-63-0	
Acetone	**<258**	ug/kg	1060	258	1	05/23/24 07:00	05/24/24 15:08	67-64-1	
Benzene	**<10.1**	ug/kg	17.0	10.1	1	05/23/24 07:00	05/24/24 15:08	71-43-2	
Bromodichloromethane	**<10.1**	ug/kg	42.4	10.1	1	05/23/24 07:00	05/24/24 15:08	75-27-4	
Bromoform	**<187**	ug/kg	212	187	1	05/23/24 07:00	05/24/24 15:08	75-25-2	
Chlorobenzene	**<5.1**	ug/kg	42.4	5.1	1	05/23/24 07:00	05/24/24 15:08	108-90-7	
Chloroform	**<30.4**	ug/kg	212	30.4	1	05/23/24 07:00	05/24/24 15:08	67-66-3	
Chloromethane	**<16.1**	ug/kg	42.4	16.1	1	05/23/24 07:00	05/24/24 15:08	74-87-3	L2
Dibromochloromethane	**<145**	ug/kg	212	145	1	05/23/24 07:00	05/24/24 15:08	124-48-1	
Dichlorofluoromethane	**<12.0**	ug/kg	42.4	12.0	1	05/23/24 07:00	05/24/24 15:08	75-43-4	
Methyl-tert-butyl ether	**<12.5**	ug/kg	42.4	12.5	1	05/23/24 07:00	05/24/24 15:08	1634-04-4	
Methylene Chloride	**<11.8**	ug/kg	42.4	11.8	1	05/23/24 07:00	05/24/24 15:08	75-09-2	
Tetrachloroethene	**<16.5**	ug/kg	42.4	16.5	1	05/23/24 07:00	05/24/24 15:08	127-18-4	
Toluene	**<10.7**	ug/kg	42.4	10.7	1	05/23/24 07:00	05/24/24 15:08	108-88-3	
Trichloroethene	**<15.9**	ug/kg	42.4	15.9	1	05/23/24 07:00	05/24/24 15:08	79-01-6	
Trichlorofluoromethane	**<12.3**	ug/kg	42.4	12.3	1	05/23/24 07:00	05/24/24 15:08	75-69-4	
m&p-Xylene	**<17.9**	ug/kg	84.9	17.9	1	05/23/24 07:00	05/24/24 15:08	179601-23-1	
trans-1,2-Dichloroethene	**<9.3**	ug/kg	42.4	9.3	1	05/23/24 07:00	05/24/24 15:08	156-60-5	
Surrogates									
Toluene-d8 (S)	109	%	60-140		1	05/23/24 07:00	05/24/24 15:08	2037-26-5	
4-Bromofluorobenzene (S)	106	%	66-143		1	05/23/24 07:00	05/24/24 15:08	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	60-140		1	05/23/24 07:00	05/24/24 15:08	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-140.5_20240515 **Lab ID: 40278528026** Collected: 05/15/24 14:59 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.3**	ug/kg	36.3	9.3	1	05/23/24 07:00	05/24/24 15:28	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.8**	ug/kg	36.3	11.8	1	05/23/24 07:00	05/24/24 15:28	76-13-1	
1,1-Dichloroethene	**<12.0**	ug/kg	36.3	12.0	1	05/23/24 07:00	05/24/24 15:28	75-35-4	
1,2-Dichloroethane	**<8.3**	ug/kg	36.3	8.3	1	05/23/24 07:00	05/24/24 15:28	107-06-2	
2-Butanone (MEK)	**<115**	ug/kg	907	115	1	05/23/24 07:00	05/24/24 15:28	78-93-3	
2-Hexanone	**<360**	ug/kg	907	360	1	05/23/24 07:00	05/24/24 15:28	591-78-6	
2-Propanol	**<1160**	ug/kg	3630	1160	1	05/23/24 07:00	05/24/24 15:28	67-63-0	
Acetone	**<221**	ug/kg	907	221	1	05/23/24 07:00	05/24/24 15:28	67-64-1	
Benzene	**<8.6**	ug/kg	14.5	8.6	1	05/23/24 07:00	05/24/24 15:28	71-43-2	
Bromodichloromethane	**<8.6**	ug/kg	36.3	8.6	1	05/23/24 07:00	05/24/24 15:28	75-27-4	
Bromoform	**<160**	ug/kg	181	160	1	05/23/24 07:00	05/24/24 15:28	75-25-2	
Chlorobenzene	**<4.3**	ug/kg	36.3	4.3	1	05/23/24 07:00	05/24/24 15:28	108-90-7	
Chloroform	**<26.0**	ug/kg	181	26.0	1	05/23/24 07:00	05/24/24 15:28	67-66-3	
Chloromethane	**<13.8**	ug/kg	36.3	13.8	1	05/23/24 07:00	05/24/24 15:28	74-87-3	L2
Dibromochloromethane	**<124**	ug/kg	181	124	1	05/23/24 07:00	05/24/24 15:28	124-48-1	
Dichlorofluoromethane	**<10.2**	ug/kg	36.3	10.2	1	05/23/24 07:00	05/24/24 15:28	75-43-4	
Methyl-tert-butyl ether	**<10.7**	ug/kg	36.3	10.7	1	05/23/24 07:00	05/24/24 15:28	1634-04-4	
Methylene Chloride	**<10.1**	ug/kg	36.3	10.1	1	05/23/24 07:00	05/24/24 15:28	75-09-2	
Tetrachloroethene	**<14.1**	ug/kg	36.3	14.1	1	05/23/24 07:00	05/24/24 15:28	127-18-4	
Toluene	**<9.1**	ug/kg	36.3	9.1	1	05/23/24 07:00	05/24/24 15:28	108-88-3	
Trichloroethene	**<13.6**	ug/kg	36.3	13.6	1	05/23/24 07:00	05/24/24 15:28	79-01-6	
Trichlorofluoromethane	**<10.5**	ug/kg	36.3	10.5	1	05/23/24 07:00	05/24/24 15:28	75-69-4	
m&p-Xylene	**<15.3**	ug/kg	72.6	15.3	1	05/23/24 07:00	05/24/24 15:28	179601-23-1	
trans-1,2-Dichloroethene	**<7.9**	ug/kg	36.3	7.9	1	05/23/24 07:00	05/24/24 15:28	156-60-5	
Surrogates									
Toluene-d8 (S)	96	%	60-140		1	05/23/24 07:00	05/24/24 15:28	2037-26-5	
4-Bromofluorobenzene (S)	96	%	66-143		1	05/23/24 07:00	05/24/24 15:28	460-00-4	
1,2-Dichlorobenzene-d4 (S)	95	%	60-140		1	05/23/24 07:00	05/24/24 15:28	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-144.3_20240515 **Lab ID: 40278528027** Collected: 05/15/24 16:50 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.9**	ug/kg	30.9	7.9	1	05/23/24 07:00	05/24/24 15:47	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.1**	ug/kg	30.9	10.1	1	05/23/24 07:00	05/24/24 15:47	76-13-1	
1,1-Dichloroethene	**<10.3**	ug/kg	30.9	10.3	1	05/23/24 07:00	05/24/24 15:47	75-35-4	
1,2-Dichloroethane	**<7.1**	ug/kg	30.9	7.1	1	05/23/24 07:00	05/24/24 15:47	107-06-2	
2-Butanone (MEK)	**<97.7**	ug/kg	773	97.7	1	05/23/24 07:00	05/24/24 15:47	78-93-3	
2-Hexanone	**<307**	ug/kg	773	307	1	05/23/24 07:00	05/24/24 15:47	591-78-6	
2-Propanol	**<985**	ug/kg	3090	985	1	05/23/24 07:00	05/24/24 15:47	67-63-0	
Acetone	**<188**	ug/kg	773	188	1	05/23/24 07:00	05/24/24 15:47	67-64-1	
Benzene	**<7.4**	ug/kg	12.4	7.4	1	05/23/24 07:00	05/24/24 15:47	71-43-2	
Bromodichloromethane	**<7.4**	ug/kg	30.9	7.4	1	05/23/24 07:00	05/24/24 15:47	75-27-4	
Bromoform	**<136**	ug/kg	155	136	1	05/23/24 07:00	05/24/24 15:47	75-25-2	
Chlorobenzene	**<3.7**	ug/kg	30.9	3.7	1	05/23/24 07:00	05/24/24 15:47	108-90-7	
Chloroform	**<22.1**	ug/kg	155	22.1	1	05/23/24 07:00	05/24/24 15:47	67-66-3	
Chloromethane	**<11.7**	ug/kg	30.9	11.7	1	05/23/24 07:00	05/24/24 15:47	74-87-3	L2
Dibromochloromethane	**<106**	ug/kg	155	106	1	05/23/24 07:00	05/24/24 15:47	124-48-1	
Dichlorofluoromethane	**<8.7**	ug/kg	30.9	8.7	1	05/23/24 07:00	05/24/24 15:47	75-43-4	
Methyl-tert-butyl ether	**<9.1**	ug/kg	30.9	9.1	1	05/23/24 07:00	05/24/24 15:47	1634-04-4	
Methylene Chloride	**<8.6**	ug/kg	30.9	8.6	1	05/23/24 07:00	05/24/24 15:47	75-09-2	
Tetrachloroethene	**<12.0**	ug/kg	30.9	12.0	1	05/23/24 07:00	05/24/24 15:47	127-18-4	
Toluene	**<7.8**	ug/kg	30.9	7.8	1	05/23/24 07:00	05/24/24 15:47	108-88-3	
Trichloroethene	**<11.6**	ug/kg	30.9	11.6	1	05/23/24 07:00	05/24/24 15:47	79-01-6	
Trichlorofluoromethane	**<9.0**	ug/kg	30.9	9.0	1	05/23/24 07:00	05/24/24 15:47	75-69-4	
m&p-Xylene	**<13.0**	ug/kg	61.8	13.0	1	05/23/24 07:00	05/24/24 15:47	179601-23-1	
trans-1,2-Dichloroethene	**<6.8**	ug/kg	30.9	6.8	1	05/23/24 07:00	05/24/24 15:47	156-60-5	
Surrogates									
Toluene-d8 (S)	103	%	60-140		1	05/23/24 07:00	05/24/24 15:47	2037-26-5	
4-Bromofluorobenzene (S)	100	%	66-143		1	05/23/24 07:00	05/24/24 15:47	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	60-140		1	05/23/24 07:00	05/24/24 15:47	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-146.05_20240515 **Lab ID: 40278528028** Collected: 05/15/24 16:51 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.1**	ug/kg	35.6	9.1	1	05/23/24 07:00	05/24/24 16:07	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.6**	ug/kg	35.6	11.6	1	05/23/24 07:00	05/24/24 16:07	76-13-1	
1,1-Dichloroethene	**<11.8**	ug/kg	35.6	11.8	1	05/23/24 07:00	05/24/24 16:07	75-35-4	
1,2-Dichloroethane	**<8.2**	ug/kg	35.6	8.2	1	05/23/24 07:00	05/24/24 16:07	107-06-2	
2-Butanone (MEK)	**<112**	ug/kg	889	112	1	05/23/24 07:00	05/24/24 16:07	78-93-3	
2-Hexanone	**<353**	ug/kg	889	353	1	05/23/24 07:00	05/24/24 16:07	591-78-6	
2-Propanol	**<1130**	ug/kg	3560	1130	1	05/23/24 07:00	05/24/24 16:07	67-63-0	
Acetone	**<216**	ug/kg	889	216	1	05/23/24 07:00	05/24/24 16:07	67-64-1	
Benzene	**<8.5**	ug/kg	14.2	8.5	1	05/23/24 07:00	05/24/24 16:07	71-43-2	
Bromodichloromethane	**<8.5**	ug/kg	35.6	8.5	1	05/23/24 07:00	05/24/24 16:07	75-27-4	
Bromoform	**<157**	ug/kg	178	157	1	05/23/24 07:00	05/24/24 16:07	75-25-2	
Chlorobenzene	**<4.3**	ug/kg	35.6	4.3	1	05/23/24 07:00	05/24/24 16:07	108-90-7	
Chloroform	**<25.5**	ug/kg	178	25.5	1	05/23/24 07:00	05/24/24 16:07	67-66-3	
Chloromethane	**<13.5**	ug/kg	35.6	13.5	1	05/23/24 07:00	05/24/24 16:07	74-87-3	L2
Dibromochloromethane	**<122**	ug/kg	178	122	1	05/23/24 07:00	05/24/24 16:07	124-48-1	
Dichlorofluoromethane	**<10.0**	ug/kg	35.6	10.0	1	05/23/24 07:00	05/24/24 16:07	75-43-4	
Methyl-tert-butyl ether	**<10.5**	ug/kg	35.6	10.5	1	05/23/24 07:00	05/24/24 16:07	1634-04-4	
Methylene Chloride	**<9.9**	ug/kg	35.6	9.9	1	05/23/24 07:00	05/24/24 16:07	75-09-2	
Tetrachloroethene	**<13.8**	ug/kg	35.6	13.8	1	05/23/24 07:00	05/24/24 16:07	127-18-4	
Toluene	**<9.0**	ug/kg	35.6	9.0	1	05/23/24 07:00	05/24/24 16:07	108-88-3	
Trichloroethene	**<13.3**	ug/kg	35.6	13.3	1	05/23/24 07:00	05/24/24 16:07	79-01-6	
Trichlorofluoromethane	**<10.3**	ug/kg	35.6	10.3	1	05/23/24 07:00	05/24/24 16:07	75-69-4	
m&p-Xylene	**<15.0**	ug/kg	71.1	15.0	1	05/23/24 07:00	05/24/24 16:07	179601-23-1	
trans-1,2-Dichloroethene	**<7.8**	ug/kg	35.6	7.8	1	05/23/24 07:00	05/24/24 16:07	156-60-5	
Surrogates									
Toluene-d8 (S)	108	%	60-140		1	05/23/24 07:00	05/24/24 16:07	2037-26-5	
4-Bromofluorobenzene (S)	107	%	66-143		1	05/23/24 07:00	05/24/24 16:07	460-00-4	
1,2-Dichlorobenzene-d4 (S)	111	%	60-140		1	05/23/24 07:00	05/24/24 16:07	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-148_20240516 **Lab ID: 40278528029** Collected: 05/16/24 09:33 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.6**	ug/kg	37.7	9.6	1	05/23/24 07:00	05/24/24 16:26	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.3**	ug/kg	37.7	12.3	1	05/23/24 07:00	05/24/24 16:26	76-13-1	
1,1-Dichloroethene	**<12.5**	ug/kg	37.7	12.5	1	05/23/24 07:00	05/24/24 16:26	75-35-4	
1,2-Dichloroethane	**<8.7**	ug/kg	37.7	8.7	1	05/23/24 07:00	05/24/24 16:26	107-06-2	
2-Butanone (MEK)	**<119**	ug/kg	942	119	1	05/23/24 07:00	05/24/24 16:26	78-93-3	
2-Hexanone	**<374**	ug/kg	942	374	1	05/23/24 07:00	05/24/24 16:26	591-78-6	
2-Propanol	**<1200**	ug/kg	3770	1200	1	05/23/24 07:00	05/24/24 16:26	67-63-0	
Acetone	**<229**	ug/kg	942	229	1	05/23/24 07:00	05/24/24 16:26	67-64-1	
Benzene	**<9.0**	ug/kg	15.1	9.0	1	05/23/24 07:00	05/24/24 16:26	71-43-2	
Bromodichloromethane	**<9.0**	ug/kg	37.7	9.0	1	05/23/24 07:00	05/24/24 16:26	75-27-4	
Bromoform	**<166**	ug/kg	188	166	1	05/23/24 07:00	05/24/24 16:26	75-25-2	
Chlorobenzene	**<4.5**	ug/kg	37.7	4.5	1	05/23/24 07:00	05/24/24 16:26	108-90-7	
Chloroform	**<27.0**	ug/kg	188	27.0	1	05/23/24 07:00	05/24/24 16:26	67-66-3	
Chloromethane	**<14.3**	ug/kg	37.7	14.3	1	05/23/24 07:00	05/24/24 16:26	74-87-3	L2
Dibromochloromethane	**<129**	ug/kg	188	129	1	05/23/24 07:00	05/24/24 16:26	124-48-1	
Dichlorofluoromethane	**<10.6**	ug/kg	37.7	10.6	1	05/23/24 07:00	05/24/24 16:26	75-43-4	
Methyl-tert-butyl ether	**<11.1**	ug/kg	37.7	11.1	1	05/23/24 07:00	05/24/24 16:26	1634-04-4	
Methylene Chloride	**<10.5**	ug/kg	37.7	10.5	1	05/23/24 07:00	05/24/24 16:26	75-09-2	
Tetrachloroethene	**<14.6**	ug/kg	37.7	14.6	1	05/23/24 07:00	05/24/24 16:26	127-18-4	
Toluene	**<9.5**	ug/kg	37.7	9.5	1	05/23/24 07:00	05/24/24 16:26	108-88-3	
Trichloroethene	**<14.1**	ug/kg	37.7	14.1	1	05/23/24 07:00	05/24/24 16:26	79-01-6	
Trichlorofluoromethane	**<10.9**	ug/kg	37.7	10.9	1	05/23/24 07:00	05/24/24 16:26	75-69-4	
m&p-Xylene	**<15.9**	ug/kg	75.4	15.9	1	05/23/24 07:00	05/24/24 16:26	179601-23-1	
trans-1,2-Dichloroethene	**<8.2**	ug/kg	37.7	8.2	1	05/23/24 07:00	05/24/24 16:26	156-60-5	
Surrogates									
Toluene-d8 (S)	109	%	60-140		1	05/23/24 07:00	05/24/24 16:26	2037-26-5	
4-Bromofluorobenzene (S)	110	%	66-143		1	05/23/24 07:00	05/24/24 16:26	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	60-140		1	05/23/24 07:00	05/24/24 16:26	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-149.7_20240516 **Lab ID: 40278528030** Collected: 05/16/24 10:35 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.4**	ug/kg	28.9	7.4	1	05/23/24 07:00	05/24/24 16:46	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<9.4**	ug/kg	28.9	9.4	1	05/23/24 07:00	05/24/24 16:46	76-13-1	
1,1-Dichloroethene	**<9.6**	ug/kg	28.9	9.6	1	05/23/24 07:00	05/24/24 16:46	75-35-4	
1,2-Dichloroethane	**<6.6**	ug/kg	28.9	6.6	1	05/23/24 07:00	05/24/24 16:46	107-06-2	
2-Butanone (MEK)	**<91.2**	ug/kg	722	91.2	1	05/23/24 07:00	05/24/24 16:46	78-93-3	
2-Hexanone	**<287**	ug/kg	722	287	1	05/23/24 07:00	05/24/24 16:46	591-78-6	
2-Propanol	**<920**	ug/kg	2890	920	1	05/23/24 07:00	05/24/24 16:46	67-63-0	
Acetone	**<176**	ug/kg	722	176	1	05/23/24 07:00	05/24/24 16:46	67-64-1	
Benzene	**<6.9**	ug/kg	11.5	6.9	1	05/23/24 07:00	05/24/24 16:46	71-43-2	
Bromodichloromethane	**<6.9**	ug/kg	28.9	6.9	1	05/23/24 07:00	05/24/24 16:46	75-27-4	
Bromoform	**<127**	ug/kg	144	127	1	05/23/24 07:00	05/24/24 16:46	75-25-2	
Chlorobenzene	**<3.5**	ug/kg	28.9	3.5	1	05/23/24 07:00	05/24/24 16:46	108-90-7	
Chloroform	**<20.7**	ug/kg	144	20.7	1	05/23/24 07:00	05/24/24 16:46	67-66-3	
Chloromethane	**<11.0**	ug/kg	28.9	11.0	1	05/23/24 07:00	05/24/24 16:46	74-87-3	L2
Dibromochloromethane	**<98.7**	ug/kg	144	98.7	1	05/23/24 07:00	05/24/24 16:46	124-48-1	
Dichlorofluoromethane	**<8.1**	ug/kg	28.9	8.1	1	05/23/24 07:00	05/24/24 16:46	75-43-4	
Methyl-tert-butyl ether	**<8.5**	ug/kg	28.9	8.5	1	05/23/24 07:00	05/24/24 16:46	1634-04-4	
Methylene Chloride	**<8.0**	ug/kg	28.9	8.0	1	05/23/24 07:00	05/24/24 16:46	75-09-2	
Tetrachloroethene	**<11.2**	ug/kg	28.9	11.2	1	05/23/24 07:00	05/24/24 16:46	127-18-4	
Toluene	**<7.3**	ug/kg	28.9	7.3	1	05/23/24 07:00	05/24/24 16:46	108-88-3	
Trichloroethene	**<10.8**	ug/kg	28.9	10.8	1	05/23/24 07:00	05/24/24 16:46	79-01-6	
Trichlorofluoromethane	**<8.4**	ug/kg	28.9	8.4	1	05/23/24 07:00	05/24/24 16:46	75-69-4	
m&p-Xylene	**<12.2**	ug/kg	57.7	12.2	1	05/23/24 07:00	05/24/24 16:46	179601-23-1	
trans-1,2-Dichloroethene	**<6.3**	ug/kg	28.9	6.3	1	05/23/24 07:00	05/24/24 16:46	156-60-5	
Surrogates									
Toluene-d8 (S)	101	%	60-140		1	05/23/24 07:00	05/24/24 16:46	2037-26-5	
4-Bromofluorobenzene (S)	103	%	66-143		1	05/23/24 07:00	05/24/24 16:46	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	60-140		1	05/23/24 07:00	05/24/24 16:46	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: TB-04 **Lab ID: 40278528031** Collected: 05/19/24 08:45 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	05/23/24 07:00	05/24/24 13:10	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	05/23/24 07:00	05/24/24 13:10	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	05/23/24 07:00	05/24/24 13:10	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	05/23/24 07:00	05/24/24 13:10	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	05/23/24 07:00	05/24/24 13:10	78-93-3	
2-Hexanone	**<496**	ug/kg	1250	496	1	05/23/24 07:00	05/24/24 13:10	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	05/23/24 07:00	05/24/24 13:10	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	05/23/24 07:00	05/24/24 13:10	67-64-1	
Benzene	**<11.9**	ug/kg	20.0	11.9	1	05/23/24 07:00	05/24/24 13:10	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	05/23/24 07:00	05/24/24 13:10	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	05/23/24 07:00	05/24/24 13:10	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	05/23/24 07:00	05/24/24 13:10	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	05/23/24 07:00	05/24/24 13:10	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	05/23/24 07:00	05/24/24 13:10	74-87-3	L2
Dibromochloromethane	**<171**	ug/kg	250	171	1	05/23/24 07:00	05/24/24 13:10	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	05/23/24 07:00	05/24/24 13:10	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	05/23/24 07:00	05/24/24 13:10	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	05/23/24 07:00	05/24/24 13:10	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	05/23/24 07:00	05/24/24 13:10	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	05/23/24 07:00	05/24/24 13:10	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	05/23/24 07:00	05/24/24 13:10	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	05/23/24 07:00	05/24/24 13:10	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	05/23/24 07:00	05/24/24 13:10	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	05/23/24 07:00	05/24/24 13:10	156-60-5	
Surrogates									
Toluene-d8 (S)	110	%	60-140		1	05/23/24 07:00	05/24/24 13:10	2037-26-5	
4-Bromofluorobenzene (S)	106	%	66-143		1	05/23/24 07:00	05/24/24 13:10	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	60-140		1	05/23/24 07:00	05/24/24 13:10	2199-69-1	

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(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-158.75_20240516 **Lab ID: 40278528032** Collected: 05/16/24 15:12 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.6**	ug/kg	33.4	8.6	1	05/23/24 07:00	05/24/24 17:05	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.9**	ug/kg	33.4	10.9	1	05/23/24 07:00	05/24/24 17:05	76-13-1	
1,1-Dichloroethene	**<11.1**	ug/kg	33.4	11.1	1	05/23/24 07:00	05/24/24 17:05	75-35-4	
1,2-Dichloroethane	**<7.7**	ug/kg	33.4	7.7	1	05/23/24 07:00	05/24/24 17:05	107-06-2	
2-Butanone (MEK)	**<106**	ug/kg	835	106	1	05/23/24 07:00	05/24/24 17:05	78-93-3	
2-Hexanone	**<332**	ug/kg	835	332	1	05/23/24 07:00	05/24/24 17:05	591-78-6	
2-Propanol	**<1060**	ug/kg	3340	1060	1	05/23/24 07:00	05/24/24 17:05	67-63-0	
Acetone	**<203**	ug/kg	835	203	1	05/23/24 07:00	05/24/24 17:05	67-64-1	
Benzene	**<7.9**	ug/kg	13.4	7.9	1	05/23/24 07:00	05/24/24 17:05	71-43-2	
Bromodichloromethane	**<7.9**	ug/kg	33.4	7.9	1	05/23/24 07:00	05/24/24 17:05	75-27-4	
Bromoform	**<147**	ug/kg	167	147	1	05/23/24 07:00	05/24/24 17:05	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.4	4.0	1	05/23/24 07:00	05/24/24 17:05	108-90-7	
Chloroform	**<23.9**	ug/kg	167	23.9	1	05/23/24 07:00	05/24/24 17:05	67-66-3	
Chloromethane	**<12.7**	ug/kg	33.4	12.7	1	05/23/24 07:00	05/24/24 17:05	74-87-3	L2
Dibromochloromethane	**<114**	ug/kg	167	114	1	05/23/24 07:00	05/24/24 17:05	124-48-1	
Dichlorofluoromethane	**<9.4**	ug/kg	33.4	9.4	1	05/23/24 07:00	05/24/24 17:05	75-43-4	
Methyl-tert-butyl ether	**<9.8**	ug/kg	33.4	9.8	1	05/23/24 07:00	05/24/24 17:05	1634-04-4	
Methylene Chloride	**<9.3**	ug/kg	33.4	9.3	1	05/23/24 07:00	05/24/24 17:05	75-09-2	
Tetrachloroethene	**<13.0**	ug/kg	33.4	13.0	1	05/23/24 07:00	05/24/24 17:05	127-18-4	
Toluene	**<8.4**	ug/kg	33.4	8.4	1	05/23/24 07:00	05/24/24 17:05	108-88-3	
Trichloroethene	**<12.5**	ug/kg	33.4	12.5	1	05/23/24 07:00	05/24/24 17:05	79-01-6	
Trichlorofluoromethane	**<9.7**	ug/kg	33.4	9.7	1	05/23/24 07:00	05/24/24 17:05	75-69-4	
m&p-Xylene	**<14.1**	ug/kg	66.8	14.1	1	05/23/24 07:00	05/24/24 17:05	179601-23-1	
trans-1,2-Dichloroethene	**<7.3**	ug/kg	33.4	7.3	1	05/23/24 07:00	05/24/24 17:05	156-60-5	
Surrogates									
Toluene-d8 (S)	108	%	60-140		1	05/23/24 07:00	05/24/24 17:05	2037-26-5	
4-Bromofluorobenzene (S)	102	%	66-143		1	05/23/24 07:00	05/24/24 17:05	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	60-140		1	05/23/24 07:00	05/24/24 17:05	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-162.4_20240516 **Lab ID: 40278528033** Collected: 05/16/24 15:38 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.6**	ug/kg	33.5	8.6	1	05/23/24 07:00	05/24/24 17:25	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.9**	ug/kg	33.5	10.9	1	05/23/24 07:00	05/24/24 17:25	76-13-1	
1,1-Dichloroethene	**<11.1**	ug/kg	33.5	11.1	1	05/23/24 07:00	05/24/24 17:25	75-35-4	
1,2-Dichloroethane	**<7.7**	ug/kg	33.5	7.7	1	05/23/24 07:00	05/24/24 17:25	107-06-2	
2-Butanone (MEK)	**<106**	ug/kg	838	106	1	05/23/24 07:00	05/24/24 17:25	78-93-3	
2-Hexanone	**<333**	ug/kg	838	333	1	05/23/24 07:00	05/24/24 17:25	591-78-6	
2-Propanol	**<1070**	ug/kg	3350	1070	1	05/23/24 07:00	05/24/24 17:25	67-63-0	
Acetone	**<204**	ug/kg	838	204	1	05/23/24 07:00	05/24/24 17:25	67-64-1	
Benzene	**<8.0**	ug/kg	13.4	8.0	1	05/23/24 07:00	05/24/24 17:25	71-43-2	
Bromodichloromethane	**<8.0**	ug/kg	33.5	8.0	1	05/23/24 07:00	05/24/24 17:25	75-27-4	
Bromoform	**<148**	ug/kg	168	148	1	05/23/24 07:00	05/24/24 17:25	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.5	4.0	1	05/23/24 07:00	05/24/24 17:25	108-90-7	
Chloroform	**<24.0**	ug/kg	168	24.0	1	05/23/24 07:00	05/24/24 17:25	67-66-3	
Chloromethane	**<12.7**	ug/kg	33.5	12.7	1	05/23/24 07:00	05/24/24 17:25	74-87-3	L2
Dibromochloromethane	**<115**	ug/kg	168	115	1	05/23/24 07:00	05/24/24 17:25	124-48-1	
Dichlorofluoromethane	**<9.5**	ug/kg	33.5	9.5	1	05/23/24 07:00	05/24/24 17:25	75-43-4	
Methyl-tert-butyl ether	**<9.9**	ug/kg	33.5	9.9	1	05/23/24 07:00	05/24/24 17:25	1634-04-4	
Methylene Chloride	**<9.3**	ug/kg	33.5	9.3	1	05/23/24 07:00	05/24/24 17:25	75-09-2	
Tetrachloroethene	**<13.0**	ug/kg	33.5	13.0	1	05/23/24 07:00	05/24/24 17:25	127-18-4	
Toluene	**<8.4**	ug/kg	33.5	8.4	1	05/23/24 07:00	05/24/24 17:25	108-88-3	
Trichloroethene	**<12.5**	ug/kg	33.5	12.5	1	05/23/24 07:00	05/24/24 17:25	79-01-6	
Trichlorofluoromethane	**<9.7**	ug/kg	33.5	9.7	1	05/23/24 07:00	05/24/24 17:25	75-69-4	
m&p-Xylene	**<14.1**	ug/kg	67.0	14.1	1	05/23/24 07:00	05/24/24 17:25	179601-23-1	
trans-1,2-Dichloroethene	**<7.3**	ug/kg	33.5	7.3	1	05/23/24 07:00	05/24/24 17:25	156-60-5	
Surrogates									
Toluene-d8 (S)	99	%	60-140		1	05/23/24 07:00	05/24/24 17:25	2037-26-5	
4-Bromofluorobenzene (S)	97	%	66-143		1	05/23/24 07:00	05/24/24 17:25	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	60-140		1	05/23/24 07:00	05/24/24 17:25	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-162.7_20240516 **Lab ID: 40278528034** Collected: 05/16/24 15:39 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.6**	ug/kg	33.7	8.6	1	05/23/24 07:00	05/24/24 19:33	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.0**	ug/kg	33.7	11.0	1	05/23/24 07:00	05/24/24 19:33	76-13-1	
1,1-Dichloroethene	**<11.2**	ug/kg	33.7	11.2	1	05/23/24 07:00	05/24/24 19:33	75-35-4	
1,2-Dichloroethane	**<7.8**	ug/kg	33.7	7.8	1	05/23/24 07:00	05/24/24 19:33	107-06-2	
2-Butanone (MEK)	**<107**	ug/kg	843	107	1	05/23/24 07:00	05/24/24 19:33	78-93-3	
2-Hexanone	**<335**	ug/kg	843	335	1	05/23/24 07:00	05/24/24 19:33	591-78-6	
2-Propanol	**<1070**	ug/kg	3370	1070	1	05/23/24 07:00	05/24/24 19:33	67-63-0	
Acetone	**<205**	ug/kg	843	205	1	05/23/24 07:00	05/24/24 19:33	67-64-1	
Benzene	**<8.0**	ug/kg	13.5	8.0	1	05/23/24 07:00	05/24/24 19:33	71-43-2	
Bromodichloromethane	**<8.0**	ug/kg	33.7	8.0	1	05/23/24 07:00	05/24/24 19:33	75-27-4	
Bromoform	**<148**	ug/kg	169	148	1	05/23/24 07:00	05/24/24 19:33	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.7	4.0	1	05/23/24 07:00	05/24/24 19:33	108-90-7	
Chloroform	**<24.1**	ug/kg	169	24.1	1	05/23/24 07:00	05/24/24 19:33	67-66-3	
Chloromethane	**<12.8**	ug/kg	33.7	12.8	1	05/23/24 07:00	05/24/24 19:33	74-87-3	L2
Dibromochloromethane	**<115**	ug/kg	169	115	1	05/23/24 07:00	05/24/24 19:33	124-48-1	
Dichlorofluoromethane	**<9.5**	ug/kg	33.7	9.5	1	05/23/24 07:00	05/24/24 19:33	75-43-4	
Methyl-tert-butyl ether	**<9.9**	ug/kg	33.7	9.9	1	05/23/24 07:00	05/24/24 19:33	1634-04-4	
Methylene Chloride	**<9.4**	ug/kg	33.7	9.4	1	05/23/24 07:00	05/24/24 19:33	75-09-2	
Tetrachloroethene	**<13.1**	ug/kg	33.7	13.1	1	05/23/24 07:00	05/24/24 19:33	127-18-4	
Toluene	**<8.5**	ug/kg	33.7	8.5	1	05/23/24 07:00	05/24/24 19:33	108-88-3	
Trichloroethene	**<12.6**	ug/kg	33.7	12.6	1	05/23/24 07:00	05/24/24 19:33	79-01-6	
Trichlorofluoromethane	**<9.8**	ug/kg	33.7	9.8	1	05/23/24 07:00	05/24/24 19:33	75-69-4	
m&p-Xylene	**<14.2**	ug/kg	67.4	14.2	1	05/23/24 07:00	05/24/24 19:33	179601-23-1	
trans-1,2-Dichloroethene	**<7.4**	ug/kg	33.7	7.4	1	05/23/24 07:00	05/24/24 19:33	156-60-5	
Surrogates									
Toluene-d8 (S)	102	%	60-140		1	05/23/24 07:00	05/24/24 19:33	2037-26-5	
4-Bromofluorobenzene (S)	98	%	66-143		1	05/23/24 07:00	05/24/24 19:33	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	60-140		1	05/23/24 07:00	05/24/24 19:33	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-165.35_20240516 **Lab ID: 40278528035** Collected: 05/16/24 15:40 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.1**	ug/kg	35.6	9.1	1	05/23/24 07:00	05/24/24 19:53	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.6**	ug/kg	35.6	11.6	1	05/23/24 07:00	05/24/24 19:53	76-13-1	
1,1-Dichloroethene	**<11.8**	ug/kg	35.6	11.8	1	05/23/24 07:00	05/24/24 19:53	75-35-4	
1,2-Dichloroethane	**<8.2**	ug/kg	35.6	8.2	1	05/23/24 07:00	05/24/24 19:53	107-06-2	
2-Butanone (MEK)	**<113**	ug/kg	891	113	1	05/23/24 07:00	05/24/24 19:53	78-93-3	
2-Hexanone	**<354**	ug/kg	891	354	1	05/23/24 07:00	05/24/24 19:53	591-78-6	
2-Propanol	**<1140**	ug/kg	3560	1140	1	05/23/24 07:00	05/24/24 19:53	67-63-0	
Acetone	**<217**	ug/kg	891	217	1	05/23/24 07:00	05/24/24 19:53	67-64-1	
Benzene	**<8.5**	ug/kg	14.3	8.5	1	05/23/24 07:00	05/24/24 19:53	71-43-2	
Bromodichloromethane	**<8.5**	ug/kg	35.6	8.5	1	05/23/24 07:00	05/24/24 19:53	75-27-4	
Bromoform	**<157**	ug/kg	178	157	1	05/23/24 07:00	05/24/24 19:53	75-25-2	
Chlorobenzene	**<4.3**	ug/kg	35.6	4.3	1	05/23/24 07:00	05/24/24 19:53	108-90-7	
Chloroform	**<25.5**	ug/kg	178	25.5	1	05/23/24 07:00	05/24/24 19:53	67-66-3	
Chloromethane	**<13.5**	ug/kg	35.6	13.5	1	05/23/24 07:00	05/24/24 19:53	74-87-3	L2
Dibromochloromethane	**<122**	ug/kg	178	122	1	05/23/24 07:00	05/24/24 19:53	124-48-1	
Dichlorofluoromethane	**<10.0**	ug/kg	35.6	10.0	1	05/23/24 07:00	05/24/24 19:53	75-43-4	
Methyl-tert-butyl ether	**<10.5**	ug/kg	35.6	10.5	1	05/23/24 07:00	05/24/24 19:53	1634-04-4	
Methylene Chloride	**<9.9**	ug/kg	35.6	9.9	1	05/23/24 07:00	05/24/24 19:53	75-09-2	
Tetrachloroethene	**<13.8**	ug/kg	35.6	13.8	1	05/23/24 07:00	05/24/24 19:53	127-18-4	
Toluene	**<9.0**	ug/kg	35.6	9.0	1	05/23/24 07:00	05/24/24 19:53	108-88-3	
Trichloroethene	**<13.3**	ug/kg	35.6	13.3	1	05/23/24 07:00	05/24/24 19:53	79-01-6	
Trichlorofluoromethane	**<10.3**	ug/kg	35.6	10.3	1	05/23/24 07:00	05/24/24 19:53	75-69-4	
m&p-Xylene	**<15.0**	ug/kg	71.3	15.0	1	05/23/24 07:00	05/24/24 19:53	179601-23-1	
trans-1,2-Dichloroethene	**<7.8**	ug/kg	35.6	7.8	1	05/23/24 07:00	05/24/24 19:53	156-60-5	
Surrogates									
Toluene-d8 (S)	99	%	60-140		1	05/23/24 07:00	05/24/24 19:53	2037-26-5	
4-Bromofluorobenzene (S)	98	%	66-143		1	05/23/24 07:00	05/24/24 19:53	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	60-140		1	05/23/24 07:00	05/24/24 19:53	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-168.05_20240517 **Lab ID: 40278528036** Collected: 05/17/24 09:20 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.6**	ug/kg	49.4	12.6	1	05/23/24 07:00	05/24/24 20:12	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.1**	ug/kg	49.4	16.1	1	05/23/24 07:00	05/24/24 20:12	76-13-1	
1,1-Dichloroethene	**<16.4**	ug/kg	49.4	16.4	1	05/23/24 07:00	05/24/24 20:12	75-35-4	
1,2-Dichloroethane	**<11.4**	ug/kg	49.4	11.4	1	05/23/24 07:00	05/24/24 20:12	107-06-2	
2-Butanone (MEK)	**<156**	ug/kg	1230	156	1	05/23/24 07:00	05/24/24 20:12	78-93-3	
2-Hexanone	**<490**	ug/kg	1230	490	1	05/23/24 07:00	05/24/24 20:12	591-78-6	
2-Propanol	**<1570**	ug/kg	4940	1570	1	05/23/24 07:00	05/24/24 20:12	67-63-0	
Acetone	**<300**	ug/kg	1230	300	1	05/23/24 07:00	05/24/24 20:12	67-64-1	
Benzene	**<11.7**	ug/kg	19.7	11.7	1	05/23/24 07:00	05/24/24 20:12	71-43-2	
Bromodichloromethane	**<11.7**	ug/kg	49.4	11.7	1	05/23/24 07:00	05/24/24 20:12	75-27-4	
Bromoform	**<217**	ug/kg	247	217	1	05/23/24 07:00	05/24/24 20:12	75-25-2	
Chlorobenzene	**<5.9**	ug/kg	49.4	5.9	1	05/23/24 07:00	05/24/24 20:12	108-90-7	
Chloroform	**<35.3**	ug/kg	247	35.3	1	05/23/24 07:00	05/24/24 20:12	67-66-3	
Chloromethane	**<18.8**	ug/kg	49.4	18.8	1	05/23/24 07:00	05/24/24 20:12	74-87-3	L2
Dibromochloromethane	**<169**	ug/kg	247	169	1	05/23/24 07:00	05/24/24 20:12	124-48-1	
Dichlorofluoromethane	**<13.9**	ug/kg	49.4	13.9	1	05/23/24 07:00	05/24/24 20:12	75-43-4	
Methyl-tert-butyl ether	**<14.5**	ug/kg	49.4	14.5	1	05/23/24 07:00	05/24/24 20:12	1634-04-4	
Methylene Chloride	**<13.7**	ug/kg	49.4	13.7	1	05/23/24 07:00	05/24/24 20:12	75-09-2	
Tetrachloroethene	**<19.2**	ug/kg	49.4	19.2	1	05/23/24 07:00	05/24/24 20:12	127-18-4	
Toluene	**<12.4**	ug/kg	49.4	12.4	1	05/23/24 07:00	05/24/24 20:12	108-88-3	
Trichloroethene	**<18.5**	ug/kg	49.4	18.5	1	05/23/24 07:00	05/24/24 20:12	79-01-6	
Trichlorofluoromethane	**<14.3**	ug/kg	49.4	14.3	1	05/23/24 07:00	05/24/24 20:12	75-69-4	
m&p-Xylene	**<20.8**	ug/kg	98.7	20.8	1	05/23/24 07:00	05/24/24 20:12	179601-23-1	
trans-1,2-Dichloroethene	**<10.8**	ug/kg	49.4	10.8	1	05/23/24 07:00	05/24/24 20:12	156-60-5	
Surrogates									
Toluene-d8 (S)	104	%	60-140		1	05/23/24 07:00	05/24/24 20:12	2037-26-5	
4-Bromofluorobenzene (S)	100	%	66-143		1	05/23/24 07:00	05/24/24 20:12	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	60-140		1	05/23/24 07:00	05/24/24 20:12	2199-69-1	

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(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-170.3_20240517 **Lab ID: 40278528037** Collected: 05/17/24 09:21 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.5**	ug/kg	41.2	10.5	1	05/23/24 07:00	05/24/24 20:32	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<13.4**	ug/kg	41.2	13.4	1	05/23/24 07:00	05/24/24 20:32	76-13-1	
1,1-Dichloroethene	**<13.7**	ug/kg	41.2	13.7	1	05/23/24 07:00	05/24/24 20:32	75-35-4	
1,2-Dichloroethane	**<9.5**	ug/kg	41.2	9.5	1	05/23/24 07:00	05/24/24 20:32	107-06-2	
2-Butanone (MEK)	**<130**	ug/kg	1030	130	1	05/23/24 07:00	05/24/24 20:32	78-93-3	
2-Hexanone	**<409**	ug/kg	1030	409	1	05/23/24 07:00	05/24/24 20:32	591-78-6	
2-Propanol	**<1310**	ug/kg	4120	1310	1	05/23/24 07:00	05/24/24 20:32	67-63-0	
Acetone	**<250**	ug/kg	1030	250	1	05/23/24 07:00	05/24/24 20:32	67-64-1	
Benzene	**<9.8**	ug/kg	16.5	9.8	1	05/23/24 07:00	05/24/24 20:32	71-43-2	
Bromodichloromethane	**<9.8**	ug/kg	41.2	9.8	1	05/23/24 07:00	05/24/24 20:32	75-27-4	
Bromoform	**<181**	ug/kg	206	181	1	05/23/24 07:00	05/24/24 20:32	75-25-2	
Chlorobenzene	**<4.9**	ug/kg	41.2	4.9	1	05/23/24 07:00	05/24/24 20:32	108-90-7	
Chloroform	**<29.5**	ug/kg	206	29.5	1	05/23/24 07:00	05/24/24 20:32	67-66-3	
Chloromethane	**<15.6**	ug/kg	41.2	15.6	1	05/23/24 07:00	05/24/24 20:32	74-87-3	L2
Dibromochloromethane	**<141**	ug/kg	206	141	1	05/23/24 07:00	05/24/24 20:32	124-48-1	
Dichlorofluoromethane	**<11.6**	ug/kg	41.2	11.6	1	05/23/24 07:00	05/24/24 20:32	75-43-4	
Methyl-tert-butyl ether	**<12.1**	ug/kg	41.2	12.1	1	05/23/24 07:00	05/24/24 20:32	1634-04-4	
Methylene Chloride	**<11.4**	ug/kg	41.2	11.4	1	05/23/24 07:00	05/24/24 20:32	75-09-2	
Tetrachloroethene	**<16.0**	ug/kg	41.2	16.0	1	05/23/24 07:00	05/24/24 20:32	127-18-4	
Toluene	**<10.4**	ug/kg	41.2	10.4	1	05/23/24 07:00	05/24/24 20:32	108-88-3	
Trichloroethene	**<15.4**	ug/kg	41.2	15.4	1	05/23/24 07:00	05/24/24 20:32	79-01-6	
Trichlorofluoromethane	**<11.9**	ug/kg	41.2	11.9	1	05/23/24 07:00	05/24/24 20:32	75-69-4	
m&p-Xylene	**<17.4**	ug/kg	82.3	17.4	1	05/23/24 07:00	05/24/24 20:32	179601-23-1	
trans-1,2-Dichloroethene	**<9.0**	ug/kg	41.2	9.0	1	05/23/24 07:00	05/24/24 20:32	156-60-5	
Surrogates									
Toluene-d8 (S)	106	%	60-140		1	05/23/24 07:00	05/24/24 20:32	2037-26-5	
4-Bromofluorobenzene (S)	102	%	66-143		1	05/23/24 07:00	05/24/24 20:32	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	60-140		1	05/23/24 07:00	05/24/24 20:32	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-171.4_20240517 **Lab ID: 40278528038** Collected: 05/17/24 09:22 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.8**	ug/kg	34.2	8.8	1	05/23/24 07:00	05/24/24 20:51	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.2**	ug/kg	34.2	11.2	1	05/23/24 07:00	05/24/24 20:51	76-13-1	
1,1-Dichloroethene	**<11.4**	ug/kg	34.2	11.4	1	05/23/24 07:00	05/24/24 20:51	75-35-4	
1,2-Dichloroethane	**<7.9**	ug/kg	34.2	7.9	1	05/23/24 07:00	05/24/24 20:51	107-06-2	
2-Butanone (MEK)	**<108**	ug/kg	856	108	1	05/23/24 07:00	05/24/24 20:51	78-93-3	
2-Hexanone	**<340**	ug/kg	856	340	1	05/23/24 07:00	05/24/24 20:51	591-78-6	
2-Propanol	**<1090**	ug/kg	3420	1090	1	05/23/24 07:00	05/24/24 20:51	67-63-0	
Acetone	**<208**	ug/kg	856	208	1	05/23/24 07:00	05/24/24 20:51	67-64-1	
Benzene	**<8.2**	ug/kg	13.7	8.2	1	05/23/24 07:00	05/24/24 20:51	71-43-2	
Bromodichloromethane	**<8.2**	ug/kg	34.2	8.2	1	05/23/24 07:00	05/24/24 20:51	75-27-4	
Bromoform	**<151**	ug/kg	171	151	1	05/23/24 07:00	05/24/24 20:51	75-25-2	
Chlorobenzene	**<4.1**	ug/kg	34.2	4.1	1	05/23/24 07:00	05/24/24 20:51	108-90-7	
Chloroform	**<24.5**	ug/kg	171	24.5	1	05/23/24 07:00	05/24/24 20:51	67-66-3	
Chloromethane	**<13.0**	ug/kg	34.2	13.0	1	05/23/24 07:00	05/24/24 20:51	74-87-3	L2
Dibromochloromethane	**<117**	ug/kg	171	117	1	05/23/24 07:00	05/24/24 20:51	124-48-1	
Dichlorofluoromethane	**<9.7**	ug/kg	34.2	9.7	1	05/23/24 07:00	05/24/24 20:51	75-43-4	
Methyl-tert-butyl ether	**<10.1**	ug/kg	34.2	10.1	1	05/23/24 07:00	05/24/24 20:51	1634-04-4	
Methylene Chloride	**<9.5**	ug/kg	34.2	9.5	1	05/23/24 07:00	05/24/24 20:51	75-09-2	
Tetrachloroethene	**<13.3**	ug/kg	34.2	13.3	1	05/23/24 07:00	05/24/24 20:51	127-18-4	
Toluene	**<8.6**	ug/kg	34.2	8.6	1	05/23/24 07:00	05/24/24 20:51	108-88-3	
Trichloroethene	**<12.8**	ug/kg	34.2	12.8	1	05/23/24 07:00	05/24/24 20:51	79-01-6	
Trichlorofluoromethane	**<9.9**	ug/kg	34.2	9.9	1	05/23/24 07:00	05/24/24 20:51	75-69-4	
m&p-Xylene	**<14.5**	ug/kg	68.5	14.5	1	05/23/24 07:00	05/24/24 20:51	179601-23-1	
trans-1,2-Dichloroethene	**<7.5**	ug/kg	34.2	7.5	1	05/23/24 07:00	05/24/24 20:51	156-60-5	
Surrogates									
Toluene-d8 (S)	100	%	60-140		1	05/23/24 07:00	05/24/24 20:51	2037-26-5	
4-Bromofluorobenzene (S)	99	%	66-143		1	05/23/24 07:00	05/24/24 20:51	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	60-140		1	05/23/24 07:00	05/24/24 20:51	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-173.2_20240517 **Lab ID: 40278528039** Collected: 05/17/24 10:15 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.9**	ug/kg	42.4	10.9	1	05/23/24 07:00	05/24/24 13:30	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<13.8**	ug/kg	42.4	13.8	1	05/23/24 07:00	05/24/24 13:30	76-13-1	
1,1-Dichloroethene	**<14.1**	ug/kg	42.4	14.1	1	05/23/24 07:00	05/24/24 13:30	75-35-4	
1,2-Dichloroethane	**<9.7**	ug/kg	42.4	9.7	1	05/23/24 07:00	05/24/24 13:30	107-06-2	
2-Butanone (MEK)	**<134**	ug/kg	1060	134	1	05/23/24 07:00	05/24/24 13:30	78-93-3	
2-Hexanone	**<421**	ug/kg	1060	421	1	05/23/24 07:00	05/24/24 13:30	591-78-6	
2-Propanol	**<1350**	ug/kg	4240	1350	1	05/23/24 07:00	05/24/24 13:30	67-63-0	
Acetone	**<258**	ug/kg	1060	258	1	05/23/24 07:00	05/24/24 13:30	67-64-1	
Benzene	**<10.1**	ug/kg	17.0	10.1	1	05/23/24 07:00	05/24/24 13:30	71-43-2	
Bromodichloromethane	**<10.1**	ug/kg	42.4	10.1	1	05/23/24 07:00	05/24/24 13:30	75-27-4	
Bromoform	**<187**	ug/kg	212	187	1	05/23/24 07:00	05/24/24 13:30	75-25-2	
Chlorobenzene	**<5.1**	ug/kg	42.4	5.1	1	05/23/24 07:00	05/24/24 13:30	108-90-7	
Chloroform	**<30.4**	ug/kg	212	30.4	1	05/23/24 07:00	05/24/24 13:30	67-66-3	
Chloromethane	**<16.1**	ug/kg	42.4	16.1	1	05/23/24 07:00	05/24/24 13:30	74-87-3	L2,M0
Dibromochloromethane	**<145**	ug/kg	212	145	1	05/23/24 07:00	05/24/24 13:30	124-48-1	
Dichlorofluoromethane	**<12.0**	ug/kg	42.4	12.0	1	05/23/24 07:00	05/24/24 13:30	75-43-4	
Methyl-tert-butyl ether	**<12.5**	ug/kg	42.4	12.5	1	05/23/24 07:00	05/24/24 13:30	1634-04-4	
Methylene Chloride	**<11.8**	ug/kg	42.4	11.8	1	05/23/24 07:00	05/24/24 13:30	75-09-2	
Tetrachloroethene	**<16.4**	ug/kg	42.4	16.4	1	05/23/24 07:00	05/24/24 13:30	127-18-4	
Toluene	**<10.7**	ug/kg	42.4	10.7	1	05/23/24 07:00	05/24/24 13:30	108-88-3	
Trichloroethene	**<15.9**	ug/kg	42.4	15.9	1	05/23/24 07:00	05/24/24 13:30	79-01-6	
Trichlorofluoromethane	**<12.3**	ug/kg	42.4	12.3	1	05/23/24 07:00	05/24/24 13:30	75-69-4	
m&p-Xylene	**<17.9**	ug/kg	84.8	17.9	1	05/23/24 07:00	05/24/24 13:30	179601-23-1	
trans-1,2-Dichloroethene	**<9.3**	ug/kg	42.4	9.3	1	05/23/24 07:00	05/24/24 13:30	156-60-5	
Surrogates									
Toluene-d8 (S)	103	%	60-140		1	05/23/24 07:00	05/24/24 13:30	2037-26-5	
4-Bromofluorobenzene (S)	102	%	66-143		1	05/23/24 07:00	05/24/24 13:30	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	60-140		1	05/23/24 07:00	05/24/24 13:30	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-173.2-DUP_20240517 **Lab ID: 40278528040** Collected: 05/17/24 10:15 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.1**	ug/kg	35.4	9.1	1	05/23/24 07:00	05/24/24 21:11	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.5**	ug/kg	35.4	11.5	1	05/23/24 07:00	05/24/24 21:11	76-13-1	
1,1-Dichloroethene	**<11.7**	ug/kg	35.4	11.7	1	05/23/24 07:00	05/24/24 21:11	75-35-4	
1,2-Dichloroethane	**<8.1**	ug/kg	35.4	8.1	1	05/23/24 07:00	05/24/24 21:11	107-06-2	
2-Butanone (MEK)	**<112**	ug/kg	884	112	1	05/23/24 07:00	05/24/24 21:11	78-93-3	
2-Hexanone	**<351**	ug/kg	884	351	1	05/23/24 07:00	05/24/24 21:11	591-78-6	
2-Propanol	**<1130**	ug/kg	3540	1130	1	05/23/24 07:00	05/24/24 21:11	67-63-0	
Acetone	**<215**	ug/kg	884	215	1	05/23/24 07:00	05/24/24 21:11	67-64-1	
Benzene	**<8.4**	ug/kg	14.1	8.4	1	05/23/24 07:00	05/24/24 21:11	71-43-2	
Bromodichloromethane	**<8.4**	ug/kg	35.4	8.4	1	05/23/24 07:00	05/24/24 21:11	75-27-4	
Bromoform	**<156**	ug/kg	177	156	1	05/23/24 07:00	05/24/24 21:11	75-25-2	
Chlorobenzene	**<4.2**	ug/kg	35.4	4.2	1	05/23/24 07:00	05/24/24 21:11	108-90-7	
Chloroform	**<25.3**	ug/kg	177	25.3	1	05/23/24 07:00	05/24/24 21:11	67-66-3	
Chloromethane	**<13.4**	ug/kg	35.4	13.4	1	05/23/24 07:00	05/24/24 21:11	74-87-3	L2
Dibromochloromethane	**<121**	ug/kg	177	121	1	05/23/24 07:00	05/24/24 21:11	124-48-1	
Dichlorofluoromethane	**<10**	ug/kg	35.4	10	1	05/23/24 07:00	05/24/24 21:11	75-43-4	
Methyl-tert-butyl ether	**<10.4**	ug/kg	35.4	10.4	1	05/23/24 07:00	05/24/24 21:11	1634-04-4	
Methylene Chloride	**<9.8**	ug/kg	35.4	9.8	1	05/23/24 07:00	05/24/24 21:11	75-09-2	
Tetrachloroethene	**<13.7**	ug/kg	35.4	13.7	1	05/23/24 07:00	05/24/24 21:11	127-18-4	
Toluene	**<8.9**	ug/kg	35.4	8.9	1	05/23/24 07:00	05/24/24 21:11	108-88-3	
Trichloroethene	**<13.2**	ug/kg	35.4	13.2	1	05/23/24 07:00	05/24/24 21:11	79-01-6	
Trichlorofluoromethane	**<10.3**	ug/kg	35.4	10.3	1	05/23/24 07:00	05/24/24 21:11	75-69-4	
m&p-Xylene	**<14.9**	ug/kg	70.7	14.9	1	05/23/24 07:00	05/24/24 21:11	179601-23-1	
trans-1,2-Dichloroethene	**<7.7**	ug/kg	35.4	7.7	1	05/23/24 07:00	05/24/24 21:11	156-60-5	
Surrogates									
Toluene-d8 (S)	105	%	60-140		1	05/23/24 07:00	05/24/24 21:11	2037-26-5	
4-Bromofluorobenzene (S)	98	%	66-143		1	05/23/24 07:00	05/24/24 21:11	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	60-140		1	05/23/24 07:00	05/24/24 21:11	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-174.05_20240517 **Lab ID: 40278528041** Collected: 05/17/24 10:17 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.1**	ug/kg	35.4	9.1	1	05/23/24 10:00	05/24/24 14:23	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.5**	ug/kg	35.4	11.5	1	05/23/24 10:00	05/24/24 14:23	76-13-1	
1,1-Dichloroethene	**<11.8**	ug/kg	35.4	11.8	1	05/23/24 10:00	05/24/24 14:23	75-35-4	
1,2-Dichloroethane	**<8.1**	ug/kg	35.4	8.1	1	05/23/24 10:00	05/24/24 14:23	107-06-2	
2-Butanone (MEK)	**<112**	ug/kg	886	112	1	05/23/24 10:00	05/24/24 14:23	78-93-3	
2-Hexanone	**<352**	ug/kg	886	352	1	05/23/24 10:00	05/24/24 14:23	591-78-6	
2-Propanol	**<1130**	ug/kg	3540	1130	1	05/23/24 10:00	05/24/24 14:23	67-63-0	v1
Acetone	**<216**	ug/kg	886	216	1	05/23/24 10:00	05/24/24 14:23	67-64-1	
Benzene	**<8.4**	ug/kg	14.2	8.4	1	05/23/24 10:00	05/24/24 14:23	71-43-2	
Bromodichloromethane	**<8.4**	ug/kg	35.4	8.4	1	05/23/24 10:00	05/24/24 14:23	75-27-4	
Bromoform	**<156**	ug/kg	177	156	1	05/23/24 10:00	05/24/24 14:23	75-25-2	
Chlorobenzene	**<4.2**	ug/kg	35.4	4.2	1	05/23/24 10:00	05/24/24 14:23	108-90-7	
Chloroform	**<25.4**	ug/kg	177	25.4	1	05/23/24 10:00	05/24/24 14:23	67-66-3	
Chloromethane	**<13.5**	ug/kg	35.4	13.5	1	05/23/24 10:00	05/24/24 14:23	74-87-3	
Dibromochloromethane	**<121**	ug/kg	177	121	1	05/23/24 10:00	05/24/24 14:23	124-48-1	
Dichlorofluoromethane	**<10**	ug/kg	35.4	10	1	05/23/24 10:00	05/24/24 14:23	75-43-4	
Methyl-tert-butyl ether	**<10.4**	ug/kg	35.4	10.4	1	05/23/24 10:00	05/24/24 14:23	1634-04-4	
Methylene Chloride	**<9.8**	ug/kg	35.4	9.8	1	05/23/24 10:00	05/24/24 14:23	75-09-2	
Tetrachloroethene	**<13.7**	ug/kg	35.4	13.7	1	05/23/24 10:00	05/24/24 14:23	127-18-4	
Toluene	**<8.9**	ug/kg	35.4	8.9	1	05/23/24 10:00	05/24/24 14:23	108-88-3	
Trichloroethene	**<13.2**	ug/kg	35.4	13.2	1	05/23/24 10:00	05/24/24 14:23	79-01-6	
Trichlorofluoromethane	**<10.3**	ug/kg	35.4	10.3	1	05/23/24 10:00	05/24/24 14:23	75-69-4	
m&p-Xylene	**<14.9**	ug/kg	70.8	14.9	1	05/23/24 10:00	05/24/24 14:23	179601-23-1	
trans-1,2-Dichloroethene	**<7.7**	ug/kg	35.4	7.7	1	05/23/24 10:00	05/24/24 14:23	156-60-5	
Surrogates									
Toluene-d8 (S)	93	%	60-140		1	05/23/24 10:00	05/24/24 14:23	2037-26-5	
4-Bromofluorobenzene (S)	89	%	66-143		1	05/23/24 10:00	05/24/24 14:23	460-00-4	
1,2-Dichlorobenzene-d4 (S)	97	%	60-140		1	05/23/24 10:00	05/24/24 14:23	2199-69-1	

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(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-181.5_20240517 **Lab ID: 40278528042** Collected: 05/17/24 11:15 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.9**	ug/kg	34.7	8.9	1	05/23/24 10:00	05/24/24 14:43	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.3**	ug/kg	34.7	11.3	1	05/23/24 10:00	05/24/24 14:43	76-13-1	
1,1-Dichloroethene	**<11.5**	ug/kg	34.7	11.5	1	05/23/24 10:00	05/24/24 14:43	75-35-4	
1,2-Dichloroethane	**<8.0**	ug/kg	34.7	8.0	1	05/23/24 10:00	05/24/24 14:43	107-06-2	
2-Butanone (MEK)	**<110**	ug/kg	867	110	1	05/23/24 10:00	05/24/24 14:43	78-93-3	
2-Hexanone	**<344**	ug/kg	867	344	1	05/23/24 10:00	05/24/24 14:43	591-78-6	
2-Propanol	**<1110**	ug/kg	3470	1110	1	05/23/24 10:00	05/24/24 14:43	67-63-0	v1
Acetone	**<211**	ug/kg	867	211	1	05/23/24 10:00	05/24/24 14:43	67-64-1	
Benzene	**<8.3**	ug/kg	13.9	8.3	1	05/23/24 10:00	05/24/24 14:43	71-43-2	
Bromodichloromethane	**<8.3**	ug/kg	34.7	8.3	1	05/23/24 10:00	05/24/24 14:43	75-27-4	
Bromoform	**<153**	ug/kg	173	153	1	05/23/24 10:00	05/24/24 14:43	75-25-2	
Chlorobenzene	**<4.2**	ug/kg	34.7	4.2	1	05/23/24 10:00	05/24/24 14:43	108-90-7	
Chloroform	**<24.8**	ug/kg	173	24.8	1	05/23/24 10:00	05/24/24 14:43	67-66-3	
Chloromethane	**<13.2**	ug/kg	34.7	13.2	1	05/23/24 10:00	05/24/24 14:43	74-87-3	
Dibromochloromethane	**<119**	ug/kg	173	119	1	05/23/24 10:00	05/24/24 14:43	124-48-1	
Dichlorofluoromethane	**<9.8**	ug/kg	34.7	9.8	1	05/23/24 10:00	05/24/24 14:43	75-43-4	
Methyl-tert-butyl ether	**<10.2**	ug/kg	34.7	10.2	1	05/23/24 10:00	05/24/24 14:43	1634-04-4	
Methylene Chloride	**<9.6**	ug/kg	34.7	9.6	1	05/23/24 10:00	05/24/24 14:43	75-09-2	
Tetrachloroethene	**<13.5**	ug/kg	34.7	13.5	1	05/23/24 10:00	05/24/24 14:43	127-18-4	
Toluene	**<8.7**	ug/kg	34.7	8.7	1	05/23/24 10:00	05/24/24 14:43	108-88-3	
Trichloroethene	**<13.0**	ug/kg	34.7	13.0	1	05/23/24 10:00	05/24/24 14:43	79-01-6	
Trichlorofluoromethane	**<10.1**	ug/kg	34.7	10.1	1	05/23/24 10:00	05/24/24 14:43	75-69-4	
m&p-Xylene	**<14.6**	ug/kg	69.4	14.6	1	05/23/24 10:00	05/24/24 14:43	179601-23-1	
trans-1,2-Dichloroethene	**<7.6**	ug/kg	34.7	7.6	1	05/23/24 10:00	05/24/24 14:43	156-60-5	
Surrogates									
Toluene-d8 (S)	96	%	60-140		1	05/23/24 10:00	05/24/24 14:43	2037-26-5	
4-Bromofluorobenzene (S)	89	%	66-143		1	05/23/24 10:00	05/24/24 14:43	460-00-4	
1,2-Dichlorobenzene-d4 (S)	95	%	60-140		1	05/23/24 10:00	05/24/24 14:43	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-182.8_20240517 **Lab ID: 40278528043** Collected: 05/17/24 12:11 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.4**	ug/kg	32.7	8.4	1	05/23/24 10:00	05/24/24 15:03	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.7**	ug/kg	32.7	10.7	1	05/23/24 10:00	05/24/24 15:03	76-13-1	
1,1-Dichloroethene	**<10.9**	ug/kg	32.7	10.9	1	05/23/24 10:00	05/24/24 15:03	75-35-4	
1,2-Dichloroethane	**<7.5**	ug/kg	32.7	7.5	1	05/23/24 10:00	05/24/24 15:03	107-06-2	
2-Butanone (MEK)	**<103**	ug/kg	818	103	1	05/23/24 10:00	05/24/24 15:03	78-93-3	
2-Hexanone	**<325**	ug/kg	818	325	1	05/23/24 10:00	05/24/24 15:03	591-78-6	
2-Propanol	**<1040**	ug/kg	3270	1040	1	05/23/24 10:00	05/24/24 15:03	67-63-0	v1
Acetone	**<199**	ug/kg	818	199	1	05/23/24 10:00	05/24/24 15:03	67-64-1	
Benzene	**<7.8**	ug/kg	13.1	7.8	1	05/23/24 10:00	05/24/24 15:03	71-43-2	
Bromodichloromethane	**<7.8**	ug/kg	32.7	7.8	1	05/23/24 10:00	05/24/24 15:03	75-27-4	
Bromoform	**<144**	ug/kg	164	144	1	05/23/24 10:00	05/24/24 15:03	75-25-2	
Chlorobenzene	**<3.9**	ug/kg	32.7	3.9	1	05/23/24 10:00	05/24/24 15:03	108-90-7	
Chloroform	**<23.4**	ug/kg	164	23.4	1	05/23/24 10:00	05/24/24 15:03	67-66-3	
Chloromethane	**<12.4**	ug/kg	32.7	12.4	1	05/23/24 10:00	05/24/24 15:03	74-87-3	
Dibromochloromethane	**<112**	ug/kg	164	112	1	05/23/24 10:00	05/24/24 15:03	124-48-1	
Dichlorofluoromethane	**<9.2**	ug/kg	32.7	9.2	1	05/23/24 10:00	05/24/24 15:03	75-43-4	
Methyl-tert-butyl ether	**<9.6**	ug/kg	32.7	9.6	1	05/23/24 10:00	05/24/24 15:03	1634-04-4	
Methylene Chloride	**<9.1**	ug/kg	32.7	9.1	1	05/23/24 10:00	05/24/24 15:03	75-09-2	
Tetrachloroethene	**<12.7**	ug/kg	32.7	12.7	1	05/23/24 10:00	05/24/24 15:03	127-18-4	
Toluene	**<8.2**	ug/kg	32.7	8.2	1	05/23/24 10:00	05/24/24 15:03	108-88-3	
Trichloroethene	**<12.2**	ug/kg	32.7	12.2	1	05/23/24 10:00	05/24/24 15:03	79-01-6	
Trichlorofluoromethane	**<9.5**	ug/kg	32.7	9.5	1	05/23/24 10:00	05/24/24 15:03	75-69-4	
m&p-Xylene	**<13.8**	ug/kg	65.4	13.8	1	05/23/24 10:00	05/24/24 15:03	179601-23-1	
trans-1,2-Dichloroethene	**<7.2**	ug/kg	32.7	7.2	1	05/23/24 10:00	05/24/24 15:03	156-60-5	
Surrogates									
Toluene-d8 (S)	97	%	60-140		1	05/23/24 10:00	05/24/24 15:03	2037-26-5	
4-Bromofluorobenzene (S)	88	%	66-143		1	05/23/24 10:00	05/24/24 15:03	460-00-4	
1,2-Dichlorobenzene-d4 (S)	96	%	60-140		1	05/23/24 10:00	05/24/24 15:03	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-184.9_20240517 **Lab ID: 40278528044** Collected: 05/17/24 12:12 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.2**	ug/kg	28.2	7.2	1	05/23/24 10:00	05/24/24 15:24	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<9.2**	ug/kg	28.2	9.2	1	05/23/24 10:00	05/24/24 15:24	76-13-1	
1,1-Dichloroethene	**<9.4**	ug/kg	28.2	9.4	1	05/23/24 10:00	05/24/24 15:24	75-35-4	
1,2-Dichloroethane	**<6.5**	ug/kg	28.2	6.5	1	05/23/24 10:00	05/24/24 15:24	107-06-2	
2-Butanone (MEK)	**<89.0**	ug/kg	704	89.0	1	05/23/24 10:00	05/24/24 15:24	78-93-3	
2-Hexanone	**<280**	ug/kg	704	280	1	05/23/24 10:00	05/24/24 15:24	591-78-6	
2-Propanol	**<898**	ug/kg	2820	898	1	05/23/24 10:00	05/24/24 15:24	67-63-0	v1
Acetone	**<171**	ug/kg	704	171	1	05/23/24 10:00	05/24/24 15:24	67-64-1	
Benzene	**<6.7**	ug/kg	11.3	6.7	1	05/23/24 10:00	05/24/24 15:24	71-43-2	
Bromodichloromethane	**<6.7**	ug/kg	28.2	6.7	1	05/23/24 10:00	05/24/24 15:24	75-27-4	
Bromoform	**<124**	ug/kg	141	124	1	05/23/24 10:00	05/24/24 15:24	75-25-2	
Chlorobenzene	**<3.4**	ug/kg	28.2	3.4	1	05/23/24 10:00	05/24/24 15:24	108-90-7	
Chloroform	**<20.2**	ug/kg	141	20.2	1	05/23/24 10:00	05/24/24 15:24	67-66-3	
Chloromethane	**<10.7**	ug/kg	28.2	10.7	1	05/23/24 10:00	05/24/24 15:24	74-87-3	
Dibromochloromethane	**<96.3**	ug/kg	141	96.3	1	05/23/24 10:00	05/24/24 15:24	124-48-1	
Dichlorofluoromethane	**<7.9**	ug/kg	28.2	7.9	1	05/23/24 10:00	05/24/24 15:24	75-43-4	
Methyl-tert-butyl ether	**<8.3**	ug/kg	28.2	8.3	1	05/23/24 10:00	05/24/24 15:24	1634-04-4	
Methylene Chloride	**<7.8**	ug/kg	28.2	7.8	1	05/23/24 10:00	05/24/24 15:24	75-09-2	
Tetrachloroethene	**<10.9**	ug/kg	28.2	10.9	1	05/23/24 10:00	05/24/24 15:24	127-18-4	
Toluene	**<7.1**	ug/kg	28.2	7.1	1	05/23/24 10:00	05/24/24 15:24	108-88-3	
Trichloroethene	**<10.5**	ug/kg	28.2	10.5	1	05/23/24 10:00	05/24/24 15:24	79-01-6	
Trichlorofluoromethane	**<8.2**	ug/kg	28.2	8.2	1	05/23/24 10:00	05/24/24 15:24	75-69-4	
m&p-Xylene	**<11.9**	ug/kg	56.3	11.9	1	05/23/24 10:00	05/24/24 15:24	179601-23-1	
trans-1,2-Dichloroethene	**<6.2**	ug/kg	28.2	6.2	1	05/23/24 10:00	05/24/24 15:24	156-60-5	
Surrogates									
Toluene-d8 (S)	106	%	60-140		1	05/23/24 10:00	05/24/24 15:24	2037-26-5	
4-Bromofluorobenzene (S)	90	%	66-143		1	05/23/24 10:00	05/24/24 15:24	460-00-4	
1,2-Dichlorobenzene-d4 (S)	91	%	60-140		1	05/23/24 10:00	05/24/24 15:24	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-185.85_20240517 **Lab ID: 40278528045** Collected: 05/17/24 12:13 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.5**	ug/kg	33.3	8.5	1	05/23/24 10:00	05/24/24 15:44	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.8**	ug/kg	33.3	10.8	1	05/23/24 10:00	05/24/24 15:44	76-13-1	
1,1-Dichloroethene	**<11.0**	ug/kg	33.3	11.0	1	05/23/24 10:00	05/24/24 15:44	75-35-4	
1,2-Dichloroethane	**<7.7**	ug/kg	33.3	7.7	1	05/23/24 10:00	05/24/24 15:44	107-06-2	
2-Butanone (MEK)	**<105**	ug/kg	832	105	1	05/23/24 10:00	05/24/24 15:44	78-93-3	
2-Hexanone	**<330**	ug/kg	832	330	1	05/23/24 10:00	05/24/24 15:44	591-78-6	
2-Propanol	**<1060**	ug/kg	3330	1060	1	05/23/24 10:00	05/24/24 15:44	67-63-0	v1
Acetone	**<203**	ug/kg	832	203	1	05/23/24 10:00	05/24/24 15:44	67-64-1	
Benzene	**<7.9**	ug/kg	13.3	7.9	1	05/23/24 10:00	05/24/24 15:44	71-43-2	
Bromodichloromethane	**<7.9**	ug/kg	33.3	7.9	1	05/23/24 10:00	05/24/24 15:44	75-27-4	
Bromoform	**<146**	ug/kg	166	146	1	05/23/24 10:00	05/24/24 15:44	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.3	4.0	1	05/23/24 10:00	05/24/24 15:44	108-90-7	
Chloroform	**<23.8**	ug/kg	166	23.8	1	05/23/24 10:00	05/24/24 15:44	67-66-3	
Chloromethane	**<12.6**	ug/kg	33.3	12.6	1	05/23/24 10:00	05/24/24 15:44	74-87-3	
Dibromochloromethane	**<114**	ug/kg	166	114	1	05/23/24 10:00	05/24/24 15:44	124-48-1	
Dichlorofluoromethane	**<9.4**	ug/kg	33.3	9.4	1	05/23/24 10:00	05/24/24 15:44	75-43-4	
Methyl-tert-butyl ether	**<9.8**	ug/kg	33.3	9.8	1	05/23/24 10:00	05/24/24 15:44	1634-04-4	
Methylene Chloride	**<9.3**	ug/kg	33.3	9.3	1	05/23/24 10:00	05/24/24 15:44	75-09-2	
Tetrachloroethene	**<12.9**	ug/kg	33.3	12.9	1	05/23/24 10:00	05/24/24 15:44	127-18-4	
Toluene	**<8.4**	ug/kg	33.3	8.4	1	05/23/24 10:00	05/24/24 15:44	108-88-3	
Trichloroethene	**<12.4**	ug/kg	33.3	12.4	1	05/23/24 10:00	05/24/24 15:44	79-01-6	
Trichlorofluoromethane	**<9.7**	ug/kg	33.3	9.7	1	05/23/24 10:00	05/24/24 15:44	75-69-4	
m&p-Xylene	**<14.0**	ug/kg	66.6	14.0	1	05/23/24 10:00	05/24/24 15:44	179601-23-1	
trans-1,2-Dichloroethene	**<7.3**	ug/kg	33.3	7.3	1	05/23/24 10:00	05/24/24 15:44	156-60-5	
Surrogates									
Toluene-d8 (S)	95	%	60-140		1	05/23/24 10:00	05/24/24 15:44	2037-26-5	
4-Bromofluorobenzene (S)	84	%	66-143		1	05/23/24 10:00	05/24/24 15:44	460-00-4	
1,2-Dichlorobenzene-d4 (S)	92	%	60-140		1	05/23/24 10:00	05/24/24 15:44	2199-69-1	

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-189.45_20240517 **Lab ID: 40278528046** Collected: 05/17/24 14:20 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<13.6**	ug/kg	53.0	13.6	1	05/23/24 10:00	05/24/24 16:04	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<17.3**	ug/kg	53.0	17.3	1	05/23/24 10:00	05/24/24 16:04	76-13-1	
1,1-Dichloroethene	**<17.6**	ug/kg	53.0	17.6	1	05/23/24 10:00	05/24/24 16:04	75-35-4	
1,2-Dichloroethane	**<12.2**	ug/kg	53.0	12.2	1	05/23/24 10:00	05/24/24 16:04	107-06-2	
2-Butanone (MEK)	**<167**	ug/kg	1320	167	1	05/23/24 10:00	05/24/24 16:04	78-93-3	
2-Hexanone	**<526**	ug/kg	1320	526	1	05/23/24 10:00	05/24/24 16:04	591-78-6	
2-Propanol	**<1690**	ug/kg	5300	1690	1	05/23/24 10:00	05/24/24 16:04	67-63-0	v1
Acetone	**<323**	ug/kg	1320	323	1	05/23/24 10:00	05/24/24 16:04	67-64-1	
Benzene	**<12.6**	ug/kg	21.2	12.6	1	05/23/24 10:00	05/24/24 16:04	71-43-2	
Bromodichloromethane	**<12.6**	ug/kg	53.0	12.6	1	05/23/24 10:00	05/24/24 16:04	75-27-4	
Bromoform	**<233**	ug/kg	265	233	1	05/23/24 10:00	05/24/24 16:04	75-25-2	
Chlorobenzene	**<6.3**	ug/kg	53.0	6.3	1	05/23/24 10:00	05/24/24 16:04	108-90-7	
Chloroform	**<37.9**	ug/kg	265	37.9	1	05/23/24 10:00	05/24/24 16:04	67-66-3	
Chloromethane	**<20.1**	ug/kg	53.0	20.1	1	05/23/24 10:00	05/24/24 16:04	74-87-3	
Dibromochloromethane	**<181**	ug/kg	265	181	1	05/23/24 10:00	05/24/24 16:04	124-48-1	
Dichlorofluoromethane	**<14.9**	ug/kg	53.0	14.9	1	05/23/24 10:00	05/24/24 16:04	75-43-4	
Methyl-tert-butyl ether	**<15.6**	ug/kg	53.0	15.6	1	05/23/24 10:00	05/24/24 16:04	1634-04-4	
Methylene Chloride	**<14.7**	ug/kg	53.0	14.7	1	05/23/24 10:00	05/24/24 16:04	75-09-2	
Tetrachloroethene	**<20.6**	ug/kg	53.0	20.6	1	05/23/24 10:00	05/24/24 16:04	127-18-4	
Toluene	**<13.4**	ug/kg	53.0	13.4	1	05/23/24 10:00	05/24/24 16:04	108-88-3	
Trichloroethene	**<19.8**	ug/kg	53.0	19.8	1	05/23/24 10:00	05/24/24 16:04	79-01-6	
Trichlorofluoromethane	**<15.4**	ug/kg	53.0	15.4	1	05/23/24 10:00	05/24/24 16:04	75-69-4	
m&p-Xylene	**<22.4**	ug/kg	106	22.4	1	05/23/24 10:00	05/24/24 16:04	179601-23-1	
trans-1,2-Dichloroethene	**<11.6**	ug/kg	53.0	11.6	1	05/23/24 10:00	05/24/24 16:04	156-60-5	
Surrogates									
Toluene-d8 (S)	104	%	60-140		1	05/23/24 10:00	05/24/24 16:04	2037-26-5	
4-Bromofluorobenzene (S)	95	%	66-143		1	05/23/24 10:00	05/24/24 16:04	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	60-140		1	05/23/24 10:00	05/24/24 16:04	2199-69-1	

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(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-189.55_20240517 **Lab ID: 40278528047** Collected: 05/17/24 14:21 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<11.9**	ug/kg	46.6	11.9	1	05/23/24 10:00	05/24/24 16:25	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<15.2**	ug/kg	46.6	15.2	1	05/23/24 10:00	05/24/24 16:25	76-13-1	
1,1-Dichloroethene	**<15.5**	ug/kg	46.6	15.5	1	05/23/24 10:00	05/24/24 16:25	75-35-4	
1,2-Dichloroethane	**<10.7**	ug/kg	46.6	10.7	1	05/23/24 10:00	05/24/24 16:25	107-06-2	
2-Butanone (MEK)	**<147**	ug/kg	1160	147	1	05/23/24 10:00	05/24/24 16:25	78-93-3	
2-Hexanone	**<462**	ug/kg	1160	462	1	05/23/24 10:00	05/24/24 16:25	591-78-6	
2-Propanol	**<1480**	ug/kg	4660	1480	1	05/23/24 10:00	05/24/24 16:25	67-63-0	v1
Acetone	**<283**	ug/kg	1160	283	1	05/23/24 10:00	05/24/24 16:25	67-64-1	
Benzene	**<11.1**	ug/kg	18.6	11.1	1	05/23/24 10:00	05/24/24 16:25	71-43-2	
Bromodichloromethane	**<11.1**	ug/kg	46.6	11.1	1	05/23/24 10:00	05/24/24 16:25	75-27-4	
Bromoform	**<205**	ug/kg	233	205	1	05/23/24 10:00	05/24/24 16:25	75-25-2	
Chlorobenzene	**<5.6**	ug/kg	46.6	5.6	1	05/23/24 10:00	05/24/24 16:25	108-90-7	
Chloroform	**<33.3**	ug/kg	233	33.3	1	05/23/24 10:00	05/24/24 16:25	67-66-3	
Chloromethane	**<17.7**	ug/kg	46.6	17.7	1	05/23/24 10:00	05/24/24 16:25	74-87-3	
Dibromochloromethane	**<159**	ug/kg	233	159	1	05/23/24 10:00	05/24/24 16:25	124-48-1	
Dichlorofluoromethane	**<13.1**	ug/kg	46.6	13.1	1	05/23/24 10:00	05/24/24 16:25	75-43-4	
Methyl-tert-butyl ether	**<13.7**	ug/kg	46.6	13.7	1	05/23/24 10:00	05/24/24 16:25	1634-04-4	
Methylene Chloride	**<12.9**	ug/kg	46.6	12.9	1	05/23/24 10:00	05/24/24 16:25	75-09-2	
Tetrachloroethene	**<18.1**	ug/kg	46.6	18.1	1	05/23/24 10:00	05/24/24 16:25	127-18-4	
Toluene	**<11.7**	ug/kg	46.6	11.7	1	05/23/24 10:00	05/24/24 16:25	108-88-3	
Trichloroethene	**<17.4**	ug/kg	46.6	17.4	1	05/23/24 10:00	05/24/24 16:25	79-01-6	
Trichlorofluoromethane	**<13.5**	ug/kg	46.6	13.5	1	05/23/24 10:00	05/24/24 16:25	75-69-4	
m&p-Xylene	**<19.6**	ug/kg	93.1	19.6	1	05/23/24 10:00	05/24/24 16:25	179601-23-1	
trans-1,2-Dichloroethene	**<10.2**	ug/kg	46.6	10.2	1	05/23/24 10:00	05/24/24 16:25	156-60-5	
Surrogates									
Toluene-d8 (S)	97	%	60-140		1	05/23/24 10:00	05/24/24 16:25	2037-26-5	
4-Bromofluorobenzene (S)	89	%	66-143		1	05/23/24 10:00	05/24/24 16:25	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	60-140		1	05/23/24 10:00	05/24/24 16:25	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-189.9_20240517 **Lab ID: 40278528048** Collected: 05/17/24 14:22 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<11.3**	ug/kg	44.3	11.3	1	05/23/24 10:00	05/24/24 16:45	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<14.5**	ug/kg	44.3	14.5	1	05/23/24 10:00	05/24/24 16:45	76-13-1	
1,1-Dichloroethene	**<14.7**	ug/kg	44.3	14.7	1	05/23/24 10:00	05/24/24 16:45	75-35-4	
1,2-Dichloroethane	**<10.2**	ug/kg	44.3	10.2	1	05/23/24 10:00	05/24/24 16:45	107-06-2	
2-Butanone (MEK)	**<140**	ug/kg	1110	140	1	05/23/24 10:00	05/24/24 16:45	78-93-3	
2-Hexanone	**<440**	ug/kg	1110	440	1	05/23/24 10:00	05/24/24 16:45	591-78-6	
2-Propanol	**<1410**	ug/kg	4430	1410	1	05/23/24 10:00	05/24/24 16:45	67-63-0	v1
Acetone	**<270**	ug/kg	1110	270	1	05/23/24 10:00	05/24/24 16:45	67-64-1	
Benzene	**<10.5**	ug/kg	17.7	10.5	1	05/23/24 10:00	05/24/24 16:45	71-43-2	
Bromodichloromethane	**<10.5**	ug/kg	44.3	10.5	1	05/23/24 10:00	05/24/24 16:45	75-27-4	
Bromoform	**<195**	ug/kg	222	195	1	05/23/24 10:00	05/24/24 16:45	75-25-2	
Chlorobenzene	**<5.3**	ug/kg	44.3	5.3	1	05/23/24 10:00	05/24/24 16:45	108-90-7	
Chloroform	**<31.7**	ug/kg	222	31.7	1	05/23/24 10:00	05/24/24 16:45	67-66-3	
Chloromethane	**<16.8**	ug/kg	44.3	16.8	1	05/23/24 10:00	05/24/24 16:45	74-87-3	
Dibromochloromethane	**<152**	ug/kg	222	152	1	05/23/24 10:00	05/24/24 16:45	124-48-1	
Dichlorofluoromethane	**<12.5**	ug/kg	44.3	12.5	1	05/23/24 10:00	05/24/24 16:45	75-43-4	
Methyl-tert-butyl ether	**<13.0**	ug/kg	44.3	13.0	1	05/23/24 10:00	05/24/24 16:45	1634-04-4	
Methylene Chloride	**<12.3**	ug/kg	44.3	12.3	1	05/23/24 10:00	05/24/24 16:45	75-09-2	
Tetrachloroethene	**<17.2**	ug/kg	44.3	17.2	1	05/23/24 10:00	05/24/24 16:45	127-18-4	
Toluene	**<11.2**	ug/kg	44.3	11.2	1	05/23/24 10:00	05/24/24 16:45	108-88-3	
Trichloroethene	**<16.6**	ug/kg	44.3	16.6	1	05/23/24 10:00	05/24/24 16:45	79-01-6	
Trichlorofluoromethane	**<12.9**	ug/kg	44.3	12.9	1	05/23/24 10:00	05/24/24 16:45	75-69-4	
m&p-Xylene	**<18.7**	ug/kg	88.7	18.7	1	05/23/24 10:00	05/24/24 16:45	179601-23-1	
trans-1,2-Dichloroethene	**<9.7**	ug/kg	44.3	9.7	1	05/23/24 10:00	05/24/24 16:45	156-60-5	
Surrogates									
Toluene-d8 (S)	98	%	60-140		1	05/23/24 10:00	05/24/24 16:45	2037-26-5	
4-Bromofluorobenzene (S)	89	%	66-143		1	05/23/24 10:00	05/24/24 16:45	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	60-140		1	05/23/24 10:00	05/24/24 16:45	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-194.9_20240517 **Lab ID: 40278528049** Collected: 05/17/24 15:15 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.6**	ug/kg	37.6	9.6	1	05/23/24 10:00	05/24/24 17:05	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.2**	ug/kg	37.6	12.2	1	05/23/24 10:00	05/24/24 17:05	76-13-1	
1,1-Dichloroethene	**<12.5**	ug/kg	37.6	12.5	1	05/23/24 10:00	05/24/24 17:05	75-35-4	
1,2-Dichloroethane	**<8.6**	ug/kg	37.6	8.6	1	05/23/24 10:00	05/24/24 17:05	107-06-2	
2-Butanone (MEK)	**<119**	ug/kg	939	119	1	05/23/24 10:00	05/24/24 17:05	78-93-3	
2-Hexanone	**<373**	ug/kg	939	373	1	05/23/24 10:00	05/24/24 17:05	591-78-6	
2-Propanol	**<1200**	ug/kg	3760	1200	1	05/23/24 10:00	05/24/24 17:05	67-63-0	v1
Acetone	**<229**	ug/kg	939	229	1	05/23/24 10:00	05/24/24 17:05	67-64-1	
Benzene	**<8.9**	ug/kg	15.0	8.9	1	05/23/24 10:00	05/24/24 17:05	71-43-2	
Bromodichloromethane	**<8.9**	ug/kg	37.6	8.9	1	05/23/24 10:00	05/24/24 17:05	75-27-4	
Bromoform	**<165**	ug/kg	188	165	1	05/23/24 10:00	05/24/24 17:05	75-25-2	
Chlorobenzene	**<4.5**	ug/kg	37.6	4.5	1	05/23/24 10:00	05/24/24 17:05	108-90-7	
Chloroform	**<26.9**	ug/kg	188	26.9	1	05/23/24 10:00	05/24/24 17:05	67-66-3	
Chloromethane	**<14.3**	ug/kg	37.6	14.3	1	05/23/24 10:00	05/24/24 17:05	74-87-3	
Dibromochloromethane	**<128**	ug/kg	188	128	1	05/23/24 10:00	05/24/24 17:05	124-48-1	
Dichlorofluoromethane	**<10.6**	ug/kg	37.6	10.6	1	05/23/24 10:00	05/24/24 17:05	75-43-4	
Methyl-tert-butyl ether	**<11.0**	ug/kg	37.6	11.0	1	05/23/24 10:00	05/24/24 17:05	1634-04-4	
Methylene Chloride	**<10.4**	ug/kg	37.6	10.4	1	05/23/24 10:00	05/24/24 17:05	75-09-2	
Tetrachloroethene	**<14.6**	ug/kg	37.6	14.6	1	05/23/24 10:00	05/24/24 17:05	127-18-4	
Toluene	**<9.5**	ug/kg	37.6	9.5	1	05/23/24 10:00	05/24/24 17:05	108-88-3	
Trichloroethene	**<14.0**	ug/kg	37.6	14.0	1	05/23/24 10:00	05/24/24 17:05	79-01-6	
Trichlorofluoromethane	**<10.9**	ug/kg	37.6	10.9	1	05/23/24 10:00	05/24/24 17:05	75-69-4	
m&p-Xylene	**<15.9**	ug/kg	75.1	15.9	1	05/23/24 10:00	05/24/24 17:05	179601-23-1	
trans-1,2-Dichloroethene	**<8.2**	ug/kg	37.6	8.2	1	05/23/24 10:00	05/24/24 17:05	156-60-5	
Surrogates									
Toluene-d8 (S)	103	%	60-140		1	05/23/24 10:00	05/24/24 17:05	2037-26-5	
4-Bromofluorobenzene (S)	98	%	66-143		1	05/23/24 10:00	05/24/24 17:05	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	60-140		1	05/23/24 10:00	05/24/24 17:05	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-195.5_20240517 **Lab ID: 40278528050** Collected: 05/17/24 15:16 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.6**	ug/kg	37.4	9.6	1	05/23/24 10:00	05/24/24 17:25	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.2**	ug/kg	37.4	12.2	1	05/23/24 10:00	05/24/24 17:25	76-13-1	
1,1-Dichloroethene	**<12.4**	ug/kg	37.4	12.4	1	05/23/24 10:00	05/24/24 17:25	75-35-4	
1,2-Dichloroethane	**<8.6**	ug/kg	37.4	8.6	1	05/23/24 10:00	05/24/24 17:25	107-06-2	
2-Butanone (MEK)	**<118**	ug/kg	936	118	1	05/23/24 10:00	05/24/24 17:25	78-93-3	
2-Hexanone	**<372**	ug/kg	936	372	1	05/23/24 10:00	05/24/24 17:25	591-78-6	
2-Propanol	**<1190**	ug/kg	3740	1190	1	05/23/24 10:00	05/24/24 17:25	67-63-0	v1
Acetone	**<228**	ug/kg	936	228	1	05/23/24 10:00	05/24/24 17:25	67-64-1	
Benzene	**<8.9**	ug/kg	15.0	8.9	1	05/23/24 10:00	05/24/24 17:25	71-43-2	
Bromodichloromethane	**<8.9**	ug/kg	37.4	8.9	1	05/23/24 10:00	05/24/24 17:25	75-27-4	
Bromoform	**<165**	ug/kg	187	165	1	05/23/24 10:00	05/24/24 17:25	75-25-2	
Chlorobenzene	**<4.5**	ug/kg	37.4	4.5	1	05/23/24 10:00	05/24/24 17:25	108-90-7	
Chloroform	**<26.8**	ug/kg	187	26.8	1	05/23/24 10:00	05/24/24 17:25	67-66-3	
Chloromethane	**<14.2**	ug/kg	37.4	14.2	1	05/23/24 10:00	05/24/24 17:25	74-87-3	
Dibromochloromethane	**<128**	ug/kg	187	128	1	05/23/24 10:00	05/24/24 17:25	124-48-1	
Dichlorofluoromethane	**<10.6**	ug/kg	37.4	10.6	1	05/23/24 10:00	05/24/24 17:25	75-43-4	
Methyl-tert-butyl ether	**<11.0**	ug/kg	37.4	11.0	1	05/23/24 10:00	05/24/24 17:25	1634-04-4	
Methylene Chloride	**<10.4**	ug/kg	37.4	10.4	1	05/23/24 10:00	05/24/24 17:25	75-09-2	
Tetrachloroethene	**<14.5**	ug/kg	37.4	14.5	1	05/23/24 10:00	05/24/24 17:25	127-18-4	
Toluene	**<9.4**	ug/kg	37.4	9.4	1	05/23/24 10:00	05/24/24 17:25	108-88-3	
Trichloroethene	**<14.0**	ug/kg	37.4	14.0	1	05/23/24 10:00	05/24/24 17:25	79-01-6	
Trichlorofluoromethane	**<10.9**	ug/kg	37.4	10.9	1	05/23/24 10:00	05/24/24 17:25	75-69-4	
m&p-Xylene	**<15.8**	ug/kg	74.9	15.8	1	05/23/24 10:00	05/24/24 17:25	179601-23-1	
trans-1,2-Dichloroethene	**<8.2**	ug/kg	37.4	8.2	1	05/23/24 10:00	05/24/24 17:25	156-60-5	
Surrogates									
Toluene-d8 (S)	99	%	60-140		1	05/23/24 10:00	05/24/24 17:25	2037-26-5	
4-Bromofluorobenzene (S)	89	%	66-143		1	05/23/24 10:00	05/24/24 17:25	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	60-140		1	05/23/24 10:00	05/24/24 17:25	2199-69-1	

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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-196.1_20240517 **Lab ID: 40278528051** Collected: 05/17/24 15:17 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	05/23/24 10:00	05/24/24 19:38	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	05/23/24 10:00	05/24/24 19:38	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	05/23/24 10:00	05/24/24 19:38	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	05/23/24 10:00	05/24/24 19:38	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	05/23/24 10:00	05/24/24 19:38	78-93-3	
2-Hexanone	**<496**	ug/kg	1250	496	1	05/23/24 10:00	05/24/24 19:38	591-78-6	v1
2-Propanol	**<1590**	ug/kg	5000	1590	1	05/23/24 10:00	05/24/24 19:38	67-63-0	v1
Acetone	**<304**	ug/kg	1250	304	1	05/23/24 10:00	05/24/24 19:38	67-64-1	
Benzene	**<11.9**	ug/kg	20.0	11.9	1	05/23/24 10:00	05/24/24 19:38	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	05/23/24 10:00	05/24/24 19:38	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	05/23/24 10:00	05/24/24 19:38	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	05/23/24 10:00	05/24/24 19:38	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	05/23/24 10:00	05/24/24 19:38	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	05/23/24 10:00	05/24/24 19:38	74-87-3	
Dibromochloromethane	**<171**	ug/kg	250	171	1	05/23/24 10:00	05/24/24 19:38	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	05/23/24 10:00	05/24/24 19:38	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	05/23/24 10:00	05/24/24 19:38	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	05/23/24 10:00	05/24/24 19:38	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	05/23/24 10:00	05/24/24 19:38	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	05/23/24 10:00	05/24/24 19:38	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	05/23/24 10:00	05/24/24 19:38	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	05/23/24 10:00	05/24/24 19:38	75-69-4	v1
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	05/23/24 10:00	05/24/24 19:38	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	05/23/24 10:00	05/24/24 19:38	156-60-5	
Surrogates									
Toluene-d8 (S)	102	%	60-140		1	05/23/24 10:00	05/24/24 19:38	2037-26-5	
4-Bromofluorobenzene (S)	91	%	66-143		1	05/23/24 10:00	05/24/24 19:38	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	60-140		1	05/23/24 10:00	05/24/24 19:38	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-197.55_20240517 **Lab ID: 40278528052** Collected: 05/17/24 16:02 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.2**	ug/kg	39.9	10.2	1	05/23/24 10:00	05/24/24 19:58	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<13.0**	ug/kg	39.9	13.0	1	05/23/24 10:00	05/24/24 19:58	76-13-1	
1,1-Dichloroethene	**<13.3**	ug/kg	39.9	13.3	1	05/23/24 10:00	05/24/24 19:58	75-35-4	
1,2-Dichloroethane	**<9.2**	ug/kg	39.9	9.2	1	05/23/24 10:00	05/24/24 19:58	107-06-2	
2-Butanone (MEK)	**<126**	ug/kg	998	126	1	05/23/24 10:00	05/24/24 19:58	78-93-3	
2-Hexanone	**<396**	ug/kg	998	396	1	05/23/24 10:00	05/24/24 19:58	591-78-6	v1
2-Propanol	**<1270**	ug/kg	3990	1270	1	05/23/24 10:00	05/24/24 19:58	67-63-0	v1
Acetone	**<243**	ug/kg	998	243	1	05/23/24 10:00	05/24/24 19:58	67-64-1	
Benzene	**<9.5**	ug/kg	16.0	9.5	1	05/23/24 10:00	05/24/24 19:58	71-43-2	
Bromodichloromethane	**<9.5**	ug/kg	39.9	9.5	1	05/23/24 10:00	05/24/24 19:58	75-27-4	
Bromoform	**<176**	ug/kg	200	176	1	05/23/24 10:00	05/24/24 19:58	75-25-2	
Chlorobenzene	**<4.8**	ug/kg	39.9	4.8	1	05/23/24 10:00	05/24/24 19:58	108-90-7	
Chloroform	**<28.6**	ug/kg	200	28.6	1	05/23/24 10:00	05/24/24 19:58	67-66-3	
Chloromethane	**<15.2**	ug/kg	39.9	15.2	1	05/23/24 10:00	05/24/24 19:58	74-87-3	
Dibromochloromethane	**<137**	ug/kg	200	137	1	05/23/24 10:00	05/24/24 19:58	124-48-1	
Dichlorofluoromethane	**<11.3**	ug/kg	39.9	11.3	1	05/23/24 10:00	05/24/24 19:58	75-43-4	
Methyl-tert-butyl ether	**<11.7**	ug/kg	39.9	11.7	1	05/23/24 10:00	05/24/24 19:58	1634-04-4	
Methylene Chloride	**<11.1**	ug/kg	39.9	11.1	1	05/23/24 10:00	05/24/24 19:58	75-09-2	
Tetrachloroethene	**<15.5**	ug/kg	39.9	15.5	1	05/23/24 10:00	05/24/24 19:58	127-18-4	
Toluene	**<10.1**	ug/kg	39.9	10.1	1	05/23/24 10:00	05/24/24 19:58	108-88-3	
Trichloroethene	**<14.9**	ug/kg	39.9	14.9	1	05/23/24 10:00	05/24/24 19:58	79-01-6	
Trichlorofluoromethane	**<11.6**	ug/kg	39.9	11.6	1	05/23/24 10:00	05/24/24 19:58	75-69-4	v1
m&p-Xylene	**<16.9**	ug/kg	79.9	16.9	1	05/23/24 10:00	05/24/24 19:58	179601-23-1	
trans-1,2-Dichloroethene	**<8.7**	ug/kg	39.9	8.7	1	05/23/24 10:00	05/24/24 19:58	156-60-5	
Surrogates									
Toluene-d8 (S)	98	%	60-140		1	05/23/24 10:00	05/24/24 19:58	2037-26-5	
4-Bromofluorobenzene (S)	91	%	66-143		1	05/23/24 10:00	05/24/24 19:58	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	60-140		1	05/23/24 10:00	05/24/24 19:58	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-198.4_20240517 **Lab ID: 40278528053** Collected: 05/17/24 16:03 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.8**	ug/kg	34.4	8.8	1	05/23/24 10:00	05/24/24 20:18	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.2**	ug/kg	34.4	11.2	1	05/23/24 10:00	05/24/24 20:18	76-13-1	
1,1-Dichloroethene	**<11.4**	ug/kg	34.4	11.4	1	05/23/24 10:00	05/24/24 20:18	75-35-4	
1,2-Dichloroethane	**<7.9**	ug/kg	34.4	7.9	1	05/23/24 10:00	05/24/24 20:18	107-06-2	
2-Butanone (MEK)	**<109**	ug/kg	859	109	1	05/23/24 10:00	05/24/24 20:18	78-93-3	
2-Hexanone	**<341**	ug/kg	859	341	1	05/23/24 10:00	05/24/24 20:18	591-78-6	v1
2-Propanol	**<1100**	ug/kg	3440	1100	1	05/23/24 10:00	05/24/24 20:18	67-63-0	v1
Acetone	**<209**	ug/kg	859	209	1	05/23/24 10:00	05/24/24 20:18	67-64-1	
Benzene	**<8.2**	ug/kg	13.7	8.2	1	05/23/24 10:00	05/24/24 20:18	71-43-2	
Bromodichloromethane	**<8.2**	ug/kg	34.4	8.2	1	05/23/24 10:00	05/24/24 20:18	75-27-4	
Bromoform	**<151**	ug/kg	172	151	1	05/23/24 10:00	05/24/24 20:18	75-25-2	
Chlorobenzene	**<4.1**	ug/kg	34.4	4.1	1	05/23/24 10:00	05/24/24 20:18	108-90-7	
Chloroform	**<24.6**	ug/kg	172	24.6	1	05/23/24 10:00	05/24/24 20:18	67-66-3	
Chloromethane	**<13.1**	ug/kg	34.4	13.1	1	05/23/24 10:00	05/24/24 20:18	74-87-3	
Dibromochloromethane	**<117**	ug/kg	172	117	1	05/23/24 10:00	05/24/24 20:18	124-48-1	
Dichlorofluoromethane	**<9.7**	ug/kg	34.4	9.7	1	05/23/24 10:00	05/24/24 20:18	75-43-4	
Methyl-tert-butyl ether	**<10.1**	ug/kg	34.4	10.1	1	05/23/24 10:00	05/24/24 20:18	1634-04-4	
Methylene Chloride	**<9.6**	ug/kg	34.4	9.6	1	05/23/24 10:00	05/24/24 20:18	75-09-2	
Tetrachloroethene	**<13.3**	ug/kg	34.4	13.3	1	05/23/24 10:00	05/24/24 20:18	127-18-4	
Toluene	**<8.7**	ug/kg	34.4	8.7	1	05/23/24 10:00	05/24/24 20:18	108-88-3	
Trichloroethene	**<12.9**	ug/kg	34.4	12.9	1	05/23/24 10:00	05/24/24 20:18	79-01-6	
Trichlorofluoromethane	**<10**	ug/kg	34.4	10	1	05/23/24 10:00	05/24/24 20:18	75-69-4	v1
m&p-Xylene	**<14.5**	ug/kg	68.7	14.5	1	05/23/24 10:00	05/24/24 20:18	179601-23-1	
trans-1,2-Dichloroethene	**<7.5**	ug/kg	34.4	7.5	1	05/23/24 10:00	05/24/24 20:18	156-60-5	
Surrogates									
Toluene-d8 (S)	106	%	60-140		1	05/23/24 10:00	05/24/24 20:18	2037-26-5	
4-Bromofluorobenzene (S)	91	%	66-143		1	05/23/24 10:00	05/24/24 20:18	460-00-4	
1,2-Dichlorobenzene-d4 (S)	97	%	60-140		1	05/23/24 10:00	05/24/24 20:18	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-201.4_20240517 **Lab ID: 40278528054** Collected: 05/17/24 16:04 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.6**	ug/kg	37.7	9.6	1	05/24/24 09:00	05/28/24 14:47	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.3**	ug/kg	37.7	12.3	1	05/24/24 09:00	05/28/24 14:47	76-13-1	
1,1-Dichloroethene	**<12.5**	ug/kg	37.7	12.5	1	05/24/24 09:00	05/28/24 14:47	75-35-4	
1,2-Dichloroethane	**<8.7**	ug/kg	37.7	8.7	1	05/24/24 09:00	05/28/24 14:47	107-06-2	
2-Butanone (MEK)	**<119**	ug/kg	941	119	1	05/24/24 09:00	05/28/24 14:47	78-93-3	
2-Hexanone	**<374**	ug/kg	941	374	1	05/24/24 09:00	05/28/24 14:47	591-78-6	v1
2-Propanol	**<1200**	ug/kg	3770	1200	1	05/24/24 09:00	05/28/24 14:47	67-63-0	v1
Acetone	**<229**	ug/kg	941	229	1	05/24/24 09:00	05/28/24 14:47	67-64-1	
Benzene	**<9.0**	ug/kg	15.1	9.0	1	05/24/24 09:00	05/28/24 14:47	71-43-2	
Bromodichloromethane	**<9.0**	ug/kg	37.7	9.0	1	05/24/24 09:00	05/28/24 14:47	75-27-4	
Bromoform	**<166**	ug/kg	188	166	1	05/24/24 09:00	05/28/24 14:47	75-25-2	
Chlorobenzene	**<4.5**	ug/kg	37.7	4.5	1	05/24/24 09:00	05/28/24 14:47	108-90-7	
Chloroform	**<27.0**	ug/kg	188	27.0	1	05/24/24 09:00	05/28/24 14:47	67-66-3	
Chloromethane	**<14.3**	ug/kg	37.7	14.3	1	05/24/24 09:00	05/28/24 14:47	74-87-3	
Dibromochloromethane	**<129**	ug/kg	188	129	1	05/24/24 09:00	05/28/24 14:47	124-48-1	
Dichlorofluoromethane	**<10.6**	ug/kg	37.7	10.6	1	05/24/24 09:00	05/28/24 14:47	75-43-4	
Methyl-tert-butyl ether	**<11.1**	ug/kg	37.7	11.1	1	05/24/24 09:00	05/28/24 14:47	1634-04-4	
Methylene Chloride	**<10.5**	ug/kg	37.7	10.5	1	05/24/24 09:00	05/28/24 14:47	75-09-2	
Tetrachloroethene	**<14.6**	ug/kg	37.7	14.6	1	05/24/24 09:00	05/28/24 14:47	127-18-4	
Toluene	**<9.5**	ug/kg	37.7	9.5	1	05/24/24 09:00	05/28/24 14:47	108-88-3	
Trichloroethene	**<14.1**	ug/kg	37.7	14.1	1	05/24/24 09:00	05/28/24 14:47	79-01-6	
Trichlorofluoromethane	**<10.9**	ug/kg	37.7	10.9	1	05/24/24 09:00	05/28/24 14:47	75-69-4	
m&p-Xylene	**<15.9**	ug/kg	75.3	15.9	1	05/24/24 09:00	05/28/24 14:47	179601-23-1	
trans-1,2-Dichloroethene	**<8.2**	ug/kg	37.7	8.2	1	05/24/24 09:00	05/28/24 14:47	156-60-5	
Surrogates									
Toluene-d8 (S)	107	%	60-140		1	05/24/24 09:00	05/28/24 14:47	2037-26-5	
4-Bromofluorobenzene (S)	94	%	66-143		1	05/24/24 09:00	05/28/24 14:47	460-00-4	
1,2-Dichlorobenzene-d4 (S)	96	%	60-140		1	05/24/24 09:00	05/28/24 14:47	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-204.6_20240517 **Lab ID: 40278528055** Collected: 05/17/24 16:50 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.6**	ug/kg	33.5	8.6	1	05/24/24 09:00	05/28/24 15:07	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.9**	ug/kg	33.5	10.9	1	05/24/24 09:00	05/28/24 15:07	76-13-1	
1,1-Dichloroethene	**<11.1**	ug/kg	33.5	11.1	1	05/24/24 09:00	05/28/24 15:07	75-35-4	
1,2-Dichloroethane	**<7.7**	ug/kg	33.5	7.7	1	05/24/24 09:00	05/28/24 15:07	107-06-2	
2-Butanone (MEK)	**<106**	ug/kg	839	106	1	05/24/24 09:00	05/28/24 15:07	78-93-3	
2-Hexanone	**<333**	ug/kg	839	333	1	05/24/24 09:00	05/28/24 15:07	591-78-6	v1
2-Propanol	**<1070**	ug/kg	3350	1070	1	05/24/24 09:00	05/28/24 15:07	67-63-0	v1
Acetone	**<204**	ug/kg	839	204	1	05/24/24 09:00	05/28/24 15:07	67-64-1	
Benzene	**<8.0**	ug/kg	13.4	8.0	1	05/24/24 09:00	05/28/24 15:07	71-43-2	
Bromodichloromethane	**<8.0**	ug/kg	33.5	8.0	1	05/24/24 09:00	05/28/24 15:07	75-27-4	
Bromoform	**<148**	ug/kg	168	148	1	05/24/24 09:00	05/28/24 15:07	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.5	4.0	1	05/24/24 09:00	05/28/24 15:07	108-90-7	
Chloroform	**<24.0**	ug/kg	168	24.0	1	05/24/24 09:00	05/28/24 15:07	67-66-3	
Chloromethane	**<12.7**	ug/kg	33.5	12.7	1	05/24/24 09:00	05/28/24 15:07	74-87-3	
Dibromochloromethane	**<115**	ug/kg	168	115	1	05/24/24 09:00	05/28/24 15:07	124-48-1	
Dichlorofluoromethane	**<9.5**	ug/kg	33.5	9.5	1	05/24/24 09:00	05/28/24 15:07	75-43-4	
Methyl-tert-butyl ether	**<9.9**	ug/kg	33.5	9.9	1	05/24/24 09:00	05/28/24 15:07	1634-04-4	
Methylene Chloride	**<9.3**	ug/kg	33.5	9.3	1	05/24/24 09:00	05/28/24 15:07	75-09-2	
Tetrachloroethene	**<13.0**	ug/kg	33.5	13.0	1	05/24/24 09:00	05/28/24 15:07	127-18-4	
Toluene	**<8.5**	ug/kg	33.5	8.5	1	05/24/24 09:00	05/28/24 15:07	108-88-3	
Trichloroethene	**<12.5**	ug/kg	33.5	12.5	1	05/24/24 09:00	05/28/24 15:07	79-01-6	
Trichlorofluoromethane	**17.3J**	ug/kg	33.5	9.7	1	05/24/24 09:00	05/28/24 15:07	75-69-4	
m&p-Xylene	**<14.2**	ug/kg	67.1	14.2	1	05/24/24 09:00	05/28/24 15:07	179601-23-1	
trans-1,2-Dichloroethene	**<7.3**	ug/kg	33.5	7.3	1	05/24/24 09:00	05/28/24 15:07	156-60-5	
Surrogates									
Toluene-d8 (S)	98	%	60-140		1	05/24/24 09:00	05/28/24 15:07	2037-26-5	
4-Bromofluorobenzene (S)	94	%	66-143		1	05/24/24 09:00	05/28/24 15:07	460-00-4	
1,2-Dichlorobenzene-d4 (S)	97	%	60-140		1	05/24/24 09:00	05/28/24 15:07	2199-69-1	

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(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-205.9_20240517 **Lab ID: 40278528056** Collected: 05/17/24 16:51 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.5**	ug/kg	33.3	8.5	1	05/24/24 09:00	05/28/24 15:27	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.8**	ug/kg	33.3	10.8	1	05/24/24 09:00	05/28/24 15:27	76-13-1	
1,1-Dichloroethene	**<11.0**	ug/kg	33.3	11.0	1	05/24/24 09:00	05/28/24 15:27	75-35-4	
1,2-Dichloroethane	**<7.7**	ug/kg	33.3	7.7	1	05/24/24 09:00	05/28/24 15:27	107-06-2	
2-Butanone (MEK)	**<105**	ug/kg	832	105	1	05/24/24 09:00	05/28/24 15:27	78-93-3	
2-Hexanone	**<330**	ug/kg	832	330	1	05/24/24 09:00	05/28/24 15:27	591-78-6	v1
2-Propanol	**<1060**	ug/kg	3330	1060	1	05/24/24 09:00	05/28/24 15:27	67-63-0	v1
Acetone	**<202**	ug/kg	832	202	1	05/24/24 09:00	05/28/24 15:27	67-64-1	
Benzene	**<7.9**	ug/kg	13.3	7.9	1	05/24/24 09:00	05/28/24 15:27	71-43-2	
Bromodichloromethane	**<7.9**	ug/kg	33.3	7.9	1	05/24/24 09:00	05/28/24 15:27	75-27-4	
Bromoform	**<146**	ug/kg	166	146	1	05/24/24 09:00	05/28/24 15:27	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.3	4.0	1	05/24/24 09:00	05/28/24 15:27	108-90-7	
Chloroform	**<23.8**	ug/kg	166	23.8	1	05/24/24 09:00	05/28/24 15:27	67-66-3	
Chloromethane	**<12.6**	ug/kg	33.3	12.6	1	05/24/24 09:00	05/28/24 15:27	74-87-3	
Dibromochloromethane	**<114**	ug/kg	166	114	1	05/24/24 09:00	05/28/24 15:27	124-48-1	
Dichlorofluoromethane	**<9.4**	ug/kg	33.3	9.4	1	05/24/24 09:00	05/28/24 15:27	75-43-4	
Methyl-tert-butyl ether	**<9.8**	ug/kg	33.3	9.8	1	05/24/24 09:00	05/28/24 15:27	1634-04-4	
Methylene Chloride	**<9.2**	ug/kg	33.3	9.2	1	05/24/24 09:00	05/28/24 15:27	75-09-2	
Tetrachloroethene	**<12.9**	ug/kg	33.3	12.9	1	05/24/24 09:00	05/28/24 15:27	127-18-4	
Toluene	**<8.4**	ug/kg	33.3	8.4	1	05/24/24 09:00	05/28/24 15:27	108-88-3	
Trichloroethene	**<12.4**	ug/kg	33.3	12.4	1	05/24/24 09:00	05/28/24 15:27	79-01-6	
Trichlorofluoromethane	**<9.6**	ug/kg	33.3	9.6	1	05/24/24 09:00	05/28/24 15:27	75-69-4	
m&p-Xylene	**<14.0**	ug/kg	66.5	14.0	1	05/24/24 09:00	05/28/24 15:27	179601-23-1	
trans-1,2-Dichloroethene	**<7.3**	ug/kg	33.3	7.3	1	05/24/24 09:00	05/28/24 15:27	156-60-5	
Surrogates									
Toluene-d8 (S)	102	%	60-140		1	05/24/24 09:00	05/28/24 15:27	2037-26-5	
4-Bromofluorobenzene (S)	98	%	66-143		1	05/24/24 09:00	05/28/24 15:27	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	60-140		1	05/24/24 09:00	05/28/24 15:27	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-209.45_20240518 **Lab ID: 40278528057** Collected: 05/18/24 08:25 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.5**	ug/kg	33.2	8.5	1	05/24/24 09:00	05/28/24 15:48	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.8**	ug/kg	33.2	10.8	1	05/24/24 09:00	05/28/24 15:48	76-13-1	
1,1-Dichloroethene	**<11.0**	ug/kg	33.2	11.0	1	05/24/24 09:00	05/28/24 15:48	75-35-4	
1,2-Dichloroethane	**<7.6**	ug/kg	33.2	7.6	1	05/24/24 09:00	05/28/24 15:48	107-06-2	
2-Butanone (MEK)	**<105**	ug/kg	831	105	1	05/24/24 09:00	05/28/24 15:48	78-93-3	
2-Hexanone	**<330**	ug/kg	831	330	1	05/24/24 09:00	05/28/24 15:48	591-78-6	v1
2-Propanol	**<1060**	ug/kg	3320	1060	1	05/24/24 09:00	05/28/24 15:48	67-63-0	v1
Acetone	**<202**	ug/kg	831	202	1	05/24/24 09:00	05/28/24 15:48	67-64-1	
Benzene	**<7.9**	ug/kg	13.3	7.9	1	05/24/24 09:00	05/28/24 15:48	71-43-2	
Bromodichloromethane	**<7.9**	ug/kg	33.2	7.9	1	05/24/24 09:00	05/28/24 15:48	75-27-4	
Bromoform	**<146**	ug/kg	166	146	1	05/24/24 09:00	05/28/24 15:48	75-25-2	
Chlorobenzene	**7.9J**	ug/kg	33.2	4.0	1	05/24/24 09:00	05/28/24 15:48	108-90-7	
Chloroform	**<23.8**	ug/kg	166	23.8	1	05/24/24 09:00	05/28/24 15:48	67-66-3	
Chloromethane	**<12.6**	ug/kg	33.2	12.6	1	05/24/24 09:00	05/28/24 15:48	74-87-3	
Dibromochloromethane	**<114**	ug/kg	166	114	1	05/24/24 09:00	05/28/24 15:48	124-48-1	
Dichlorofluoromethane	**<9.4**	ug/kg	33.2	9.4	1	05/24/24 09:00	05/28/24 15:48	75-43-4	
Methyl-tert-butyl ether	**<9.8**	ug/kg	33.2	9.8	1	05/24/24 09:00	05/28/24 15:48	1634-04-4	
Methylene Chloride	**<9.2**	ug/kg	33.2	9.2	1	05/24/24 09:00	05/28/24 15:48	75-09-2	
Tetrachloroethene	**<12.9**	ug/kg	33.2	12.9	1	05/24/24 09:00	05/28/24 15:48	127-18-4	
Toluene	**<8.4**	ug/kg	33.2	8.4	1	05/24/24 09:00	05/28/24 15:48	108-88-3	
Trichloroethene	**<12.4**	ug/kg	33.2	12.4	1	05/24/24 09:00	05/28/24 15:48	79-01-6	
Trichlorofluoromethane	**<9.6**	ug/kg	33.2	9.6	1	05/24/24 09:00	05/28/24 15:48	75-69-4	
m&p-Xylene	**<14.0**	ug/kg	66.5	14.0	1	05/24/24 09:00	05/28/24 15:48	179601-23-1	
trans-1,2-Dichloroethene	**<7.3**	ug/kg	33.2	7.3	1	05/24/24 09:00	05/28/24 15:48	156-60-5	
Surrogates									
Toluene-d8 (S)	92	%	60-140		1	05/24/24 09:00	05/28/24 15:48	2037-26-5	
4-Bromofluorobenzene (S)	87	%	66-143		1	05/24/24 09:00	05/28/24 15:48	460-00-4	
1,2-Dichlorobenzene-d4 (S)	91	%	60-140		1	05/24/24 09:00	05/28/24 15:48	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-210.65_20240518 **Lab ID: 40278528058** Collected: 05/18/24 08:26 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<6.8**	ug/kg	26.6	6.8	1	05/24/24 09:00	05/28/24 16:08	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<8.7**	ug/kg	26.6	8.7	1	05/24/24 09:00	05/28/24 16:08	76-13-1	
1,1-Dichloroethene	**<8.8**	ug/kg	26.6	8.8	1	05/24/24 09:00	05/28/24 16:08	75-35-4	
1,2-Dichloroethane	**<6.1**	ug/kg	26.6	6.1	1	05/24/24 09:00	05/28/24 16:08	107-06-2	
2-Butanone (MEK)	**<84.1**	ug/kg	666	84.1	1	05/24/24 09:00	05/28/24 16:08	78-93-3	
2-Hexanone	**<264**	ug/kg	666	264	1	05/24/24 09:00	05/28/24 16:08	591-78-6	v1
2-Propanol	**<848**	ug/kg	2660	848	1	05/24/24 09:00	05/28/24 16:08	67-63-0	v1
Acetone	**<162**	ug/kg	666	162	1	05/24/24 09:00	05/28/24 16:08	67-64-1	
Benzene	**<6.3**	ug/kg	10.6	6.3	1	05/24/24 09:00	05/28/24 16:08	71-43-2	
Bromodichloromethane	**<6.3**	ug/kg	26.6	6.3	1	05/24/24 09:00	05/28/24 16:08	75-27-4	
Bromoform	**<117**	ug/kg	133	117	1	05/24/24 09:00	05/28/24 16:08	75-25-2	
Chlorobenzene	**<3.2**	ug/kg	26.6	3.2	1	05/24/24 09:00	05/28/24 16:08	108-90-7	
Chloroform	**<19.1**	ug/kg	133	19.1	1	05/24/24 09:00	05/28/24 16:08	67-66-3	
Chloromethane	**<10.1**	ug/kg	26.6	10.1	1	05/24/24 09:00	05/28/24 16:08	74-87-3	
Dibromochloromethane	**<91.0**	ug/kg	133	91.0	1	05/24/24 09:00	05/28/24 16:08	124-48-1	
Dichlorofluoromethane	**<7.5**	ug/kg	26.6	7.5	1	05/24/24 09:00	05/28/24 16:08	75-43-4	
Methyl-tert-butyl ether	**<7.8**	ug/kg	26.6	7.8	1	05/24/24 09:00	05/28/24 16:08	1634-04-4	
Methylene Chloride	**<7.4**	ug/kg	26.6	7.4	1	05/24/24 09:00	05/28/24 16:08	75-09-2	
Tetrachloroethene	**<10.3**	ug/kg	26.6	10.3	1	05/24/24 09:00	05/28/24 16:08	127-18-4	
Toluene	**<6.7**	ug/kg	26.6	6.7	1	05/24/24 09:00	05/28/24 16:08	108-88-3	
Trichloroethene	**<10**	ug/kg	26.6	10	1	05/24/24 09:00	05/28/24 16:08	79-01-6	
Trichlorofluoromethane	**<7.7**	ug/kg	26.6	7.7	1	05/24/24 09:00	05/28/24 16:08	75-69-4	
m&p-Xylene	**<11.2**	ug/kg	53.2	11.2	1	05/24/24 09:00	05/28/24 16:08	179601-23-1	
trans-1,2-Dichloroethene	**<5.8**	ug/kg	26.6	5.8	1	05/24/24 09:00	05/28/24 16:08	156-60-5	
Surrogates									
Toluene-d8 (S)	99	%	60-140		1	05/24/24 09:00	05/28/24 16:08	2037-26-5	
4-Bromofluorobenzene (S)	91	%	66-143		1	05/24/24 09:00	05/28/24 16:08	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	60-140		1	05/24/24 09:00	05/28/24 16:08	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-211.65_20240518 **Lab ID: 40278528059** Collected: 05/18/24 08:27 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<6.1**	ug/kg	23.9	6.1	1	05/24/24 09:00	05/28/24 16:28	71-55-6	
1,1,2-Trichlorotrifluoroethane	**10.1J**	ug/kg	23.9	7.8	1	05/24/24 09:00	05/28/24 16:28	76-13-1	
1,1-Dichloroethene	**<7.9**	ug/kg	23.9	7.9	1	05/24/24 09:00	05/28/24 16:28	75-35-4	
1,2-Dichloroethane	**<5.5**	ug/kg	23.9	5.5	1	05/24/24 09:00	05/28/24 16:28	107-06-2	
2-Butanone (MEK)	**<75.5**	ug/kg	597	75.5	1	05/24/24 09:00	05/28/24 16:28	78-93-3	
2-Hexanone	**<237**	ug/kg	597	237	1	05/24/24 09:00	05/28/24 16:28	591-78-6	v1
2-Propanol	**<761**	ug/kg	2390	761	1	05/24/24 09:00	05/28/24 16:28	67-63-0	v1
Acetone	**<145**	ug/kg	597	145	1	05/24/24 09:00	05/28/24 16:28	67-64-1	
Benzene	**<5.7**	ug/kg	9.6	5.7	1	05/24/24 09:00	05/28/24 16:28	71-43-2	
Bromodichloromethane	**<5.7**	ug/kg	23.9	5.7	1	05/24/24 09:00	05/28/24 16:28	75-27-4	
Bromoform	**<105**	ug/kg	119	105	1	05/24/24 09:00	05/28/24 16:28	75-25-2	
Chlorobenzene	**<2.9**	ug/kg	23.9	2.9	1	05/24/24 09:00	05/28/24 16:28	108-90-7	
Chloroform	**<17.1**	ug/kg	119	17.1	1	05/24/24 09:00	05/28/24 16:28	67-66-3	
Chloromethane	**<9.1**	ug/kg	23.9	9.1	1	05/24/24 09:00	05/28/24 16:28	74-87-3	
Dibromochloromethane	**<81.7**	ug/kg	119	81.7	1	05/24/24 09:00	05/28/24 16:28	124-48-1	
Dichlorofluoromethane	**<6.7**	ug/kg	23.9	6.7	1	05/24/24 09:00	05/28/24 16:28	75-43-4	
Methyl-tert-butyl ether	**<7.0**	ug/kg	23.9	7.0	1	05/24/24 09:00	05/28/24 16:28	1634-04-4	
Methylene Chloride	**<6.6**	ug/kg	23.9	6.6	1	05/24/24 09:00	05/28/24 16:28	75-09-2	
Tetrachloroethene	**<9.3**	ug/kg	23.9	9.3	1	05/24/24 09:00	05/28/24 16:28	127-18-4	
Toluene	**<6.0**	ug/kg	23.9	6.0	1	05/24/24 09:00	05/28/24 16:28	108-88-3	
Trichloroethene	**<8.9**	ug/kg	23.9	8.9	1	05/24/24 09:00	05/28/24 16:28	79-01-6	
Trichlorofluoromethane	**15.3J**	ug/kg	23.9	6.9	1	05/24/24 09:00	05/28/24 16:28	75-69-4	
m&p-Xylene	**<10.1**	ug/kg	47.8	10.1	1	05/24/24 09:00	05/28/24 16:28	179601-23-1	
trans-1,2-Dichloroethene	**<5.2**	ug/kg	23.9	5.2	1	05/24/24 09:00	05/28/24 16:28	156-60-5	
Surrogates									
Toluene-d8 (S)	95	%	60-140		1	05/24/24 09:00	05/28/24 16:28	2037-26-5	
4-Bromofluorobenzene (S)	87	%	66-143		1	05/24/24 09:00	05/28/24 16:28	460-00-4	
1,2-Dichlorobenzene-d4 (S)	94	%	60-140		1	05/24/24 09:00	05/28/24 16:28	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-212.8_20240518 **Lab ID: 40278528060** Collected: 05/18/24 08:50 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.5**	ug/kg	29.4	7.5	1	05/23/24 10:00	05/24/24 14:03	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<9.6**	ug/kg	29.4	9.6	1	05/23/24 10:00	05/24/24 14:03	76-13-1	
1,1-Dichloroethene	**<9.8**	ug/kg	29.4	9.8	1	05/23/24 10:00	05/24/24 14:03	75-35-4	
1,2-Dichloroethane	**<6.8**	ug/kg	29.4	6.8	1	05/23/24 10:00	05/24/24 14:03	107-06-2	
2-Butanone (MEK)	**<93.0**	ug/kg	736	93.0	1	05/23/24 10:00	05/24/24 14:03	78-93-3	
2-Hexanone	**<292**	ug/kg	736	292	1	05/23/24 10:00	05/24/24 14:03	591-78-6	
2-Propanol	**<938**	ug/kg	2940	938	1	05/23/24 10:00	05/24/24 14:03	67-63-0	v1
Acetone	**<179**	ug/kg	736	179	1	05/23/24 10:00	05/24/24 14:03	67-64-1	
Benzene	**8.5J**	ug/kg	11.8	7.0	1	05/23/24 10:00	05/24/24 14:03	71-43-2	
Bromodichloromethane	**<7.0**	ug/kg	29.4	7.0	1	05/23/24 10:00	05/24/24 14:03	75-27-4	
Bromoform	**<130**	ug/kg	147	130	1	05/23/24 10:00	05/24/24 14:03	75-25-2	
Chlorobenzene	**<3.5**	ug/kg	29.4	3.5	1	05/23/24 10:00	05/24/24 14:03	108-90-7	
Chloroform	**<21.1**	ug/kg	147	21.1	1	05/23/24 10:00	05/24/24 14:03	67-66-3	
Chloromethane	**<11.2**	ug/kg	29.4	11.2	1	05/23/24 10:00	05/24/24 14:03	74-87-3	
Dibromochloromethane	**<101**	ug/kg	147	101	1	05/23/24 10:00	05/24/24 14:03	124-48-1	
Dichlorofluoromethane	**<8.3**	ug/kg	29.4	8.3	1	05/23/24 10:00	05/24/24 14:03	75-43-4	
Methyl-tert-butyl ether	**<8.7**	ug/kg	29.4	8.7	1	05/23/24 10:00	05/24/24 14:03	1634-04-4	
Methylene Chloride	**<8.2**	ug/kg	29.4	8.2	1	05/23/24 10:00	05/24/24 14:03	75-09-2	
Tetrachloroethene	**<11.4**	ug/kg	29.4	11.4	1	05/23/24 10:00	05/24/24 14:03	127-18-4	
Toluene	**<7.4**	ug/kg	29.4	7.4	1	05/23/24 10:00	05/24/24 14:03	108-88-3	
Trichloroethene	**<11.0**	ug/kg	29.4	11.0	1	05/23/24 10:00	05/24/24 14:03	79-01-6	
Trichlorofluoromethane	**27.1J**	ug/kg	29.4	8.5	1	05/23/24 10:00	05/24/24 14:03	75-69-4	
m&p-Xylene	**<12.4**	ug/kg	58.9	12.4	1	05/23/24 10:00	05/24/24 14:03	179601-23-1	
trans-1,2-Dichloroethene	**<6.4**	ug/kg	29.4	6.4	1	05/23/24 10:00	05/24/24 14:03	156-60-5	
Surrogates									
Toluene-d8 (S)	94	%	60-140		1	05/23/24 10:00	05/24/24 14:03	2037-26-5	
4-Bromofluorobenzene (S)	91	%	66-143		1	05/23/24 10:00	05/24/24 14:03	460-00-4	
1,2-Dichlorobenzene-d4 (S)	94	%	60-140		1	05/23/24 10:00	05/24/24 14:03	2199-69-1	

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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-212.8-DUP_20240518 **Lab ID: 40278528061** Collected: 05/18/24 08:50 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<10.0**	ug/kg	39.1	10.0	1	05/24/24 09:00	05/28/24 16:48	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.8**	ug/kg	39.1	12.8	1	05/24/24 09:00	05/28/24 16:48	76-13-1	
1,1-Dichloroethene	**<13.0**	ug/kg	39.1	13.0	1	05/24/24 09:00	05/28/24 16:48	75-35-4	
1,2-Dichloroethane	**<9.0**	ug/kg	39.1	9.0	1	05/24/24 09:00	05/28/24 16:48	107-06-2	
2-Butanone (MEK)	**<124**	ug/kg	978	124	1	05/24/24 09:00	05/28/24 16:48	78-93-3	
2-Hexanone	**<389**	ug/kg	978	389	1	05/24/24 09:00	05/28/24 16:48	591-78-6	v1
2-Propanol	**<1250**	ug/kg	3910	1250	1	05/24/24 09:00	05/28/24 16:48	67-63-0	v1
Acetone	**<238**	ug/kg	978	238	1	05/24/24 09:00	05/28/24 16:48	67-64-1	
Benzene	**<9.3**	ug/kg	15.7	9.3	1	05/24/24 09:00	05/28/24 16:48	71-43-2	
Bromodichloromethane	**<9.3**	ug/kg	39.1	9.3	1	05/24/24 09:00	05/28/24 16:48	75-27-4	
Bromoform	**<172**	ug/kg	196	172	1	05/24/24 09:00	05/28/24 16:48	75-25-2	
Chlorobenzene	**<4.7**	ug/kg	39.1	4.7	1	05/24/24 09:00	05/28/24 16:48	108-90-7	
Chloroform	**<28.0**	ug/kg	196	28.0	1	05/24/24 09:00	05/28/24 16:48	67-66-3	
Chloromethane	**<14.9**	ug/kg	39.1	14.9	1	05/24/24 09:00	05/28/24 16:48	74-87-3	
Dibromochloromethane	**<134**	ug/kg	196	134	1	05/24/24 09:00	05/28/24 16:48	124-48-1	
Dichlorofluoromethane	**<11.0**	ug/kg	39.1	11.0	1	05/24/24 09:00	05/28/24 16:48	75-43-4	
Methyl-tert-butyl ether	**<11.5**	ug/kg	39.1	11.5	1	05/24/24 09:00	05/28/24 16:48	1634-04-4	
Methylene Chloride	**<10.9**	ug/kg	39.1	10.9	1	05/24/24 09:00	05/28/24 16:48	75-09-2	
Tetrachloroethene	**<15.2**	ug/kg	39.1	15.2	1	05/24/24 09:00	05/28/24 16:48	127-18-4	
Toluene	**<9.9**	ug/kg	39.1	9.9	1	05/24/24 09:00	05/28/24 16:48	108-88-3	
Trichloroethene	**<14.6**	ug/kg	39.1	14.6	1	05/24/24 09:00	05/28/24 16:48	79-01-6	
Trichlorofluoromethane	**12.3J**	ug/kg	39.1	11.4	1	05/24/24 09:00	05/28/24 16:48	75-69-4	
m&p-Xylene	**<16.5**	ug/kg	78.3	16.5	1	05/24/24 09:00	05/28/24 16:48	179601-23-1	
trans-1,2-Dichloroethene	**<8.6**	ug/kg	39.1	8.6	1	05/24/24 09:00	05/28/24 16:48	156-60-5	
Surrogates									
Toluene-d8 (S)	106	%	60-140		1	05/24/24 09:00	05/28/24 16:48	2037-26-5	
4-Bromofluorobenzene (S)	104	%	66-143		1	05/24/24 09:00	05/28/24 16:48	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	60-140		1	05/24/24 09:00	05/28/24 16:48	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: TB-05 **Lab ID: 40278528062** Collected: 05/19/24 08:45 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	05/24/24 09:00	05/28/24 14:07	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	05/24/24 09:00	05/28/24 14:07	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	05/24/24 09:00	05/28/24 14:07	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	05/24/24 09:00	05/28/24 14:07	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	05/24/24 09:00	05/28/24 14:07	78-93-3	
2-Hexanone	**<496**	ug/kg	1250	496	1	05/24/24 09:00	05/28/24 14:07	591-78-6	v1
2-Propanol	**<1590**	ug/kg	5000	1590	1	05/24/24 09:00	05/28/24 14:07	67-63-0	v1
Acetone	**<304**	ug/kg	1250	304	1	05/24/24 09:00	05/28/24 14:07	67-64-1	
Benzene	**<11.9**	ug/kg	20.0	11.9	1	05/24/24 09:00	05/28/24 14:07	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	05/24/24 09:00	05/28/24 14:07	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	05/24/24 09:00	05/28/24 14:07	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	05/24/24 09:00	05/28/24 14:07	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	05/24/24 09:00	05/28/24 14:07	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	05/24/24 09:00	05/28/24 14:07	74-87-3	
Dibromochloromethane	**<171**	ug/kg	250	171	1	05/24/24 09:00	05/28/24 14:07	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	05/24/24 09:00	05/28/24 14:07	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	05/24/24 09:00	05/28/24 14:07	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	05/24/24 09:00	05/28/24 14:07	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	05/24/24 09:00	05/28/24 14:07	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	05/24/24 09:00	05/28/24 14:07	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	05/24/24 09:00	05/28/24 14:07	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	05/24/24 09:00	05/28/24 14:07	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	05/24/24 09:00	05/28/24 14:07	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	05/24/24 09:00	05/28/24 14:07	156-60-5	
Surrogates									
Toluene-d8 (S)	104	%	60-140		1	05/24/24 09:00	05/28/24 14:07	2037-26-5	
4-Bromofluorobenzene (S)	101	%	66-143		1	05/24/24 09:00	05/28/24 14:07	460-00-4	
1,2-Dichlorobenzene-d4 (S)	111	%	60-140		1	05/24/24 09:00	05/28/24 14:07	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-214.85_20240518 **Lab ID: 40278528063** Collected: 05/18/24 08:51 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.4**	ug/kg	36.9	9.4	1	05/24/24 09:00	05/28/24 17:08	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.0**	ug/kg	36.9	12.0	1	05/24/24 09:00	05/28/24 17:08	76-13-1	
1,1-Dichloroethene	**<12.3**	ug/kg	36.9	12.3	1	05/24/24 09:00	05/28/24 17:08	75-35-4	
1,2-Dichloroethane	**<8.5**	ug/kg	36.9	8.5	1	05/24/24 09:00	05/28/24 17:08	107-06-2	
2-Butanone (MEK)	**<117**	ug/kg	923	117	1	05/24/24 09:00	05/28/24 17:08	78-93-3	
2-Hexanone	**<366**	ug/kg	923	366	1	05/24/24 09:00	05/28/24 17:08	591-78-6	v1
2-Propanol	**<1180**	ug/kg	3690	1180	1	05/24/24 09:00	05/28/24 17:08	67-63-0	v1
Acetone	**<225**	ug/kg	923	225	1	05/24/24 09:00	05/28/24 17:08	67-64-1	
Benzene	**<8.8**	ug/kg	14.8	8.8	1	05/24/24 09:00	05/28/24 17:08	71-43-2	
Bromodichloromethane	**<8.8**	ug/kg	36.9	8.8	1	05/24/24 09:00	05/28/24 17:08	75-27-4	
Bromoform	**<162**	ug/kg	185	162	1	05/24/24 09:00	05/28/24 17:08	75-25-2	
Chlorobenzene	**<4.4**	ug/kg	36.9	4.4	1	05/24/24 09:00	05/28/24 17:08	108-90-7	
Chloroform	**<26.4**	ug/kg	185	26.4	1	05/24/24 09:00	05/28/24 17:08	67-66-3	
Chloromethane	**<14.0**	ug/kg	36.9	14.0	1	05/24/24 09:00	05/28/24 17:08	74-87-3	
Dibromochloromethane	**<126**	ug/kg	185	126	1	05/24/24 09:00	05/28/24 17:08	124-48-1	
Dichlorofluoromethane	**<10.4**	ug/kg	36.9	10.4	1	05/24/24 09:00	05/28/24 17:08	75-43-4	
Methyl-tert-butyl ether	**<10.9**	ug/kg	36.9	10.9	1	05/24/24 09:00	05/28/24 17:08	1634-04-4	
Methylene Chloride	**<10.3**	ug/kg	36.9	10.3	1	05/24/24 09:00	05/28/24 17:08	75-09-2	
Tetrachloroethene	**<14.3**	ug/kg	36.9	14.3	1	05/24/24 09:00	05/28/24 17:08	127-18-4	
Toluene	**<9.3**	ug/kg	36.9	9.3	1	05/24/24 09:00	05/28/24 17:08	108-88-3	
Trichloroethene	**<13.8**	ug/kg	36.9	13.8	1	05/24/24 09:00	05/28/24 17:08	79-01-6	
Trichlorofluoromethane	**<10.7**	ug/kg	36.9	10.7	1	05/24/24 09:00	05/28/24 17:08	75-69-4	
m&p-Xylene	**<15.6**	ug/kg	73.8	15.6	1	05/24/24 09:00	05/28/24 17:08	179601-23-1	
trans-1,2-Dichloroethene	**<8.1**	ug/kg	36.9	8.1	1	05/24/24 09:00	05/28/24 17:08	156-60-5	
Surrogates									
Toluene-d8 (S)	90	%	60-140		1	05/24/24 09:00	05/28/24 17:08	2037-26-5	
4-Bromofluorobenzene (S)	86	%	66-143		1	05/24/24 09:00	05/28/24 17:08	460-00-4	
1,2-Dichlorobenzene-d4 (S)	91	%	60-140		1	05/24/24 09:00	05/28/24 17:08	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-216.9_20240518 **Lab ID: 40278528064** Collected: 05/18/24 09:15 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<6.7**	ug/kg	26.3	6.7	1	05/24/24 09:00	05/28/24 17:29	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<8.6**	ug/kg	26.3	8.6	1	05/24/24 09:00	05/28/24 17:29	76-13-1	
1,1-Dichloroethene	**<8.7**	ug/kg	26.3	8.7	1	05/24/24 09:00	05/28/24 17:29	75-35-4	
1,2-Dichloroethane	**<6.0**	ug/kg	26.3	6.0	1	05/24/24 09:00	05/28/24 17:29	107-06-2	
2-Butanone (MEK)	**<83.0**	ug/kg	657	83.0	1	05/24/24 09:00	05/28/24 17:29	78-93-3	
2-Hexanone	**<261**	ug/kg	657	261	1	05/24/24 09:00	05/28/24 17:29	591-78-6	v1
2-Propanol	**<837**	ug/kg	2630	837	1	05/24/24 09:00	05/28/24 17:29	67-63-0	v1
Acetone	**<160**	ug/kg	657	160	1	05/24/24 09:00	05/28/24 17:29	67-64-1	
Benzene	**8.3J**	ug/kg	10.5	6.3	1	05/24/24 09:00	05/28/24 17:29	71-43-2	
Bromodichloromethane	**<6.3**	ug/kg	26.3	6.3	1	05/24/24 09:00	05/28/24 17:29	75-27-4	
Bromoform	**<116**	ug/kg	131	116	1	05/24/24 09:00	05/28/24 17:29	75-25-2	
Chlorobenzene	**<3.1**	ug/kg	26.3	3.1	1	05/24/24 09:00	05/28/24 17:29	108-90-7	
Chloroform	**<18.8**	ug/kg	131	18.8	1	05/24/24 09:00	05/28/24 17:29	67-66-3	
Chloromethane	**<10**	ug/kg	26.3	10	1	05/24/24 09:00	05/28/24 17:29	74-87-3	
Dibromochloromethane	**<89.8**	ug/kg	131	89.8	1	05/24/24 09:00	05/28/24 17:29	124-48-1	
Dichlorofluoromethane	**<7.4**	ug/kg	26.3	7.4	1	05/24/24 09:00	05/28/24 17:29	75-43-4	
Methyl-tert-butyl ether	**<7.7**	ug/kg	26.3	7.7	1	05/24/24 09:00	05/28/24 17:29	1634-04-4	
Methylene Chloride	**<7.3**	ug/kg	26.3	7.3	1	05/24/24 09:00	05/28/24 17:29	75-09-2	
Tetrachloroethene	**<10.2**	ug/kg	26.3	10.2	1	05/24/24 09:00	05/28/24 17:29	127-18-4	
Toluene	**9.2J**	ug/kg	26.3	6.6	1	05/24/24 09:00	05/28/24 17:29	108-88-3	
Trichloroethene	**<9.8**	ug/kg	26.3	9.8	1	05/24/24 09:00	05/28/24 17:29	79-01-6	
Trichlorofluoromethane	**<7.6**	ug/kg	26.3	7.6	1	05/24/24 09:00	05/28/24 17:29	75-69-4	
m&p-Xylene	**<11.1**	ug/kg	52.5	11.1	1	05/24/24 09:00	05/28/24 17:29	179601-23-1	
trans-1,2-Dichloroethene	**<5.7**	ug/kg	26.3	5.7	1	05/24/24 09:00	05/28/24 17:29	156-60-5	
Surrogates									
Toluene-d8 (S)	99	%	60-140		1	05/24/24 09:00	05/28/24 17:29	2037-26-5	
4-Bromofluorobenzene (S)	93	%	66-143		1	05/24/24 09:00	05/28/24 17:29	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	60-140		1	05/24/24 09:00	05/28/24 17:29	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-220.35_20240518 **Lab ID: 40278528065** Collected: 05/18/24 09:51 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.6**	ug/kg	29.5	7.6	1	05/24/24 09:00	05/28/24 17:49	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<9.6**	ug/kg	29.5	9.6	1	05/24/24 09:00	05/28/24 17:49	76-13-1	
1,1-Dichloroethene	**<9.8**	ug/kg	29.5	9.8	1	05/24/24 09:00	05/28/24 17:49	75-35-4	
1,2-Dichloroethane	**<6.8**	ug/kg	29.5	6.8	1	05/24/24 09:00	05/28/24 17:49	107-06-2	
2-Butanone (MEK)	**<93.3**	ug/kg	738	93.3	1	05/24/24 09:00	05/28/24 17:49	78-93-3	
2-Hexanone	**<293**	ug/kg	738	293	1	05/24/24 09:00	05/28/24 17:49	591-78-6	v1
2-Propanol	**<941**	ug/kg	2950	941	1	05/24/24 09:00	05/28/24 17:49	67-63-0	v1
Acetone	**<180**	ug/kg	738	180	1	05/24/24 09:00	05/28/24 17:49	67-64-1	
Benzene	**<7.0**	ug/kg	11.8	7.0	1	05/24/24 09:00	05/28/24 17:49	71-43-2	
Bromodichloromethane	**<7.0**	ug/kg	29.5	7.0	1	05/24/24 09:00	05/28/24 17:49	75-27-4	
Bromoform	**<130**	ug/kg	148	130	1	05/24/24 09:00	05/28/24 17:49	75-25-2	
Chlorobenzene	**<3.5**	ug/kg	29.5	3.5	1	05/24/24 09:00	05/28/24 17:49	108-90-7	
Chloroform	**<21.1**	ug/kg	148	21.1	1	05/24/24 09:00	05/28/24 17:49	67-66-3	
Chloromethane	**<11.2**	ug/kg	29.5	11.2	1	05/24/24 09:00	05/28/24 17:49	74-87-3	
Dibromochloromethane	**<101**	ug/kg	148	101	1	05/24/24 09:00	05/28/24 17:49	124-48-1	
Dichlorofluoromethane	**<8.3**	ug/kg	29.5	8.3	1	05/24/24 09:00	05/28/24 17:49	75-43-4	
Methyl-tert-butyl ether	**<8.7**	ug/kg	29.5	8.7	1	05/24/24 09:00	05/28/24 17:49	1634-04-4	
Methylene Chloride	**<8.2**	ug/kg	29.5	8.2	1	05/24/24 09:00	05/28/24 17:49	75-09-2	
Tetrachloroethene	**<11.5**	ug/kg	29.5	11.5	1	05/24/24 09:00	05/28/24 17:49	127-18-4	
Toluene	**<7.4**	ug/kg	29.5	7.4	1	05/24/24 09:00	05/28/24 17:49	108-88-3	
Trichloroethene	**<11.0**	ug/kg	29.5	11.0	1	05/24/24 09:00	05/28/24 17:49	79-01-6	
Trichlorofluoromethane	**<8.6**	ug/kg	29.5	8.6	1	05/24/24 09:00	05/28/24 17:49	75-69-4	
m&p-Xylene	**<12.5**	ug/kg	59.0	12.5	1	05/24/24 09:00	05/28/24 17:49	179601-23-1	
trans-1,2-Dichloroethene	**<6.5**	ug/kg	29.5	6.5	1	05/24/24 09:00	05/28/24 17:49	156-60-5	
Surrogates									
Toluene-d8 (S)	99	%	60-140		1	05/24/24 09:00	05/28/24 17:49	2037-26-5	
4-Bromofluorobenzene (S)	90	%	66-143		1	05/24/24 09:00	05/28/24 17:49	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	60-140		1	05/24/24 09:00	05/28/24 17:49	2199-69-1	

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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-220.9_20240518 **Lab ID: 40278528066** Collected: 05/18/24 10:32 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<8.6**	ug/kg	33.5	8.6	1	05/24/24 09:00	05/28/24 18:09	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.9**	ug/kg	33.5	10.9	1	05/24/24 09:00	05/28/24 18:09	76-13-1	
1,1-Dichloroethene	**<11.1**	ug/kg	33.5	11.1	1	05/24/24 09:00	05/28/24 18:09	75-35-4	
1,2-Dichloroethane	**<7.7**	ug/kg	33.5	7.7	1	05/24/24 09:00	05/28/24 18:09	107-06-2	
2-Butanone (MEK)	**<106**	ug/kg	836	106	1	05/24/24 09:00	05/28/24 18:09	78-93-3	
2-Hexanone	**<332**	ug/kg	836	332	1	05/24/24 09:00	05/28/24 18:09	591-78-6	v1
2-Propanol	**<1070**	ug/kg	3350	1070	1	05/24/24 09:00	05/28/24 18:09	67-63-0	v1
Acetone	**<204**	ug/kg	836	204	1	05/24/24 09:00	05/28/24 18:09	67-64-1	
Benzene	**10.4J**	ug/kg	13.4	8.0	1	05/24/24 09:00	05/28/24 18:09	71-43-2	
Bromodichloromethane	**<8.0**	ug/kg	33.5	8.0	1	05/24/24 09:00	05/28/24 18:09	75-27-4	
Bromoform	**<147**	ug/kg	167	147	1	05/24/24 09:00	05/28/24 18:09	75-25-2	
Chlorobenzene	**<4.0**	ug/kg	33.5	4.0	1	05/24/24 09:00	05/28/24 18:09	108-90-7	
Chloroform	**<24.0**	ug/kg	167	24.0	1	05/24/24 09:00	05/28/24 18:09	67-66-3	
Chloromethane	**<12.7**	ug/kg	33.5	12.7	1	05/24/24 09:00	05/28/24 18:09	74-87-3	
Dibromochloromethane	**<114**	ug/kg	167	114	1	05/24/24 09:00	05/28/24 18:09	124-48-1	
Dichlorofluoromethane	**<9.4**	ug/kg	33.5	9.4	1	05/24/24 09:00	05/28/24 18:09	75-43-4	
Methyl-tert-butyl ether	**<9.8**	ug/kg	33.5	9.8	1	05/24/24 09:00	05/28/24 18:09	1634-04-4	
Methylene Chloride	**<9.3**	ug/kg	33.5	9.3	1	05/24/24 09:00	05/28/24 18:09	75-09-2	
Tetrachloroethene	**<13.0**	ug/kg	33.5	13.0	1	05/24/24 09:00	05/28/24 18:09	127-18-4	
Toluene	**<8.4**	ug/kg	33.5	8.4	1	05/24/24 09:00	05/28/24 18:09	108-88-3	
Trichloroethene	**<12.5**	ug/kg	33.5	12.5	1	05/24/24 09:00	05/28/24 18:09	79-01-6	
Trichlorofluoromethane	**<9.7**	ug/kg	33.5	9.7	1	05/24/24 09:00	05/28/24 18:09	75-69-4	
m&p-Xylene	**<14.1**	ug/kg	66.9	14.1	1	05/24/24 09:00	05/28/24 18:09	179601-23-1	
trans-1,2-Dichloroethene	**<7.3**	ug/kg	33.5	7.3	1	05/24/24 09:00	05/28/24 18:09	156-60-5	
Surrogates									
Toluene-d8 (S)	110	%	60-140		1	05/24/24 09:00	05/28/24 18:09	2037-26-5	
4-Bromofluorobenzene (S)	102	%	66-143		1	05/24/24 09:00	05/28/24 18:09	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	60-140		1	05/24/24 09:00	05/28/24 18:09	2199-69-1	

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(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-224.4_20240518 **Lab ID: 40278528067** Collected: 05/18/24 11:05 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.1**	ug/kg	27.6	7.1	1	05/24/24 09:00	05/28/24 18:29	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<9.0**	ug/kg	27.6	9.0	1	05/24/24 09:00	05/28/24 18:29	76-13-1	
1,1-Dichloroethene	**<9.2**	ug/kg	27.6	9.2	1	05/24/24 09:00	05/28/24 18:29	75-35-4	
1,2-Dichloroethane	**<6.4**	ug/kg	27.6	6.4	1	05/24/24 09:00	05/28/24 18:29	107-06-2	
2-Butanone (MEK)	**<87.3**	ug/kg	690	87.3	1	05/24/24 09:00	05/28/24 18:29	78-93-3	
2-Hexanone	**<274**	ug/kg	690	274	1	05/24/24 09:00	05/28/24 18:29	591-78-6	v1
2-Propanol	**<880**	ug/kg	2760	880	1	05/24/24 09:00	05/28/24 18:29	67-63-0	v1
Acetone	**<168**	ug/kg	690	168	1	05/24/24 09:00	05/28/24 18:29	67-64-1	
Benzene	**<6.6**	ug/kg	11.0	6.6	1	05/24/24 09:00	05/28/24 18:29	71-43-2	
Bromodichloromethane	**<6.6**	ug/kg	27.6	6.6	1	05/24/24 09:00	05/28/24 18:29	75-27-4	
Bromoform	**<122**	ug/kg	138	122	1	05/24/24 09:00	05/28/24 18:29	75-25-2	
Chlorobenzene	**<3.3**	ug/kg	27.6	3.3	1	05/24/24 09:00	05/28/24 18:29	108-90-7	
Chloroform	**<19.8**	ug/kg	138	19.8	1	05/24/24 09:00	05/28/24 18:29	67-66-3	
Chloromethane	**<10.5**	ug/kg	27.6	10.5	1	05/24/24 09:00	05/28/24 18:29	74-87-3	
Dibromochloromethane	**<94.4**	ug/kg	138	94.4	1	05/24/24 09:00	05/28/24 18:29	124-48-1	
Dichlorofluoromethane	**<7.8**	ug/kg	27.6	7.8	1	05/24/24 09:00	05/28/24 18:29	75-43-4	
Methyl-tert-butyl ether	**<8.1**	ug/kg	27.6	8.1	1	05/24/24 09:00	05/28/24 18:29	1634-04-4	
Methylene Chloride	**<7.7**	ug/kg	27.6	7.7	1	05/24/24 09:00	05/28/24 18:29	75-09-2	
Tetrachloroethene	**<10.7**	ug/kg	27.6	10.7	1	05/24/24 09:00	05/28/24 18:29	127-18-4	
Toluene	**<7.0**	ug/kg	27.6	7.0	1	05/24/24 09:00	05/28/24 18:29	108-88-3	
Trichloroethene	**<10.3**	ug/kg	27.6	10.3	1	05/24/24 09:00	05/28/24 18:29	79-01-6	
Trichlorofluoromethane	**<8.0**	ug/kg	27.6	8.0	1	05/24/24 09:00	05/28/24 18:29	75-69-4	
m&p-Xylene	**<11.7**	ug/kg	55.2	11.7	1	05/24/24 09:00	05/28/24 18:29	179601-23-1	
trans-1,2-Dichloroethene	**<6.0**	ug/kg	27.6	6.0	1	05/24/24 09:00	05/28/24 18:29	156-60-5	
Surrogates									
Toluene-d8 (S)	97	%	60-140		1	05/24/24 09:00	05/28/24 18:29	2037-26-5	
4-Bromofluorobenzene (S)	87	%	66-143		1	05/24/24 09:00	05/28/24 18:29	460-00-4	
1,2-Dichlorobenzene-d4 (S)	93	%	60-140		1	05/24/24 09:00	05/28/24 18:29	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-225.6_20240518 **Lab ID: 40278528068** Collected: 05/18/24 11:06 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.3**	ug/kg	36.2	9.3	1	05/24/24 10:00	05/25/24 01:06	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.8**	ug/kg	36.2	11.8	1	05/24/24 10:00	05/25/24 01:06	76-13-1	
1,1-Dichloroethene	**<12.0**	ug/kg	36.2	12.0	1	05/24/24 10:00	05/25/24 01:06	75-35-4	
1,2-Dichloroethane	**<8.3**	ug/kg	36.2	8.3	1	05/24/24 10:00	05/25/24 01:06	107-06-2	
2-Butanone (MEK)	**<114**	ug/kg	905	114	1	05/24/24 10:00	05/25/24 01:06	78-93-3	
2-Hexanone	**<360**	ug/kg	905	360	1	05/24/24 10:00	05/25/24 01:06	591-78-6	
2-Propanol	**<1150**	ug/kg	3620	1150	1	05/24/24 10:00	05/25/24 01:06	67-63-0	
Acetone	**<220**	ug/kg	905	220	1	05/24/24 10:00	05/25/24 01:06	67-64-1	
Benzene	**<8.6**	ug/kg	14.5	8.6	1	05/24/24 10:00	05/25/24 01:06	71-43-2	
Bromodichloromethane	**<8.6**	ug/kg	36.2	8.6	1	05/24/24 10:00	05/25/24 01:06	75-27-4	
Bromoform	**<159**	ug/kg	181	159	1	05/24/24 10:00	05/25/24 01:06	75-25-2	
Chlorobenzene	**<4.3**	ug/kg	36.2	4.3	1	05/24/24 10:00	05/25/24 01:06	108-90-7	
Chloroform	**<25.9**	ug/kg	181	25.9	1	05/24/24 10:00	05/25/24 01:06	67-66-3	
Chloromethane	**<13.8**	ug/kg	36.2	13.8	1	05/24/24 10:00	05/25/24 01:06	74-87-3	
Dibromochloromethane	**<124**	ug/kg	181	124	1	05/24/24 10:00	05/25/24 01:06	124-48-1	
Dichlorofluoromethane	**<10.2**	ug/kg	36.2	10.2	1	05/24/24 10:00	05/25/24 01:06	75-43-4	
Methyl-tert-butyl ether	**<10.6**	ug/kg	36.2	10.6	1	05/24/24 10:00	05/25/24 01:06	1634-04-4	
Methylene Chloride	**<10.1**	ug/kg	36.2	10.1	1	05/24/24 10:00	05/25/24 01:06	75-09-2	
Tetrachloroethene	**<14.1**	ug/kg	36.2	14.1	1	05/24/24 10:00	05/25/24 01:06	127-18-4	
Toluene	**<9.1**	ug/kg	36.2	9.1	1	05/24/24 10:00	05/25/24 01:06	108-88-3	
Trichloroethene	**<13.5**	ug/kg	36.2	13.5	1	05/24/24 10:00	05/25/24 01:06	79-01-6	
Trichlorofluoromethane	**<10.5**	ug/kg	36.2	10.5	1	05/24/24 10:00	05/25/24 01:06	75-69-4	
m&p-Xylene	**<15.3**	ug/kg	72.4	15.3	1	05/24/24 10:00	05/25/24 01:06	179601-23-1	
trans-1,2-Dichloroethene	**<7.9**	ug/kg	36.2	7.9	1	05/24/24 10:00	05/25/24 01:06	156-60-5	
Surrogates									
Toluene-d8 (S)	111	%	60-140		1	05/24/24 10:00	05/25/24 01:06	2037-26-5	
4-Bromofluorobenzene (S)	109	%	66-143		1	05/24/24 10:00	05/25/24 01:06	460-00-4	
1,2-Dichlorobenzene-d4 (S)	116	%	60-140		1	05/24/24 10:00	05/25/24 01:06	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-226.55_20240518 **Lab ID: 40278528069** Collected: 05/18/24 11:07 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<5.5**	ug/kg	21.6	5.5	1	05/24/24 10:00	05/25/24 01:25	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<7.1**	ug/kg	21.6	7.1	1	05/24/24 10:00	05/25/24 01:25	76-13-1	
1,1-Dichloroethene	**<7.2**	ug/kg	21.6	7.2	1	05/24/24 10:00	05/25/24 01:25	75-35-4	
1,2-Dichloroethane	**<5.0**	ug/kg	21.6	5.0	1	05/24/24 10:00	05/25/24 01:25	107-06-2	
2-Butanone (MEK)	**<68.4**	ug/kg	541	68.4	1	05/24/24 10:00	05/25/24 01:25	78-93-3	
2-Hexanone	**<215**	ug/kg	541	215	1	05/24/24 10:00	05/25/24 01:25	591-78-6	
2-Propanol	**<689**	ug/kg	2160	689	1	05/24/24 10:00	05/25/24 01:25	67-63-0	
Acetone	**<132**	ug/kg	541	132	1	05/24/24 10:00	05/25/24 01:25	67-64-1	
Benzene	**<5.1**	ug/kg	8.7	5.1	1	05/24/24 10:00	05/25/24 01:25	71-43-2	
Bromodichloromethane	**<5.1**	ug/kg	21.6	5.1	1	05/24/24 10:00	05/25/24 01:25	75-27-4	
Bromoform	**<95.2**	ug/kg	108	95.2	1	05/24/24 10:00	05/25/24 01:25	75-25-2	
Chlorobenzene	**<2.6**	ug/kg	21.6	2.6	1	05/24/24 10:00	05/25/24 01:25	108-90-7	
Chloroform	**<15.5**	ug/kg	108	15.5	1	05/24/24 10:00	05/25/24 01:25	67-66-3	
Chloromethane	**<8.2**	ug/kg	21.6	8.2	1	05/24/24 10:00	05/25/24 01:25	74-87-3	
Dibromochloromethane	**<74.0**	ug/kg	108	74.0	1	05/24/24 10:00	05/25/24 01:25	124-48-1	
Dichlorofluoromethane	**<6.1**	ug/kg	21.6	6.1	1	05/24/24 10:00	05/25/24 01:25	75-43-4	
Methyl-tert-butyl ether	**<6.4**	ug/kg	21.6	6.4	1	05/24/24 10:00	05/25/24 01:25	1634-04-4	
Methylene Chloride	**<6.0**	ug/kg	21.6	6.0	1	05/24/24 10:00	05/25/24 01:25	75-09-2	
Tetrachloroethene	**<8.4**	ug/kg	21.6	8.4	1	05/24/24 10:00	05/25/24 01:25	127-18-4	
Toluene	**<5.5**	ug/kg	21.6	5.5	1	05/24/24 10:00	05/25/24 01:25	108-88-3	
Trichloroethene	**<8.1**	ug/kg	21.6	8.1	1	05/24/24 10:00	05/25/24 01:25	79-01-6	
Trichlorofluoromethane	**<6.3**	ug/kg	21.6	6.3	1	05/24/24 10:00	05/25/24 01:25	75-69-4	
m&p-Xylene	**<9.1**	ug/kg	43.3	9.1	1	05/24/24 10:00	05/25/24 01:25	179601-23-1	
trans-1,2-Dichloroethene	**<4.7**	ug/kg	21.6	4.7	1	05/24/24 10:00	05/25/24 01:25	156-60-5	
Surrogates									
Toluene-d8 (S)	111	%	60-140		1	05/24/24 10:00	05/25/24 01:25	2037-26-5	
4-Bromofluorobenzene (S)	99	%	66-143		1	05/24/24 10:00	05/25/24 01:25	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	60-140		1	05/24/24 10:00	05/25/24 01:25	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-230.75_20240518 **Lab ID: 40278528070** Collected: 05/18/24 12:16 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.8**	ug/kg	30.5	7.8	1	05/24/24 10:00	05/25/24 01:45	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10**	ug/kg	30.5	10	1	05/24/24 10:00	05/25/24 01:45	76-13-1	
1,1-Dichloroethene	**<10.1**	ug/kg	30.5	10.1	1	05/24/24 10:00	05/25/24 01:45	75-35-4	
1,2-Dichloroethane	**<7.0**	ug/kg	30.5	7.0	1	05/24/24 10:00	05/25/24 01:45	107-06-2	
2-Butanone (MEK)	**<96.5**	ug/kg	763	96.5	1	05/24/24 10:00	05/25/24 01:45	78-93-3	
2-Hexanone	**<303**	ug/kg	763	303	1	05/24/24 10:00	05/25/24 01:45	591-78-6	
2-Propanol	**<973**	ug/kg	3050	973	1	05/24/24 10:00	05/25/24 01:45	67-63-0	
Acetone	**<186**	ug/kg	763	186	1	05/24/24 10:00	05/25/24 01:45	67-64-1	
Benzene	**<7.3**	ug/kg	12.2	7.3	1	05/24/24 10:00	05/25/24 01:45	71-43-2	
Bromodichloromethane	**<7.3**	ug/kg	30.5	7.3	1	05/24/24 10:00	05/25/24 01:45	75-27-4	
Bromoform	**<134**	ug/kg	153	134	1	05/24/24 10:00	05/25/24 01:45	75-25-2	
Chlorobenzene	**<3.7**	ug/kg	30.5	3.7	1	05/24/24 10:00	05/25/24 01:45	108-90-7	
Chloroform	**<21.9**	ug/kg	153	21.9	1	05/24/24 10:00	05/25/24 01:45	67-66-3	
Chloromethane	**<11.6**	ug/kg	30.5	11.6	1	05/24/24 10:00	05/25/24 01:45	74-87-3	
Dibromochloromethane	**<104**	ug/kg	153	104	1	05/24/24 10:00	05/25/24 01:45	124-48-1	
Dichlorofluoromethane	**<8.6**	ug/kg	30.5	8.6	1	05/24/24 10:00	05/25/24 01:45	75-43-4	
Methyl-tert-butyl ether	**<9.0**	ug/kg	30.5	9.0	1	05/24/24 10:00	05/25/24 01:45	1634-04-4	
Methylene Chloride	**<8.5**	ug/kg	30.5	8.5	1	05/24/24 10:00	05/25/24 01:45	75-09-2	
Tetrachloroethene	**<11.8**	ug/kg	30.5	11.8	1	05/24/24 10:00	05/25/24 01:45	127-18-4	
Toluene	**<7.7**	ug/kg	30.5	7.7	1	05/24/24 10:00	05/25/24 01:45	108-88-3	
Trichloroethene	**<11.4**	ug/kg	30.5	11.4	1	05/24/24 10:00	05/25/24 01:45	79-01-6	
Trichlorofluoromethane	**<8.9**	ug/kg	30.5	8.9	1	05/24/24 10:00	05/25/24 01:45	75-69-4	
m&p-Xylene	**<12.9**	ug/kg	61.1	12.9	1	05/24/24 10:00	05/25/24 01:45	179601-23-1	
trans-1,2-Dichloroethene	**<6.7**	ug/kg	30.5	6.7	1	05/24/24 10:00	05/25/24 01:45	156-60-5	
Surrogates									
Toluene-d8 (S)	107	%	60-140		1	05/24/24 10:00	05/25/24 01:45	2037-26-5	
4-Bromofluorobenzene (S)	102	%	66-143		1	05/24/24 10:00	05/25/24 01:45	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	60-140		1	05/24/24 10:00	05/25/24 01:45	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-233.25_20240518 **Lab ID: 40278528071** Collected: 05/18/24 13:25 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<7.9**	ug/kg	30.8	7.9	1	05/24/24 10:00	05/25/24 02:05	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<10.1**	ug/kg	30.8	10.1	1	05/24/24 10:00	05/25/24 02:05	76-13-1	
1,1-Dichloroethene	**<10.2**	ug/kg	30.8	10.2	1	05/24/24 10:00	05/25/24 02:05	75-35-4	
1,2-Dichloroethane	**<7.1**	ug/kg	30.8	7.1	1	05/24/24 10:00	05/25/24 02:05	107-06-2	
2-Butanone (MEK)	**<97.4**	ug/kg	771	97.4	1	05/24/24 10:00	05/25/24 02:05	78-93-3	
2-Hexanone	**<306**	ug/kg	771	306	1	05/24/24 10:00	05/25/24 02:05	591-78-6	
2-Propanol	**<983**	ug/kg	3080	983	1	05/24/24 10:00	05/25/24 02:05	67-63-0	
Acetone	**<188**	ug/kg	771	188	1	05/24/24 10:00	05/25/24 02:05	67-64-1	
Benzene	**<7.3**	ug/kg	12.3	7.3	1	05/24/24 10:00	05/25/24 02:05	71-43-2	
Bromodichloromethane	**<7.3**	ug/kg	30.8	7.3	1	05/24/24 10:00	05/25/24 02:05	75-27-4	
Bromoform	**<136**	ug/kg	154	136	1	05/24/24 10:00	05/25/24 02:05	75-25-2	
Chlorobenzene	**<3.7**	ug/kg	30.8	3.7	1	05/24/24 10:00	05/25/24 02:05	108-90-7	
Chloroform	**<22.1**	ug/kg	154	22.1	1	05/24/24 10:00	05/25/24 02:05	67-66-3	
Chloromethane	**<11.7**	ug/kg	30.8	11.7	1	05/24/24 10:00	05/25/24 02:05	74-87-3	
Dibromochloromethane	**<105**	ug/kg	154	105	1	05/24/24 10:00	05/25/24 02:05	124-48-1	
Dichlorofluoromethane	**<8.7**	ug/kg	30.8	8.7	1	05/24/24 10:00	05/25/24 02:05	75-43-4	
Methyl-tert-butyl ether	**<9.1**	ug/kg	30.8	9.1	1	05/24/24 10:00	05/25/24 02:05	1634-04-4	
Methylene Chloride	**<8.6**	ug/kg	30.8	8.6	1	05/24/24 10:00	05/25/24 02:05	75-09-2	
Tetrachloroethene	**<12.0**	ug/kg	30.8	12.0	1	05/24/24 10:00	05/25/24 02:05	127-18-4	
Toluene	**<7.8**	ug/kg	30.8	7.8	1	05/24/24 10:00	05/25/24 02:05	108-88-3	
Trichloroethene	**<11.5**	ug/kg	30.8	11.5	1	05/24/24 10:00	05/25/24 02:05	79-01-6	
Trichlorofluoromethane	**<8.9**	ug/kg	30.8	8.9	1	05/24/24 10:00	05/25/24 02:05	75-69-4	
m&p-Xylene	**<13.0**	ug/kg	61.7	13.0	1	05/24/24 10:00	05/25/24 02:05	179601-23-1	
trans-1,2-Dichloroethene	**<6.7**	ug/kg	30.8	6.7	1	05/24/24 10:00	05/25/24 02:05	156-60-5	
Surrogates									
Toluene-d8 (S)	114	%	60-140		1	05/24/24 10:00	05/25/24 02:05	2037-26-5	
4-Bromofluorobenzene (S)	107	%	66-143		1	05/24/24 10:00	05/25/24 02:05	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	60-140		1	05/24/24 10:00	05/25/24 02:05	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-234.4_20240518 **Lab ID: 40278528072** Collected: 05/18/24 13:26 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.4**	ug/kg	36.8	9.4	1	05/24/24 10:00	05/25/24 02:24	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.0**	ug/kg	36.8	12.0	1	05/24/24 10:00	05/25/24 02:24	76-13-1	
1,1-Dichloroethene	**<12.2**	ug/kg	36.8	12.2	1	05/24/24 10:00	05/25/24 02:24	75-35-4	
1,2-Dichloroethane	**<8.5**	ug/kg	36.8	8.5	1	05/24/24 10:00	05/25/24 02:24	107-06-2	
2-Butanone (MEK)	**<116**	ug/kg	921	116	1	05/24/24 10:00	05/25/24 02:24	78-93-3	
2-Hexanone	**<366**	ug/kg	921	366	1	05/24/24 10:00	05/25/24 02:24	591-78-6	
2-Propanol	**<1170**	ug/kg	3680	1170	1	05/24/24 10:00	05/25/24 02:24	67-63-0	
Acetone	**<224**	ug/kg	921	224	1	05/24/24 10:00	05/25/24 02:24	67-64-1	
Benzene	**<8.8**	ug/kg	14.7	8.8	1	05/24/24 10:00	05/25/24 02:24	71-43-2	
Bromodichloromethane	**<8.8**	ug/kg	36.8	8.8	1	05/24/24 10:00	05/25/24 02:24	75-27-4	
Bromoform	**<162**	ug/kg	184	162	1	05/24/24 10:00	05/25/24 02:24	75-25-2	
Chlorobenzene	**<4.4**	ug/kg	36.8	4.4	1	05/24/24 10:00	05/25/24 02:24	108-90-7	
Chloroform	**<26.4**	ug/kg	184	26.4	1	05/24/24 10:00	05/25/24 02:24	67-66-3	
Chloromethane	**<14.0**	ug/kg	36.8	14.0	1	05/24/24 10:00	05/25/24 02:24	74-87-3	
Dibromochloromethane	**<126**	ug/kg	184	126	1	05/24/24 10:00	05/25/24 02:24	124-48-1	
Dichlorofluoromethane	**<10.4**	ug/kg	36.8	10.4	1	05/24/24 10:00	05/25/24 02:24	75-43-4	
Methyl-tert-butyl ether	**<10.8**	ug/kg	36.8	10.8	1	05/24/24 10:00	05/25/24 02:24	1634-04-4	
Methylene Chloride	**<10.2**	ug/kg	36.8	10.2	1	05/24/24 10:00	05/25/24 02:24	75-09-2	
Tetrachloroethene	**<14.3**	ug/kg	36.8	14.3	1	05/24/24 10:00	05/25/24 02:24	127-18-4	
Toluene	**<9.3**	ug/kg	36.8	9.3	1	05/24/24 10:00	05/25/24 02:24	108-88-3	
Trichloroethene	**<13.8**	ug/kg	36.8	13.8	1	05/24/24 10:00	05/25/24 02:24	79-01-6	
Trichlorofluoromethane	**<10.7**	ug/kg	36.8	10.7	1	05/24/24 10:00	05/25/24 02:24	75-69-4	
m&p-Xylene	**<15.5**	ug/kg	73.7	15.5	1	05/24/24 10:00	05/25/24 02:24	179601-23-1	
trans-1,2-Dichloroethene	**<8.1**	ug/kg	36.8	8.1	1	05/24/24 10:00	05/25/24 02:24	156-60-5	
Surrogates									
Toluene-d8 (S)	116	%	60-140		1	05/24/24 10:00	05/25/24 02:24	2037-26-5	
4-Bromofluorobenzene (S)	108	%	66-143		1	05/24/24 10:00	05/25/24 02:24	460-00-4	
1,2-Dichlorobenzene-d4 (S)	114	%	60-140		1	05/24/24 10:00	05/25/24 02:24	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-236.25_20240518 **Lab ID: 40278528073** Collected: 05/18/24 13:27 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<6.5**	ug/kg	25.2	6.5	1	05/24/24 10:00	05/25/24 02:44	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<8.2**	ug/kg	25.2	8.2	1	05/24/24 10:00	05/25/24 02:44	76-13-1	
1,1-Dichloroethene	**<8.4**	ug/kg	25.2	8.4	1	05/24/24 10:00	05/25/24 02:44	75-35-4	
1,2-Dichloroethane	**<5.8**	ug/kg	25.2	5.8	1	05/24/24 10:00	05/25/24 02:44	107-06-2	
2-Butanone (MEK)	**<79.7**	ug/kg	631	79.7	1	05/24/24 10:00	05/25/24 02:44	78-93-3	
2-Hexanone	**<251**	ug/kg	631	251	1	05/24/24 10:00	05/25/24 02:44	591-78-6	
2-Propanol	**<804**	ug/kg	2520	804	1	05/24/24 10:00	05/25/24 02:44	67-63-0	
Acetone	**<154**	ug/kg	631	154	1	05/24/24 10:00	05/25/24 02:44	67-64-1	
Benzene	**<6.0**	ug/kg	10.1	6.0	1	05/24/24 10:00	05/25/24 02:44	71-43-2	
Bromodichloromethane	**<6.0**	ug/kg	25.2	6.0	1	05/24/24 10:00	05/25/24 02:44	75-27-4	
Bromoform	**<111**	ug/kg	126	111	1	05/24/24 10:00	05/25/24 02:44	75-25-2	
Chlorobenzene	**<3.0**	ug/kg	25.2	3.0	1	05/24/24 10:00	05/25/24 02:44	108-90-7	
Chloroform	**<18.1**	ug/kg	126	18.1	1	05/24/24 10:00	05/25/24 02:44	67-66-3	
Chloromethane	**<9.6**	ug/kg	25.2	9.6	1	05/24/24 10:00	05/25/24 02:44	74-87-3	
Dibromochloromethane	**<86.2**	ug/kg	126	86.2	1	05/24/24 10:00	05/25/24 02:44	124-48-1	
Dichlorofluoromethane	**<7.1**	ug/kg	25.2	7.1	1	05/24/24 10:00	05/25/24 02:44	75-43-4	
Methyl-tert-butyl ether	**<7.4**	ug/kg	25.2	7.4	1	05/24/24 10:00	05/25/24 02:44	1634-04-4	
Methylene Chloride	**<7.0**	ug/kg	25.2	7.0	1	05/24/24 10:00	05/25/24 02:44	75-09-2	
Tetrachloroethene	**<9.8**	ug/kg	25.2	9.8	1	05/24/24 10:00	05/25/24 02:44	127-18-4	
Toluene	**<6.4**	ug/kg	25.2	6.4	1	05/24/24 10:00	05/25/24 02:44	108-88-3	
Trichloroethene	**<9.4**	ug/kg	25.2	9.4	1	05/24/24 10:00	05/25/24 02:44	79-01-6	
Trichlorofluoromethane	**<7.3**	ug/kg	25.2	7.3	1	05/24/24 10:00	05/25/24 02:44	75-69-4	
m&p-Xylene	**<10.6**	ug/kg	50.5	10.6	1	05/24/24 10:00	05/25/24 02:44	179601-23-1	
trans-1,2-Dichloroethene	**<5.5**	ug/kg	25.2	5.5	1	05/24/24 10:00	05/25/24 02:44	156-60-5	
Surrogates									
Toluene-d8 (S)	123	%	60-140		1	05/24/24 10:00	05/25/24 02:44	2037-26-5	
4-Bromofluorobenzene (S)	109	%	66-143		1	05/24/24 10:00	05/25/24 02:44	460-00-4	
1,2-Dichlorobenzene-d4 (S)	113	%	60-140		1	05/24/24 10:00	05/25/24 02:44	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-238.1_20240518 **Lab ID: 40278528074** Collected: 05/18/24 14:32 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.2**	ug/kg	35.9	9.2	1	05/24/24 10:00	05/25/24 03:03	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.7**	ug/kg	35.9	11.7	1	05/24/24 10:00	05/25/24 03:03	76-13-1	
1,1-Dichloroethene	**<11.9**	ug/kg	35.9	11.9	1	05/24/24 10:00	05/25/24 03:03	75-35-4	
1,2-Dichloroethane	**<8.2**	ug/kg	35.9	8.2	1	05/24/24 10:00	05/25/24 03:03	107-06-2	
2-Butanone (MEK)	**<113**	ug/kg	897	113	1	05/24/24 10:00	05/25/24 03:03	78-93-3	
2-Hexanone	**<356**	ug/kg	897	356	1	05/24/24 10:00	05/25/24 03:03	591-78-6	
2-Propanol	**<1140**	ug/kg	3590	1140	1	05/24/24 10:00	05/25/24 03:03	67-63-0	
Acetone	**<218**	ug/kg	897	218	1	05/24/24 10:00	05/25/24 03:03	67-64-1	
Benzene	**<8.5**	ug/kg	14.3	8.5	1	05/24/24 10:00	05/25/24 03:03	71-43-2	
Bromodichloromethane	**<8.5**	ug/kg	35.9	8.5	1	05/24/24 10:00	05/25/24 03:03	75-27-4	
Bromoform	**<158**	ug/kg	179	158	1	05/24/24 10:00	05/25/24 03:03	75-25-2	
Chlorobenzene	**<4.3**	ug/kg	35.9	4.3	1	05/24/24 10:00	05/25/24 03:03	108-90-7	
Chloroform	**<25.7**	ug/kg	179	25.7	1	05/24/24 10:00	05/25/24 03:03	67-66-3	
Chloromethane	**<13.6**	ug/kg	35.9	13.6	1	05/24/24 10:00	05/25/24 03:03	74-87-3	
Dibromochloromethane	**<123**	ug/kg	179	123	1	05/24/24 10:00	05/25/24 03:03	124-48-1	
Dichlorofluoromethane	**<10.1**	ug/kg	35.9	10.1	1	05/24/24 10:00	05/25/24 03:03	75-43-4	
Methyl-tert-butyl ether	**<10.5**	ug/kg	35.9	10.5	1	05/24/24 10:00	05/25/24 03:03	1634-04-4	
Methylene Chloride	**<10**	ug/kg	35.9	10	1	05/24/24 10:00	05/25/24 03:03	75-09-2	
Tetrachloroethene	**<13.9**	ug/kg	35.9	13.9	1	05/24/24 10:00	05/25/24 03:03	127-18-4	
Toluene	**<9.0**	ug/kg	35.9	9.0	1	05/24/24 10:00	05/25/24 03:03	108-88-3	
Trichloroethene	**<13.4**	ug/kg	35.9	13.4	1	05/24/24 10:00	05/25/24 03:03	79-01-6	
Trichlorofluoromethane	**<10.4**	ug/kg	35.9	10.4	1	05/24/24 10:00	05/25/24 03:03	75-69-4	
m&p-Xylene	**<15.1**	ug/kg	71.7	15.1	1	05/24/24 10:00	05/25/24 03:03	179601-23-1	
trans-1,2-Dichloroethene	**<7.8**	ug/kg	35.9	7.8	1	05/24/24 10:00	05/25/24 03:03	156-60-5	
Surrogates									
Toluene-d8 (S)	111	%	60-140		1	05/24/24 10:00	05/25/24 03:03	2037-26-5	
4-Bromofluorobenzene (S)	110	%	66-143		1	05/24/24 10:00	05/25/24 03:03	460-00-4	
1,2-Dichlorobenzene-d4 (S)	114	%	60-140		1	05/24/24 10:00	05/25/24 03:03	2199-69-1	

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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-240_20240518 **Lab ID: 40278528075** Collected: 05/18/24 14:33 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.0**	ug/kg	35.2	9.0	1	05/24/24 10:00	05/25/24 03:23	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.5**	ug/kg	35.2	11.5	1	05/24/24 10:00	05/25/24 03:23	76-13-1	
1,1-Dichloroethene	**<11.7**	ug/kg	35.2	11.7	1	05/24/24 10:00	05/25/24 03:23	75-35-4	
1,2-Dichloroethane	**<8.1**	ug/kg	35.2	8.1	1	05/24/24 10:00	05/25/24 03:23	107-06-2	
2-Butanone (MEK)	**<111**	ug/kg	880	111	1	05/24/24 10:00	05/25/24 03:23	78-93-3	
2-Hexanone	**<350**	ug/kg	880	350	1	05/24/24 10:00	05/25/24 03:23	591-78-6	
2-Propanol	**<1120**	ug/kg	3520	1120	1	05/24/24 10:00	05/25/24 03:23	67-63-0	
Acetone	**<214**	ug/kg	880	214	1	05/24/24 10:00	05/25/24 03:23	67-64-1	
Benzene	**<8.4**	ug/kg	14.1	8.4	1	05/24/24 10:00	05/25/24 03:23	71-43-2	
Bromodichloromethane	**<8.4**	ug/kg	35.2	8.4	1	05/24/24 10:00	05/25/24 03:23	75-27-4	
Bromoform	**<155**	ug/kg	176	155	1	05/24/24 10:00	05/25/24 03:23	75-25-2	
Chlorobenzene	**<4.2**	ug/kg	35.2	4.2	1	05/24/24 10:00	05/25/24 03:23	108-90-7	
Chloroform	**<25.2**	ug/kg	176	25.2	1	05/24/24 10:00	05/25/24 03:23	67-66-3	
Chloromethane	**<13.4**	ug/kg	35.2	13.4	1	05/24/24 10:00	05/25/24 03:23	74-87-3	
Dibromochloromethane	**<120**	ug/kg	176	120	1	05/24/24 10:00	05/25/24 03:23	124-48-1	
Dichlorofluoromethane	**<9.9**	ug/kg	35.2	9.9	1	05/24/24 10:00	05/25/24 03:23	75-43-4	
Methyl-tert-butyl ether	**<10.4**	ug/kg	35.2	10.4	1	05/24/24 10:00	05/25/24 03:23	1634-04-4	
Methylene Chloride	**<9.8**	ug/kg	35.2	9.8	1	05/24/24 10:00	05/25/24 03:23	75-09-2	
Tetrachloroethene	**<13.7**	ug/kg	35.2	13.7	1	05/24/24 10:00	05/25/24 03:23	127-18-4	
Toluene	**<8.9**	ug/kg	35.2	8.9	1	05/24/24 10:00	05/25/24 03:23	108-88-3	
Trichloroethene	**<13.2**	ug/kg	35.2	13.2	1	05/24/24 10:00	05/25/24 03:23	79-01-6	
Trichlorofluoromethane	**<10.2**	ug/kg	35.2	10.2	1	05/24/24 10:00	05/25/24 03:23	75-69-4	
m&p-Xylene	**<14.9**	ug/kg	70.4	14.9	1	05/24/24 10:00	05/25/24 03:23	179601-23-1	
trans-1,2-Dichloroethene	**<7.7**	ug/kg	35.2	7.7	1	05/24/24 10:00	05/25/24 03:23	156-60-5	
Surrogates									
Toluene-d8 (S)	107	%	60-140		1	05/24/24 10:00	05/25/24 03:23	2037-26-5	
4-Bromofluorobenzene (S)	106	%	66-143		1	05/24/24 10:00	05/25/24 03:23	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	60-140		1	05/24/24 10:00	05/25/24 03:23	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-240.3_20240518 **Lab ID: 40278528076** Collected: 05/18/24 14:34 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<11.2**	ug/kg	43.6	11.2	1	05/24/24 10:00	05/25/24 03:42	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<14.2**	ug/kg	43.6	14.2	1	05/24/24 10:00	05/25/24 03:42	76-13-1	
1,1-Dichloroethene	**<14.5**	ug/kg	43.6	14.5	1	05/24/24 10:00	05/25/24 03:42	75-35-4	
1,2-Dichloroethane	**<10.0**	ug/kg	43.6	10.0	1	05/24/24 10:00	05/25/24 03:42	107-06-2	
2-Butanone (MEK)	**<138**	ug/kg	1090	138	1	05/24/24 10:00	05/25/24 03:42	78-93-3	
2-Hexanone	**<433**	ug/kg	1090	433	1	05/24/24 10:00	05/25/24 03:42	591-78-6	
2-Propanol	**<1390**	ug/kg	4360	1390	1	05/24/24 10:00	05/25/24 03:42	67-63-0	
Acetone	**<265**	ug/kg	1090	265	1	05/24/24 10:00	05/25/24 03:42	67-64-1	
Benzene	**<10.4**	ug/kg	17.4	10.4	1	05/24/24 10:00	05/25/24 03:42	71-43-2	
Bromodichloromethane	**<10.4**	ug/kg	43.6	10.4	1	05/24/24 10:00	05/25/24 03:42	75-27-4	
Bromoform	**<192**	ug/kg	218	192	1	05/24/24 10:00	05/25/24 03:42	75-25-2	
Chlorobenzene	**<5.2**	ug/kg	43.6	5.2	1	05/24/24 10:00	05/25/24 03:42	108-90-7	
Chloroform	**<31.2**	ug/kg	218	31.2	1	05/24/24 10:00	05/25/24 03:42	67-66-3	
Chloromethane	**<16.6**	ug/kg	43.6	16.6	1	05/24/24 10:00	05/25/24 03:42	74-87-3	
Dibromochloromethane	**<149**	ug/kg	218	149	1	05/24/24 10:00	05/25/24 03:42	124-48-1	
Dichlorofluoromethane	**<12.3**	ug/kg	43.6	12.3	1	05/24/24 10:00	05/25/24 03:42	75-43-4	
Methyl-tert-butyl ether	**<12.8**	ug/kg	43.6	12.8	1	05/24/24 10:00	05/25/24 03:42	1634-04-4	
Methylene Chloride	**<12.1**	ug/kg	43.6	12.1	1	05/24/24 10:00	05/25/24 03:42	75-09-2	
Tetrachloroethene	**<16.9**	ug/kg	43.6	16.9	1	05/24/24 10:00	05/25/24 03:42	127-18-4	
Toluene	**<11.0**	ug/kg	43.6	11.0	1	05/24/24 10:00	05/25/24 03:42	108-88-3	
Trichloroethene	**<16.3**	ug/kg	43.6	16.3	1	05/24/24 10:00	05/25/24 03:42	79-01-6	
Trichlorofluoromethane	**<12.6**	ug/kg	43.6	12.6	1	05/24/24 10:00	05/25/24 03:42	75-69-4	
m&p-Xylene	**<18.4**	ug/kg	87.1	18.4	1	05/24/24 10:00	05/25/24 03:42	179601-23-1	
trans-1,2-Dichloroethene	**<9.5**	ug/kg	43.6	9.5	1	05/24/24 10:00	05/25/24 03:42	156-60-5	
Surrogates									
Toluene-d8 (S)	113	%	60-140		1	05/24/24 10:00	05/25/24 03:42	2037-26-5	
4-Bromofluorobenzene (S)	110	%	66-143		1	05/24/24 10:00	05/25/24 03:42	460-00-4	
1,2-Dichlorobenzene-d4 (S)	115	%	60-140		1	05/24/24 10:00	05/25/24 03:42	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-249.5_20240518 **Lab ID: 40278528077** Collected: 05/18/24 16:55 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.7**	ug/kg	38.0	9.7	1	05/24/24 10:00	05/25/24 04:02	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.4**	ug/kg	38.0	12.4	1	05/24/24 10:00	05/25/24 04:02	76-13-1	
1,1-Dichloroethene	**<12.6**	ug/kg	38.0	12.6	1	05/24/24 10:00	05/25/24 04:02	75-35-4	
1,2-Dichloroethane	**<8.7**	ug/kg	38.0	8.7	1	05/24/24 10:00	05/25/24 04:02	107-06-2	
2-Butanone (MEK)	**<120**	ug/kg	951	120	1	05/24/24 10:00	05/25/24 04:02	78-93-3	
2-Hexanone	**<378**	ug/kg	951	378	1	05/24/24 10:00	05/25/24 04:02	591-78-6	
2-Propanol	**<1210**	ug/kg	3800	1210	1	05/24/24 10:00	05/25/24 04:02	67-63-0	
Acetone	**<231**	ug/kg	951	231	1	05/24/24 10:00	05/25/24 04:02	67-64-1	
Benzene	**<9.1**	ug/kg	15.2	9.1	1	05/24/24 10:00	05/25/24 04:02	71-43-2	
Bromodichloromethane	**<9.1**	ug/kg	38.0	9.1	1	05/24/24 10:00	05/25/24 04:02	75-27-4	
Bromoform	**<167**	ug/kg	190	167	1	05/24/24 10:00	05/25/24 04:02	75-25-2	
Chlorobenzene	**<4.6**	ug/kg	38.0	4.6	1	05/24/24 10:00	05/25/24 04:02	108-90-7	
Chloroform	**<27.2**	ug/kg	190	27.2	1	05/24/24 10:00	05/25/24 04:02	67-66-3	
Chloromethane	**<14.5**	ug/kg	38.0	14.5	1	05/24/24 10:00	05/25/24 04:02	74-87-3	
Dibromochloromethane	**<130**	ug/kg	190	130	1	05/24/24 10:00	05/25/24 04:02	124-48-1	
Dichlorofluoromethane	**<10.7**	ug/kg	38.0	10.7	1	05/24/24 10:00	05/25/24 04:02	75-43-4	
Methyl-tert-butyl ether	**<11.2**	ug/kg	38.0	11.2	1	05/24/24 10:00	05/25/24 04:02	1634-04-4	
Methylene Chloride	**<10.6**	ug/kg	38.0	10.6	1	05/24/24 10:00	05/25/24 04:02	75-09-2	
Tetrachloroethene	**<14.8**	ug/kg	38.0	14.8	1	05/24/24 10:00	05/25/24 04:02	127-18-4	
Toluene	**<9.6**	ug/kg	38.0	9.6	1	05/24/24 10:00	05/25/24 04:02	108-88-3	
Trichloroethene	**<14.2**	ug/kg	38.0	14.2	1	05/24/24 10:00	05/25/24 04:02	79-01-6	
Trichlorofluoromethane	**<11.0**	ug/kg	38.0	11.0	1	05/24/24 10:00	05/25/24 04:02	75-69-4	
m&p-Xylene	**<16.1**	ug/kg	76.1	16.1	1	05/24/24 10:00	05/25/24 04:02	179601-23-1	
trans-1,2-Dichloroethene	**<8.3**	ug/kg	38.0	8.3	1	05/24/24 10:00	05/25/24 04:02	156-60-5	
Surrogates									
Toluene-d8 (S)	112	%	60-140		1	05/24/24 10:00	05/25/24 04:02	2037-26-5	
4-Bromofluorobenzene (S)	105	%	66-143		1	05/24/24 10:00	05/25/24 04:02	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	60-140		1	05/24/24 10:00	05/25/24 04:02	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-250.3_20240518 **Lab ID: 40278528078** Collected: 05/18/24 16:56 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.5**	ug/kg	37.0	9.5	1	05/24/24 10:00	05/25/24 04:21	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<12.0**	ug/kg	37.0	12.0	1	05/24/24 10:00	05/25/24 04:21	76-13-1	
1,1-Dichloroethene	**<12.3**	ug/kg	37.0	12.3	1	05/24/24 10:00	05/25/24 04:21	75-35-4	
1,2-Dichloroethane	**<8.5**	ug/kg	37.0	8.5	1	05/24/24 10:00	05/25/24 04:21	107-06-2	
2-Butanone (MEK)	**<117**	ug/kg	924	117	1	05/24/24 10:00	05/25/24 04:21	78-93-3	
2-Hexanone	**<367**	ug/kg	924	367	1	05/24/24 10:00	05/25/24 04:21	591-78-6	
2-Propanol	**<1180**	ug/kg	3700	1180	1	05/24/24 10:00	05/25/24 04:21	67-63-0	
Acetone	**<225**	ug/kg	924	225	1	05/24/24 10:00	05/25/24 04:21	67-64-1	
Benzene	**<8.8**	ug/kg	14.8	8.8	1	05/24/24 10:00	05/25/24 04:21	71-43-2	
Bromodichloromethane	**<8.8**	ug/kg	37.0	8.8	1	05/24/24 10:00	05/25/24 04:21	75-27-4	
Bromoform	**<163**	ug/kg	185	163	1	05/24/24 10:00	05/25/24 04:21	75-25-2	
Chlorobenzene	**<4.4**	ug/kg	37.0	4.4	1	05/24/24 10:00	05/25/24 04:21	108-90-7	
Chloroform	**<26.5**	ug/kg	185	26.5	1	05/24/24 10:00	05/25/24 04:21	67-66-3	
Chloromethane	**<14.0**	ug/kg	37.0	14.0	1	05/24/24 10:00	05/25/24 04:21	74-87-3	
Dibromochloromethane	**<126**	ug/kg	185	126	1	05/24/24 10:00	05/25/24 04:21	124-48-1	
Dichlorofluoromethane	**<10.4**	ug/kg	37.0	10.4	1	05/24/24 10:00	05/25/24 04:21	75-43-4	
Methyl-tert-butyl ether	**<10.9**	ug/kg	37.0	10.9	1	05/24/24 10:00	05/25/24 04:21	1634-04-4	
Methylene Chloride	**<10.3**	ug/kg	37.0	10.3	1	05/24/24 10:00	05/25/24 04:21	75-09-2	
Tetrachloroethene	**<14.3**	ug/kg	37.0	14.3	1	05/24/24 10:00	05/25/24 04:21	127-18-4	
Toluene	**<9.3**	ug/kg	37.0	9.3	1	05/24/24 10:00	05/25/24 04:21	108-88-3	
Trichloroethene	**<13.8**	ug/kg	37.0	13.8	1	05/24/24 10:00	05/25/24 04:21	79-01-6	
Trichlorofluoromethane	**<10.7**	ug/kg	37.0	10.7	1	05/24/24 10:00	05/25/24 04:21	75-69-4	
m&p-Xylene	**<15.6**	ug/kg	73.9	15.6	1	05/24/24 10:00	05/25/24 04:21	179601-23-1	
trans-1,2-Dichloroethene	**<8.1**	ug/kg	37.0	8.1	1	05/24/24 10:00	05/25/24 04:21	156-60-5	
Surrogates									
Toluene-d8 (S)	113	%	60-140		1	05/24/24 10:00	05/25/24 04:21	2037-26-5	
4-Bromofluorobenzene (S)	109	%	66-143		1	05/24/24 10:00	05/25/24 04:21	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	60-140		1	05/24/24 10:00	05/25/24 04:21	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-251.8_20240518 **Lab ID: 40278528079** Collected: 05/18/24 16:57 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<11.3**	ug/kg	44.1	11.3	1	05/24/24 09:00	05/28/24 14:27	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<14.4**	ug/kg	44.1	14.4	1	05/24/24 09:00	05/28/24 14:27	76-13-1	
1,1-Dichloroethene	**<14.7**	ug/kg	44.1	14.7	1	05/24/24 09:00	05/28/24 14:27	75-35-4	
1,2-Dichloroethane	**<10.2**	ug/kg	44.1	10.2	1	05/24/24 09:00	05/28/24 14:27	107-06-2	
2-Butanone (MEK)	**<139**	ug/kg	1100	139	1	05/24/24 09:00	05/28/24 14:27	78-93-3	
2-Hexanone	**<438**	ug/kg	1100	438	1	05/24/24 09:00	05/28/24 14:27	591-78-6	v1
2-Propanol	**<1410**	ug/kg	4410	1410	1	05/24/24 09:00	05/28/24 14:27	67-63-0	v1
Acetone	**<269**	ug/kg	1100	269	1	05/24/24 09:00	05/28/24 14:27	67-64-1	
Benzene	**<10.5**	ug/kg	17.7	10.5	1	05/24/24 09:00	05/28/24 14:27	71-43-2	
Bromodichloromethane	**<10.5**	ug/kg	44.1	10.5	1	05/24/24 09:00	05/28/24 14:27	75-27-4	
Bromoform	**<194**	ug/kg	221	194	1	05/24/24 09:00	05/28/24 14:27	75-25-2	
Chlorobenzene	**<5.3**	ug/kg	44.1	5.3	1	05/24/24 09:00	05/28/24 14:27	108-90-7	
Chloroform	**<31.6**	ug/kg	221	31.6	1	05/24/24 09:00	05/28/24 14:27	67-66-3	
Chloromethane	**<16.8**	ug/kg	44.1	16.8	1	05/24/24 09:00	05/28/24 14:27	74-87-3	
Dibromochloromethane	**<151**	ug/kg	221	151	1	05/24/24 09:00	05/28/24 14:27	124-48-1	
Dichlorofluoromethane	**<12.4**	ug/kg	44.1	12.4	1	05/24/24 09:00	05/28/24 14:27	75-43-4	
Methyl-tert-butyl ether	**<13.0**	ug/kg	44.1	13.0	1	05/24/24 09:00	05/28/24 14:27	1634-04-4	
Methylene Chloride	**<12.3**	ug/kg	44.1	12.3	1	05/24/24 09:00	05/28/24 14:27	75-09-2	
Tetrachloroethene	**<17.1**	ug/kg	44.1	17.1	1	05/24/24 09:00	05/28/24 14:27	127-18-4	
Toluene	**<11.1**	ug/kg	44.1	11.1	1	05/24/24 09:00	05/28/24 14:27	108-88-3	
Trichloroethene	**<16.5**	ug/kg	44.1	16.5	1	05/24/24 09:00	05/28/24 14:27	79-01-6	M1
Trichlorofluoromethane	**<12.8**	ug/kg	44.1	12.8	1	05/24/24 09:00	05/28/24 14:27	75-69-4	
m&p-Xylene	**<18.6**	ug/kg	88.3	18.6	1	05/24/24 09:00	05/28/24 14:27	179601-23-1	
trans-1,2-Dichloroethene	**<9.6**	ug/kg	44.1	9.6	1	05/24/24 09:00	05/28/24 14:27	156-60-5	
Surrogates									
Toluene-d8 (S)	109	%	60-140		1	05/24/24 09:00	05/28/24 14:27	2037-26-5	
4-Bromofluorobenzene (S)	103	%	66-143		1	05/24/24 09:00	05/28/24 14:27	460-00-4	
1,2-Dichlorobenzene-d4 (S)	111	%	60-140		1	05/24/24 09:00	05/28/24 14:27	2199-69-1	

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(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: 300-001-GSV-251.8-DUP_20240518 **Lab ID: 40278528080** Collected: 05/18/24 16:57 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<9.3**	ug/kg	36.4	9.3	1	05/24/24 10:00	05/25/24 04:41	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<11.9**	ug/kg	36.4	11.9	1	05/24/24 10:00	05/25/24 04:41	76-13-1	
1,1-Dichloroethene	**<12.1**	ug/kg	36.4	12.1	1	05/24/24 10:00	05/25/24 04:41	75-35-4	
1,2-Dichloroethane	**<8.4**	ug/kg	36.4	8.4	1	05/24/24 10:00	05/25/24 04:41	107-06-2	
2-Butanone (MEK)	**<115**	ug/kg	909	115	1	05/24/24 10:00	05/25/24 04:41	78-93-3	
2-Hexanone	**<361**	ug/kg	909	361	1	05/24/24 10:00	05/25/24 04:41	591-78-6	
2-Propanol	**<1160**	ug/kg	3640	1160	1	05/24/24 10:00	05/25/24 04:41	67-63-0	
Acetone	**<221**	ug/kg	909	221	1	05/24/24 10:00	05/25/24 04:41	67-64-1	
Benzene	**<8.7**	ug/kg	14.6	8.7	1	05/24/24 10:00	05/25/24 04:41	71-43-2	
Bromodichloromethane	**<8.7**	ug/kg	36.4	8.7	1	05/24/24 10:00	05/25/24 04:41	75-27-4	
Bromoform	**<160**	ug/kg	182	160	1	05/24/24 10:00	05/25/24 04:41	75-25-2	
Chlorobenzene	**<4.4**	ug/kg	36.4	4.4	1	05/24/24 10:00	05/25/24 04:41	108-90-7	
Chloroform	**<26.0**	ug/kg	182	26.0	1	05/24/24 10:00	05/25/24 04:41	67-66-3	
Chloromethane	**<13.8**	ug/kg	36.4	13.8	1	05/24/24 10:00	05/25/24 04:41	74-87-3	
Dibromochloromethane	**<124**	ug/kg	182	124	1	05/24/24 10:00	05/25/24 04:41	124-48-1	
Dichlorofluoromethane	**<10.3**	ug/kg	36.4	10.3	1	05/24/24 10:00	05/25/24 04:41	75-43-4	
Methyl-tert-butyl ether	**<10.7**	ug/kg	36.4	10.7	1	05/24/24 10:00	05/25/24 04:41	1634-04-4	
Methylene Chloride	**<10.1**	ug/kg	36.4	10.1	1	05/24/24 10:00	05/25/24 04:41	75-09-2	
Tetrachloroethene	**<14.1**	ug/kg	36.4	14.1	1	05/24/24 10:00	05/25/24 04:41	127-18-4	
Toluene	**<9.2**	ug/kg	36.4	9.2	1	05/24/24 10:00	05/25/24 04:41	108-88-3	
Trichloroethene	**<13.6**	ug/kg	36.4	13.6	1	05/24/24 10:00	05/25/24 04:41	79-01-6	
Trichlorofluoromethane	**<10.5**	ug/kg	36.4	10.5	1	05/24/24 10:00	05/25/24 04:41	75-69-4	
m&p-Xylene	**<15.4**	ug/kg	72.8	15.4	1	05/24/24 10:00	05/25/24 04:41	179601-23-1	
trans-1,2-Dichloroethene	**<8.0**	ug/kg	36.4	8.0	1	05/24/24 10:00	05/25/24 04:41	156-60-5	
Surrogates									
Toluene-d8 (S)	116	%	60-140		1	05/24/24 10:00	05/25/24 04:41	2037-26-5	
4-Bromofluorobenzene (S)	113	%	66-143		1	05/24/24 10:00	05/25/24 04:41	460-00-4	
1,2-Dichlorobenzene-d4 (S)	115	%	60-140		1	05/24/24 10:00	05/25/24 04:41	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: EB-06 **Lab ID: 40278528081** Collected: 05/14/24 10:49 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	05/24/24 10:00	05/24/24 22:29	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	05/24/24 10:00	05/24/24 22:29	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	05/24/24 10:00	05/24/24 22:29	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	05/24/24 10:00	05/24/24 22:29	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	05/24/24 10:00	05/24/24 22:29	78-93-3	
2-Hexanone	**<496**	ug/kg	1250	496	1	05/24/24 10:00	05/24/24 22:29	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	05/24/24 10:00	05/24/24 22:29	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	05/24/24 10:00	05/24/24 22:29	67-64-1	
Benzene	**<11.9**	ug/kg	20.0	11.9	1	05/24/24 10:00	05/24/24 22:29	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	05/24/24 10:00	05/24/24 22:29	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	05/24/24 10:00	05/24/24 22:29	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	05/24/24 10:00	05/24/24 22:29	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	05/24/24 10:00	05/24/24 22:29	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	05/24/24 10:00	05/24/24 22:29	74-87-3	
Dibromochloromethane	**<171**	ug/kg	250	171	1	05/24/24 10:00	05/24/24 22:29	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	05/24/24 10:00	05/24/24 22:29	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	05/24/24 10:00	05/24/24 22:29	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	05/24/24 10:00	05/24/24 22:29	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	05/24/24 10:00	05/24/24 22:29	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	05/24/24 10:00	05/24/24 22:29	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	05/24/24 10:00	05/24/24 22:29	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	05/24/24 10:00	05/24/24 22:29	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	05/24/24 10:00	05/24/24 22:29	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	05/24/24 10:00	05/24/24 22:29	156-60-5	
Surrogates									
Toluene-d8 (S)	100	%	60-140		1	05/24/24 10:00	05/24/24 22:29	2037-26-5	
4-Bromofluorobenzene (S)	100	%	66-143		1	05/24/24 10:00	05/24/24 22:29	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	60-140		1	05/24/24 10:00	05/24/24 22:29	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: EB-07 **Lab ID: 40278528082** Collected: 05/15/24 13:31 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	05/24/24 10:00	05/24/24 22:49	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	05/24/24 10:00	05/24/24 22:49	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	05/24/24 10:00	05/24/24 22:49	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	05/24/24 10:00	05/24/24 22:49	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	05/24/24 10:00	05/24/24 22:49	78-93-3	
2-Hexanone	**<496**	ug/kg	1250	496	1	05/24/24 10:00	05/24/24 22:49	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	05/24/24 10:00	05/24/24 22:49	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	05/24/24 10:00	05/24/24 22:49	67-64-1	
Benzene	**<11.9**	ug/kg	20.0	11.9	1	05/24/24 10:00	05/24/24 22:49	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	05/24/24 10:00	05/24/24 22:49	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	05/24/24 10:00	05/24/24 22:49	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	05/24/24 10:00	05/24/24 22:49	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	05/24/24 10:00	05/24/24 22:49	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	05/24/24 10:00	05/24/24 22:49	74-87-3	
Dibromochloromethane	**<171**	ug/kg	250	171	1	05/24/24 10:00	05/24/24 22:49	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	05/24/24 10:00	05/24/24 22:49	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	05/24/24 10:00	05/24/24 22:49	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	05/24/24 10:00	05/24/24 22:49	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	05/24/24 10:00	05/24/24 22:49	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	05/24/24 10:00	05/24/24 22:49	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	05/24/24 10:00	05/24/24 22:49	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	05/24/24 10:00	05/24/24 22:49	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	05/24/24 10:00	05/24/24 22:49	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	05/24/24 10:00	05/24/24 22:49	156-60-5	
Surrogates									
Toluene-d8 (S)	99	%	60-140		1	05/24/24 10:00	05/24/24 22:49	2037-26-5	
4-Bromofluorobenzene (S)	100	%	66-143		1	05/24/24 10:00	05/24/24 22:49	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	60-140		1	05/24/24 10:00	05/24/24 22:49	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: EB-08 **Lab ID: 40278528083** Collected: 05/17/24 09:44 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	05/24/24 10:00	05/24/24 23:08	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	05/24/24 10:00	05/24/24 23:08	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	05/24/24 10:00	05/24/24 23:08	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	05/24/24 10:00	05/24/24 23:08	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	05/24/24 10:00	05/24/24 23:08	78-93-3	
2-Hexanone	**<496**	ug/kg	1250	496	1	05/24/24 10:00	05/24/24 23:08	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	05/24/24 10:00	05/24/24 23:08	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	05/24/24 10:00	05/24/24 23:08	67-64-1	
Benzene	**<11.9**	ug/kg	20.0	11.9	1	05/24/24 10:00	05/24/24 23:08	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	05/24/24 10:00	05/24/24 23:08	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	05/24/24 10:00	05/24/24 23:08	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	05/24/24 10:00	05/24/24 23:08	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	05/24/24 10:00	05/24/24 23:08	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	05/24/24 10:00	05/24/24 23:08	74-87-3	
Dibromochloromethane	**<171**	ug/kg	250	171	1	05/24/24 10:00	05/24/24 23:08	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	05/24/24 10:00	05/24/24 23:08	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	05/24/24 10:00	05/24/24 23:08	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	05/24/24 10:00	05/24/24 23:08	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	05/24/24 10:00	05/24/24 23:08	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	05/24/24 10:00	05/24/24 23:08	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	05/24/24 10:00	05/24/24 23:08	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	05/24/24 10:00	05/24/24 23:08	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	05/24/24 10:00	05/24/24 23:08	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	05/24/24 10:00	05/24/24 23:08	156-60-5	
Surrogates									
Toluene-d8 (S)	100	%	60-140		1	05/24/24 10:00	05/24/24 23:08	2037-26-5	
4-Bromofluorobenzene (S)	106	%	66-143		1	05/24/24 10:00	05/24/24 23:08	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	60-140		1	05/24/24 10:00	05/24/24 23:08	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: EB-09 **Lab ID: 40278528084** Collected: 05/18/24 08:42 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	05/24/24 10:00	05/24/24 23:28	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	05/24/24 10:00	05/24/24 23:28	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	05/24/24 10:00	05/24/24 23:28	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	05/24/24 10:00	05/24/24 23:28	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	05/24/24 10:00	05/24/24 23:28	78-93-3	
2-Hexanone	**<496**	ug/kg	1250	496	1	05/24/24 10:00	05/24/24 23:28	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	05/24/24 10:00	05/24/24 23:28	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	05/24/24 10:00	05/24/24 23:28	67-64-1	
Benzene	**<11.9**	ug/kg	20.0	11.9	1	05/24/24 10:00	05/24/24 23:28	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	05/24/24 10:00	05/24/24 23:28	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	05/24/24 10:00	05/24/24 23:28	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	05/24/24 10:00	05/24/24 23:28	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	05/24/24 10:00	05/24/24 23:28	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	05/24/24 10:00	05/24/24 23:28	74-87-3	
Dibromochloromethane	**<171**	ug/kg	250	171	1	05/24/24 10:00	05/24/24 23:28	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	05/24/24 10:00	05/24/24 23:28	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	05/24/24 10:00	05/24/24 23:28	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	05/24/24 10:00	05/24/24 23:28	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	05/24/24 10:00	05/24/24 23:28	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	05/24/24 10:00	05/24/24 23:28	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	05/24/24 10:00	05/24/24 23:28	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	05/24/24 10:00	05/24/24 23:28	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	05/24/24 10:00	05/24/24 23:28	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	05/24/24 10:00	05/24/24 23:28	156-60-5	
Surrogates									
Toluene-d8 (S)	99	%	60-140		1	05/24/24 10:00	05/24/24 23:28	2037-26-5	
4-Bromofluorobenzene (S)	96	%	66-143		1	05/24/24 10:00	05/24/24 23:28	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	60-140		1	05/24/24 10:00	05/24/24 23:28	2199-69-1	

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: EB-10 **Lab ID: 40278528085** Collected: 05/18/24 17:13 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	05/24/24 10:00	05/24/24 23:48	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	05/24/24 10:00	05/24/24 23:48	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	05/24/24 10:00	05/24/24 23:48	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	05/24/24 10:00	05/24/24 23:48	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	05/24/24 10:00	05/24/24 23:48	78-93-3	
2-Hexanone	**<496**	ug/kg	1250	496	1	05/24/24 10:00	05/24/24 23:48	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	05/24/24 10:00	05/24/24 23:48	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	05/24/24 10:00	05/24/24 23:48	67-64-1	
Benzene	**<11.9**	ug/kg	20.0	11.9	1	05/24/24 10:00	05/24/24 23:48	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	05/24/24 10:00	05/24/24 23:48	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	05/24/24 10:00	05/24/24 23:48	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	05/24/24 10:00	05/24/24 23:48	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	05/24/24 10:00	05/24/24 23:48	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	05/24/24 10:00	05/24/24 23:48	74-87-3	
Dibromochloromethane	**<171**	ug/kg	250	171	1	05/24/24 10:00	05/24/24 23:48	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	05/24/24 10:00	05/24/24 23:48	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	05/24/24 10:00	05/24/24 23:48	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	05/24/24 10:00	05/24/24 23:48	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	05/24/24 10:00	05/24/24 23:48	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	05/24/24 10:00	05/24/24 23:48	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	05/24/24 10:00	05/24/24 23:48	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	05/24/24 10:00	05/24/24 23:48	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	05/24/24 10:00	05/24/24 23:48	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	05/24/24 10:00	05/24/24 23:48	156-60-5	
Surrogates									
Toluene-d8 (S)	98	%	60-140		1	05/24/24 10:00	05/24/24 23:48	2037-26-5	
4-Bromofluorobenzene (S)	100	%	66-143		1	05/24/24 10:00	05/24/24 23:48	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	60-140		1	05/24/24 10:00	05/24/24 23:48	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: TB-06 **Lab ID: 40278528086** Collected: 05/19/24 08:45 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	05/24/24 10:00	05/25/24 00:07	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	05/24/24 10:00	05/25/24 00:07	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	05/24/24 10:00	05/25/24 00:07	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	05/24/24 10:00	05/25/24 00:07	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	05/24/24 10:00	05/25/24 00:07	78-93-3	
2-Hexanone	**<496**	ug/kg	1250	496	1	05/24/24 10:00	05/25/24 00:07	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	05/24/24 10:00	05/25/24 00:07	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	05/24/24 10:00	05/25/24 00:07	67-64-1	
Benzene	**<11.9**	ug/kg	20.0	11.9	1	05/24/24 10:00	05/25/24 00:07	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	05/24/24 10:00	05/25/24 00:07	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	05/24/24 10:00	05/25/24 00:07	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	05/24/24 10:00	05/25/24 00:07	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	05/24/24 10:00	05/25/24 00:07	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	05/24/24 10:00	05/25/24 00:07	74-87-3	
Dibromochloromethane	**<171**	ug/kg	250	171	1	05/24/24 10:00	05/25/24 00:07	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	05/24/24 10:00	05/25/24 00:07	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	05/24/24 10:00	05/25/24 00:07	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	05/24/24 10:00	05/25/24 00:07	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	05/24/24 10:00	05/25/24 00:07	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	05/24/24 10:00	05/25/24 00:07	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	05/24/24 10:00	05/25/24 00:07	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	05/24/24 10:00	05/25/24 00:07	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	05/24/24 10:00	05/25/24 00:07	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	05/24/24 10:00	05/25/24 00:07	156-60-5	
Surrogates									
Toluene-d8 (S)	100	%	60-140		1	05/24/24 10:00	05/25/24 00:07	2037-26-5	
4-Bromofluorobenzene (S)	102	%	66-143		1	05/24/24 10:00	05/25/24 00:07	460-00-4	
1,2-Dichlorobenzene-d4 (S)	109	%	60-140		1	05/24/24 10:00	05/25/24 00:07	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: MB-02 **Lab ID: 40278528087** Collected: 05/14/24 08:45 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	05/24/24 10:00	05/25/24 00:27	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	05/24/24 10:00	05/25/24 00:27	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	05/24/24 10:00	05/25/24 00:27	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	05/24/24 10:00	05/25/24 00:27	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	05/24/24 10:00	05/25/24 00:27	78-93-3	
2-Hexanone	**<496**	ug/kg	1250	496	1	05/24/24 10:00	05/25/24 00:27	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	05/24/24 10:00	05/25/24 00:27	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	05/24/24 10:00	05/25/24 00:27	67-64-1	
Benzene	**<11.9**	ug/kg	20.0	11.9	1	05/24/24 10:00	05/25/24 00:27	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	05/24/24 10:00	05/25/24 00:27	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	05/24/24 10:00	05/25/24 00:27	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	05/24/24 10:00	05/25/24 00:27	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	05/24/24 10:00	05/25/24 00:27	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	05/24/24 10:00	05/25/24 00:27	74-87-3	
Dibromochloromethane	**<171**	ug/kg	250	171	1	05/24/24 10:00	05/25/24 00:27	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	05/24/24 10:00	05/25/24 00:27	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	05/24/24 10:00	05/25/24 00:27	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	05/24/24 10:00	05/25/24 00:27	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	05/24/24 10:00	05/25/24 00:27	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	05/24/24 10:00	05/25/24 00:27	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	05/24/24 10:00	05/25/24 00:27	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	05/24/24 10:00	05/25/24 00:27	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	05/24/24 10:00	05/25/24 00:27	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	05/24/24 10:00	05/25/24 00:27	156-60-5	
Surrogates									
Toluene-d8 (S)	105	%	60-140		1	05/24/24 10:00	05/25/24 00:27	2037-26-5	
4-Bromofluorobenzene (S)	108	%	66-143		1	05/24/24 10:00	05/25/24 00:27	460-00-4	
1,2-Dichlorobenzene-d4 (S)	111	%	60-140		1	05/24/24 10:00	05/25/24 00:27	2199-69-1	

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ANALYTICAL RESULTS

Project: 6119.00.020
Pace Project No.: 40278528

Sample: MB-03 **Lab ID: 40278528088** Collected: 05/19/24 08:45 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level MAE	Analytical Method: EPA 8260 Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<12.8**	ug/kg	50.0	12.8	1	05/24/24 10:00	05/25/24 00:46	71-55-6	
1,1,2-Trichlorotrifluoroethane	**<16.3**	ug/kg	50.0	16.3	1	05/24/24 10:00	05/25/24 00:46	76-13-1	
1,1-Dichloroethene	**<16.6**	ug/kg	50.0	16.6	1	05/24/24 10:00	05/25/24 00:46	75-35-4	
1,2-Dichloroethane	**<11.5**	ug/kg	50.0	11.5	1	05/24/24 10:00	05/25/24 00:46	107-06-2	
2-Butanone (MEK)	**<158**	ug/kg	1250	158	1	05/24/24 10:00	05/25/24 00:46	78-93-3	
2-Hexanone	**<496**	ug/kg	1250	496	1	05/24/24 10:00	05/25/24 00:46	591-78-6	
2-Propanol	**<1590**	ug/kg	5000	1590	1	05/24/24 10:00	05/25/24 00:46	67-63-0	
Acetone	**<304**	ug/kg	1250	304	1	05/24/24 10:00	05/25/24 00:46	67-64-1	
Benzene	**<11.9**	ug/kg	20.0	11.9	1	05/24/24 10:00	05/25/24 00:46	71-43-2	
Bromodichloromethane	**<11.9**	ug/kg	50.0	11.9	1	05/24/24 10:00	05/25/24 00:46	75-27-4	
Bromoform	**<220**	ug/kg	250	220	1	05/24/24 10:00	05/25/24 00:46	75-25-2	
Chlorobenzene	**<6.0**	ug/kg	50.0	6.0	1	05/24/24 10:00	05/25/24 00:46	108-90-7	
Chloroform	**<35.8**	ug/kg	250	35.8	1	05/24/24 10:00	05/25/24 00:46	67-66-3	
Chloromethane	**<19.0**	ug/kg	50.0	19.0	1	05/24/24 10:00	05/25/24 00:46	74-87-3	
Dibromochloromethane	**<171**	ug/kg	250	171	1	05/24/24 10:00	05/25/24 00:46	124-48-1	
Dichlorofluoromethane	**<14.1**	ug/kg	50.0	14.1	1	05/24/24 10:00	05/25/24 00:46	75-43-4	
Methyl-tert-butyl ether	**<14.7**	ug/kg	50.0	14.7	1	05/24/24 10:00	05/25/24 00:46	1634-04-4	
Methylene Chloride	**<13.9**	ug/kg	50.0	13.9	1	05/24/24 10:00	05/25/24 00:46	75-09-2	
Tetrachloroethene	**<19.4**	ug/kg	50.0	19.4	1	05/24/24 10:00	05/25/24 00:46	127-18-4	
Toluene	**<12.6**	ug/kg	50.0	12.6	1	05/24/24 10:00	05/25/24 00:46	108-88-3	
Trichloroethene	**<18.7**	ug/kg	50.0	18.7	1	05/24/24 10:00	05/25/24 00:46	79-01-6	
Trichlorofluoromethane	**<14.5**	ug/kg	50.0	14.5	1	05/24/24 10:00	05/25/24 00:46	75-69-4	
m&p-Xylene	**<21.1**	ug/kg	100	21.1	1	05/24/24 10:00	05/25/24 00:46	179601-23-1	
trans-1,2-Dichloroethene	**<10.9**	ug/kg	50.0	10.9	1	05/24/24 10:00	05/25/24 00:46	156-60-5	
Surrogates									
Toluene-d8 (S)	104	%	60-140		1	05/24/24 10:00	05/25/24 00:46	2037-26-5	
4-Bromofluorobenzene (S)	110	%	66-143		1	05/24/24 10:00	05/25/24 00:46	460-00-4	
1,2-Dichlorobenzene-d4 (S)	111	%	60-140		1	05/24/24 10:00	05/25/24 00:46	2199-69-1	

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QUALITY CONTROL DATA

Project: 6119.00.020
Pace Project No.: 40278528

QC Batch: 475000
QC Batch Method: EPA 3546
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Med Level MAE
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40278528001, 40278528002, 40278528003, 40278528004, 40278528005, 40278528006, 40278528007, 40278528008, 40278528009, 40278528010, 40278528011, 40278528012, 40278528013, 40278528014, 40278528015, 40278528016, 40278528017, 40278528018, 40278528019, 40278528020

METHOD BLANK: 2720562
Matrix: Solid
Associated Lab Samples: 40278528001, 40278528002, 40278528003, 40278528004, 40278528005, 40278528006, 40278528007, 40278528008, 40278528009, 40278528010, 40278528011, 40278528012, 40278528013, 40278528014, 40278528015, 40278528016, 40278528017, 40278528018, 40278528019, 40278528020

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/kg	<12.8	50.0	12.8	05/23/24 10:57	
1,1,2-Trichlorotrifluoroethane	ug/kg	<16.3	50.0	16.3	05/23/24 10:57	
1,1-Dichloroethene	ug/kg	<16.6	50.0	16.6	05/23/24 10:57	
1,2-Dichloroethane	ug/kg	<11.5	50.0	11.5	05/23/24 10:57	
2-Butanone (MEK)	ug/kg	<158	1250	158	05/23/24 10:57	
2-Hexanone	ug/kg	<496	1250	496	05/23/24 10:57	
2-Propanol	ug/kg	<1590	5000	1590	05/23/24 10:57	
Acetone	ug/kg	<304	1250	304	05/23/24 10:57	
Benzene	ug/kg	<11.9	20.0	11.9	05/23/24 10:57	
Bromodichloromethane	ug/kg	<11.9	50.0	11.9	05/23/24 10:57	
Bromoform	ug/kg	<220	250	220	05/23/24 10:57	
Chlorobenzene	ug/kg	<6.0	50.0	6.0	05/23/24 10:57	
Chloroform	ug/kg	<35.8	250	35.8	05/23/24 10:57	
Chloromethane	ug/kg	<19.0	50.0	19.0	05/23/24 10:57	
Dibromochloromethane	ug/kg	<171	250	171	05/23/24 10:57	
Dichlorofluoromethane	ug/kg	<14.1	50.0	14.1	05/23/24 10:57	
m&p-Xylene	ug/kg	<21.1	100	21.1	05/23/24 10:57	
Methyl-tert-butyl ether	ug/kg	<14.7	50.0	14.7	05/23/24 10:57	
Methylene Chloride	ug/kg	<13.9	50.0	13.9	05/23/24 10:57	
Tetrachloroethene	ug/kg	<19.4	50.0	19.4	05/23/24 10:57	
Toluene	ug/kg	<12.6	50.0	12.6	05/23/24 10:57	
trans-1,2-Dichloroethene	ug/kg	<10.9	50.0	10.9	05/23/24 10:57	
Trichloroethene	ug/kg	<18.7	50.0	18.7	05/23/24 10:57	
Trichlorofluoromethane	ug/kg	<14.5	50.0	14.5	05/23/24 10:57	
1,2-Dichlorobenzene-d4 (S)	%	108	60-140		05/23/24 10:57	
4-Bromofluorobenzene (S)	%	105	66-143		05/23/24 10:57	
Toluene-d8 (S)	%	111	60-140		05/23/24 10:57	

LABORATORY CONTROL SAMPLE: 2720563

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2470	99	60-140	
1,1,2-Trichlorotrifluoroethane	ug/kg	2500	2020	81	60-140	
1,1-Dichloroethene	ug/kg	2500	2020	81	62.9-142	
1,2-Dichloroethane	ug/kg	2500	2340	94	51.5-138	

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QUALITY CONTROL DATA

Project: 6119.00.020
Pace Project No.: 40278528

LABORATORY CONTROL SAMPLE: 2720563

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	2500	2360	94	60-140	
Bromodichloromethane	ug/kg	2500	2610	105	60-140	
Bromoform	ug/kg	2500	2350	94	60-140	
Chlorobenzene	ug/kg	2500	2510	101	85.8-121	
Chloroform	ug/kg	2500	2360	94	78.4-117	
Chloromethane	ug/kg	2500	1030	41	60-140	L2
Dibromochloromethane	ug/kg	2500	2660	107	60-140	
m&p-Xylene	ug/kg	5000	5070	101	60-140	
Methyl-tert-butyl ether	ug/kg	2500	2180	87	60-140	
Methylene Chloride	ug/kg	2500	2120	85	60-140	
Tetrachloroethene	ug/kg	2500	2550	102	76.3-149	
Toluene	ug/kg	2500	2460	99	60-140	
trans-1,2-Dichloroethene	ug/kg	2500	2250	90	60.9-136	
Trichloroethene	ug/kg	2500	2720	109	79.8-128	
Trichlorofluoromethane	ug/kg	2500	1880	75	49-141	
1,2-Dichlorobenzene-d4 (S)	%			113	60-140	
4-Bromofluorobenzene (S)	%			116	66-143	
Toluene-d8 (S)	%			117	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2720564 2720565

Parameter	Units	40278528019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/kg	<7.4	715	783	636	734	89	94	60-140	14	50	
1,1,2-Trichlorotrifluoroethane	ug/kg	<9.4	715	783	509	606	71	77	60-140	17	50	
1,1-Dichloroethene	ug/kg	<9.6	715	783	528	593	74	76	62.9-142	12	50	
1,2-Dichloroethane	ug/kg	<6.7	715	783	613	707	86	90	51.5-138	14	50	
Benzene	ug/kg	<6.9	715	783	621	723	87	92	60-140	15	50	
Bromodichloromethane	ug/kg	<6.9	715	783	630	770	88	98	60-140	20	50	
Bromoform	ug/kg	<127	715	783	629	691	88	88	60-140	10	50	
Chlorobenzene	ug/kg	<3.5	715	783	653	767	91	98	85.8-121	16	50	
Chloroform	ug/kg	<20.7	715	783	624	715	87	91	78.4-117	14	50	
Chloromethane	ug/kg	<11.0	715	783	285	314	40	40	60-140	9	50	M0
Dibromochloromethane	ug/kg	<99.0	715	783	634	711	89	91	60-140	12	50	
m&p-Xylene	ug/kg	<12.2	1430	1570	1340	1540	94	99	60-140	14	50	
Methyl-tert-butyl ether	ug/kg	<8.5	715	783	526	606	74	77	60-140	14	50	
Methylene Chloride	ug/kg	<8.1	715	783	559	678	78	87	60-140	19	50	
Tetrachloroethene	ug/kg	<11.2	715	783	634	722	89	92	76.3-149	13	50	
Toluene	ug/kg	<7.3	715	783	629	740	88	95	60-140	16	50	
trans-1,2-Dichloroethene	ug/kg	<6.3	715	783	587	689	82	88	60.9-136	16	50	
Trichloroethene	ug/kg	<10.8	715	783	655	813	92	104	79.8-128	22	50	
Trichlorofluoromethane	ug/kg	<8.4	715	783	494	580	69	74	21-141	16	28	
1,2-Dichlorobenzene-d4 (S)	%						103	107	60-140			
4-Bromofluorobenzene (S)	%						103	109	66-143			

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(920)469-2436

QUALITY CONTROL DATA

Project: 6119.00.020
Pace Project No.: 40278528

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2720564 2720565

Parameter	Units	40278528019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Toluene-d8 (S)	%						101	104	60-140			

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QUALITY CONTROL DATA

Project: 6119.00.020
Pace Project No.: 40278528

QC Batch: 475089
QC Batch Method: EPA 3546
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Med Level MAE
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40278528021, 40278528022, 40278528023, 40278528024, 40278528025, 40278528026, 40278528027, 40278528028, 40278528029, 40278528030, 40278528031, 40278528032, 40278528033, 40278528034, 40278528035, 40278528036, 40278528037, 40278528038, 40278528039, 40278528040

METHOD BLANK: 2721014
Matrix: Solid
Associated Lab Samples: 40278528021, 40278528022, 40278528023, 40278528024, 40278528025, 40278528026, 40278528027, 40278528028, 40278528029, 40278528030, 40278528031, 40278528032, 40278528033, 40278528034, 40278528035, 40278528036, 40278528037, 40278528038, 40278528039, 40278528040

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/kg	<12.8	50.0	12.8	05/24/24 11:33	
1,1,2-Trichlorotrifluoroethane	ug/kg	<16.3	50.0	16.3	05/24/24 11:33	
1,1-Dichloroethene	ug/kg	<16.6	50.0	16.6	05/24/24 11:33	
1,2-Dichloroethane	ug/kg	<11.5	50.0	11.5	05/24/24 11:33	
2-Butanone (MEK)	ug/kg	<158	1250	158	05/24/24 11:33	
2-Hexanone	ug/kg	<496	1250	496	05/24/24 11:33	
2-Propanol	ug/kg	<1590	5000	1590	05/24/24 11:33	
Acetone	ug/kg	<304	1250	304	05/24/24 11:33	
Benzene	ug/kg	<11.9	20.0	11.9	05/24/24 11:33	
Bromodichloromethane	ug/kg	<11.9	50.0	11.9	05/24/24 11:33	
Bromoform	ug/kg	<220	250	220	05/24/24 11:33	
Chlorobenzene	ug/kg	<6.0	50.0	6.0	05/24/24 11:33	
Chloroform	ug/kg	<35.8	250	35.8	05/24/24 11:33	
Chloromethane	ug/kg	<19.0	50.0	19.0	05/24/24 11:33	
Dibromochloromethane	ug/kg	<171	250	171	05/24/24 11:33	
Dichlorofluoromethane	ug/kg	<14.1	50.0	14.1	05/24/24 11:33	
m&p-Xylene	ug/kg	<21.1	100	21.1	05/24/24 11:33	
Methyl-tert-butyl ether	ug/kg	<14.7	50.0	14.7	05/24/24 11:33	
Methylene Chloride	ug/kg	<13.9	50.0	13.9	05/24/24 11:33	
Tetrachloroethene	ug/kg	<19.4	50.0	19.4	05/24/24 11:33	
Toluene	ug/kg	<12.6	50.0	12.6	05/24/24 11:33	
trans-1,2-Dichloroethene	ug/kg	<10.9	50.0	10.9	05/24/24 11:33	
Trichloroethene	ug/kg	<18.7	50.0	18.7	05/24/24 11:33	
Trichlorofluoromethane	ug/kg	<14.5	50.0	14.5	05/24/24 11:33	
1,2-Dichlorobenzene-d4 (S)	%	109	60-140		05/24/24 11:33	
4-Bromofluorobenzene (S)	%	105	66-143		05/24/24 11:33	
Toluene-d8 (S)	%	110	60-140		05/24/24 11:33	

LABORATORY CONTROL SAMPLE: 2721015

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2560	102	60-140	
1,1,2-Trichlorotrifluoroethane	ug/kg	2500	2130	85	60-140	
1,1-Dichloroethene	ug/kg	2500	2030	81	62.9-142	
1,2-Dichloroethane	ug/kg	2500	2480	99	51.5-138	

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QUALITY CONTROL DATA

Project: 6119.00.020
Pace Project No.: 40278528

LABORATORY CONTROL SAMPLE: 2721015

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	2500	2430	97	60-140	
Bromodichloromethane	ug/kg	2500	2750	110	60-140	
Bromoform	ug/kg	2500	2410	97	60-140	
Chlorobenzene	ug/kg	2500	2610	104	85.8-121	
Chloroform	ug/kg	2500	2390	96	78.4-117	
Chloromethane	ug/kg	2500	1060	42	60-140	L2
Dibromochloromethane	ug/kg	2500	2700	108	60-140	
m&p-Xylene	ug/kg	5000	5190	104	60-140	
Methyl-tert-butyl ether	ug/kg	2500	2370	95	60-140	
Methylene Chloride	ug/kg	2500	2350	94	60-140	
Tetrachloroethene	ug/kg	2500	2600	104	76.3-149	
Toluene	ug/kg	2500	2520	101	60-140	
trans-1,2-Dichloroethene	ug/kg	2500	2330	93	60.9-136	
Trichloroethene	ug/kg	2500	2800	112	79.8-128	
Trichlorofluoromethane	ug/kg	2500	1890	76	49-141	
1,2-Dichlorobenzene-d4 (S)	%			120	60-140	
4-Bromofluorobenzene (S)	%			119	66-143	
Toluene-d8 (S)	%			119	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2721016 2721017

Parameter	Units	40278528039 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/kg	<10.9	834	767	768	686	92	89	60-140	11	50	
1,1,2-Trichlorotrifluoroethane	ug/kg	<13.8	834	767	572	546	69	71	60-140	5	50	
1,1-Dichloroethene	ug/kg	<14.1	834	767	577	538	69	70	62.9-142	7	50	
1,2-Dichloroethane	ug/kg	<9.7	834	767	732	677	88	88	51.5-138	8	50	
Benzene	ug/kg	<10.1	834	767	713	668	86	87	60-140	7	50	
Bromodichloromethane	ug/kg	<10.1	834	767	750	735	90	96	60-140	2	50	
Bromoform	ug/kg	<187	834	767	688	649	83	85	60-140	6	50	
Chlorobenzene	ug/kg	<5.1	834	767	761	757	91	99	85.8-121	1	50	
Chloroform	ug/kg	<30.4	834	767	755	693	90	90	78.4-117	8	50	
Chloromethane	ug/kg	<16.1	834	767	328	290	39	38	60-140	12	50	M0
Dibromochloromethane	ug/kg	<145	834	767	696	713	83	93	60-140	2	50	
m&p-Xylene	ug/kg	<17.9	1670	1530	1560	1510	94	98	60-140	4	50	
Methyl-tert-butyl ether	ug/kg	<12.5	834	767	659	624	79	81	60-140	5	50	
Methylene Chloride	ug/kg	<11.8	834	767	685	622	82	81	60-140	10	50	
Tetrachloroethene	ug/kg	<16.4	834	767	741	740	89	97	76.3-149	0	50	
Toluene	ug/kg	<10.7	834	767	741	715	89	93	60-140	4	50	
trans-1,2-Dichloroethene	ug/kg	<9.3	834	767	715	655	86	85	60.9-136	9	50	
Trichloroethene	ug/kg	<15.9	834	767	798	750	96	98	79.8-128	6	50	
Trichlorofluoromethane	ug/kg	<12.3	834	767	580	507	70	66	21-141	13	28	
1,2-Dichlorobenzene-d4 (S)	%						107	104	60-140			
4-Bromofluorobenzene (S)	%						104	104	66-143			

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QUALITY CONTROL DATA

Project: 6119.00.020
Pace Project No.: 40278528

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2721016 2721017

Parameter	Units	40278528039 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Toluene-d8 (S)	%						101	107	60-140			

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QUALITY CONTROL DATA

Project: 6119.00.020
Pace Project No.: 40278528

QC Batch: 475115
QC Batch Method: EPA 3546
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Med Level MAE
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40278528041, 40278528042, 40278528043, 40278528044, 40278528045, 40278528046, 40278528047, 40278528048, 40278528049, 40278528050, 40278528051, 40278528052, 40278528053, 40278528060

METHOD BLANK: 2721088
Matrix: Solid
Associated Lab Samples: 40278528041, 40278528042, 40278528043, 40278528044, 40278528045, 40278528046, 40278528047, 40278528048, 40278528049, 40278528050, 40278528051, 40278528052, 40278528053, 40278528060

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/kg	<12.8	50.0	12.8	05/24/24 11:34	
1,1,2-Trichlorotrifluoroethane	ug/kg	<16.3	50.0	16.3	05/24/24 11:34	
1,1-Dichloroethene	ug/kg	<16.6	50.0	16.6	05/24/24 11:34	
1,2-Dichloroethane	ug/kg	<11.5	50.0	11.5	05/24/24 11:34	
2-Butanone (MEK)	ug/kg	<158	1250	158	05/24/24 11:34	
2-Hexanone	ug/kg	<496	1250	496	05/24/24 11:34	
2-Propanol	ug/kg	<1590	5000	1590	05/24/24 11:34	v1
Acetone	ug/kg	<304	1250	304	05/24/24 11:34	
Benzene	ug/kg	<11.9	20.0	11.9	05/24/24 11:34	
Bromodichloromethane	ug/kg	<11.9	50.0	11.9	05/24/24 11:34	
Bromoform	ug/kg	<220	250	220	05/24/24 11:34	
Chlorobenzene	ug/kg	<6.0	50.0	6.0	05/24/24 11:34	
Chloroform	ug/kg	<35.8	250	35.8	05/24/24 11:34	
Chloromethane	ug/kg	<19.0	50.0	19.0	05/24/24 11:34	
Dibromochloromethane	ug/kg	<171	250	171	05/24/24 11:34	
Dichlorofluoromethane	ug/kg	<14.1	50.0	14.1	05/24/24 11:34	
m&p-Xylene	ug/kg	<21.1	100	21.1	05/24/24 11:34	
Methyl-tert-butyl ether	ug/kg	<14.7	50.0	14.7	05/24/24 11:34	
Methylene Chloride	ug/kg	<13.9	50.0	13.9	05/24/24 11:34	
Tetrachloroethene	ug/kg	<19.4	50.0	19.4	05/24/24 11:34	
Toluene	ug/kg	<12.6	50.0	12.6	05/24/24 11:34	
trans-1,2-Dichloroethene	ug/kg	<10.9	50.0	10.9	05/24/24 11:34	
Trichloroethene	ug/kg	<18.7	50.0	18.7	05/24/24 11:34	
Trichlorofluoromethane	ug/kg	<14.5	50.0	14.5	05/24/24 11:34	
1,2-Dichlorobenzene-d4 (S)	%	105	60-140		05/24/24 11:34	
4-Bromofluorobenzene (S)	%	99	66-143		05/24/24 11:34	
Toluene-d8 (S)	%	103	60-140		05/24/24 11:34	

LABORATORY CONTROL SAMPLE: 2721089

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2720	109	60-140	
1,1,2-Trichlorotrifluoroethane	ug/kg	2500	1890	76	60-140	
1,1-Dichloroethene	ug/kg	2500	2250	90	62.9-142	
1,2-Dichloroethane	ug/kg	2500	2880	115	51.5-138	
Benzene	ug/kg	2500	2610	104	60-140	
Bromodichloromethane	ug/kg	2500	2850	114	60-140	

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QUALITY CONTROL DATA

Project: 6119.00.020
Pace Project No.: 40278528

LABORATORY CONTROL SAMPLE: 2721089

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromoform	ug/kg	2500	2430	97	60-140	
Chlorobenzene	ug/kg	2500	2560	103	85.8-121	
Chloroform	ug/kg	2500	2680	107	78.4-117	
Chloromethane	ug/kg	2500	1960	78	60-140	
Dibromochloromethane	ug/kg	2500	2680	107	60-140	
m&p-Xylene	ug/kg	5000	5000	100	60-140	
Methyl-tert-butyl ether	ug/kg	2500	2560	102	60-140	
Methylene Chloride	ug/kg	2500	2440	98	60-140	
Tetrachloroethene	ug/kg	2500	2320	93	76.3-149	
Toluene	ug/kg	2500	2590	104	60-140	
trans-1,2-Dichloroethene	ug/kg	2500	2480	99	60.9-136	
Trichloroethene	ug/kg	2500	3030	121	79.8-128	
Trichlorofluoromethane	ug/kg	2500	2280	91	49-141	
1,2-Dichlorobenzene-d4 (S)	%			99	60-140	
4-Bromofluorobenzene (S)	%			98	66-143	
Toluene-d8 (S)	%			106	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2721090 2721091

Parameter	Units	40278528060 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/kg	<7.5	616	690	601	667	98	97	60-140	10	50	
1,1,2-Trichlorotrifluoroethane	ug/kg	<9.6	616	690	463	418	75	61	60-140	10	50	
1,1-Dichloroethene	ug/kg	<9.8	616	690	496	492	80	71	62.9-142	1	50	
1,2-Dichloroethane	ug/kg	<6.8	616	690	672	761	109	110	51.5-138	12	50	
Benzene	ug/kg	8.5J	616	690	612	675	98	97	60-140	10	50	
Bromodichloromethane	ug/kg	<7.0	616	690	636	730	103	106	60-140	14	50	
Bromoform	ug/kg	<130	616	690	559	608	91	88	60-140	8	50	
Chlorobenzene	ug/kg	<3.5	616	690	604	687	98	100	85.8-121	13	50	
Chloroform	ug/kg	<21.1	616	690	589	717	96	104	78.4-117	20	50	
Chloromethane	ug/kg	<11.2	616	690	549	455	89	66	60-140	19	50	
Dibromochloromethane	ug/kg	<101	616	690	592	698	96	101	60-140	16	50	
m&p-Xylene	ug/kg	<12.4	1230	1380	1150	1330	93	96	60-140	14	50	
Methyl-tert-butyl ether	ug/kg	<8.7	616	690	566	665	92	96	60-140	16	50	
Methylene Chloride	ug/kg	<8.2	616	690	530	640	86	93	60-140	19	50	
Tetrachloroethene	ug/kg	<11.4	616	690	534	609	87	88	76.3-149	13	50	
Toluene	ug/kg	<7.4	616	690	594	712	96	103	60-140	18	50	
trans-1,2-Dichloroethene	ug/kg	<6.4	616	690	559	678	91	98	60.9-136	19	50	
Trichloroethene	ug/kg	<11.0	616	690	716	745	116	108	79.8-128	4	50	
Trichlorofluoromethane	ug/kg	27.1J	616	690	581	519	90	71	21-141	11	28	
1,2-Dichlorobenzene-d4 (S)	%						97	103	60-140			
4-Bromofluorobenzene (S)	%						93	98	66-143			
Toluene-d8 (S)	%						96	99	60-140			

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REPORT OF LABORATORY ANALYSIS

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(920)469-2436

QUALITY CONTROL DATA

Project: 6119.00.020
Pace Project No.: 40278528

QC Batch: 475242
QC Batch Method: EPA 3546
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Med Level MAE
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40278528054, 40278528055, 40278528056, 40278528057, 40278528058, 40278528059, 40278528061, 40278528062, 40278528063, 40278528064, 40278528065, 40278528066, 40278528067, 40278528079

METHOD BLANK: 2721928 Matrix: Solid
Associated Lab Samples: 40278528054, 40278528055, 40278528056, 40278528057, 40278528058, 40278528059, 40278528061, 40278528062, 40278528063, 40278528064, 40278528065, 40278528066, 40278528067, 40278528079

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/kg	<12.8	50.0	12.8	05/28/24 12:05	
1,1,2-Trichlorotrifluoroethane	ug/kg	<16.3	50.0	16.3	05/28/24 12:05	
1,1-Dichloroethene	ug/kg	<16.6	50.0	16.6	05/28/24 12:05	
1,2-Dichloroethane	ug/kg	<11.5	50.0	11.5	05/28/24 12:05	
2-Butanone (MEK)	ug/kg	<158	1250	158	05/28/24 12:05	
2-Hexanone	ug/kg	<496	1250	496	05/28/24 12:05	v1
2-Propanol	ug/kg	<1590	5000	1590	05/28/24 12:05	v1
Acetone	ug/kg	<304	1250	304	05/28/24 12:05	
Benzene	ug/kg	<11.9	20.0	11.9	05/28/24 12:05	
Bromodichloromethane	ug/kg	<11.9	50.0	11.9	05/28/24 12:05	
Bromoform	ug/kg	<220	250	220	05/28/24 12:05	
Chlorobenzene	ug/kg	<6.0	50.0	6.0	05/28/24 12:05	
Chloroform	ug/kg	<35.8	250	35.8	05/28/24 12:05	
Chloromethane	ug/kg	<19.0	50.0	19.0	05/28/24 12:05	
Dibromochloromethane	ug/kg	<171	250	171	05/28/24 12:05	
Dichlorofluoromethane	ug/kg	<14.1	50.0	14.1	05/28/24 12:05	
m&p-Xylene	ug/kg	<21.1	100	21.1	05/28/24 12:05	
Methyl-tert-butyl ether	ug/kg	<14.7	50.0	14.7	05/28/24 12:05	
Methylene Chloride	ug/kg	<13.9	50.0	13.9	05/28/24 12:05	
Tetrachloroethene	ug/kg	<19.4	50.0	19.4	05/28/24 12:05	
Toluene	ug/kg	<12.6	50.0	12.6	05/28/24 12:05	
trans-1,2-Dichloroethene	ug/kg	<10.9	50.0	10.9	05/28/24 12:05	
Trichloroethene	ug/kg	<18.7	50.0	18.7	05/28/24 12:05	
Trichlorofluoromethane	ug/kg	<14.5	50.0	14.5	05/28/24 12:05	
1,2-Dichlorobenzene-d4 (S)	%	98	60-140		05/28/24 12:05	
4-Bromofluorobenzene (S)	%	97	66-143		05/28/24 12:05	
Toluene-d8 (S)	%	102	60-140		05/28/24 12:05	

LABORATORY CONTROL SAMPLE: 2721929

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2660	107	60-140	
1,1,2-Trichlorotrifluoroethane	ug/kg	2500	2020	81	60-140	
1,1-Dichloroethene	ug/kg	2500	2170	87	62.9-142	
1,2-Dichloroethane	ug/kg	2500	2750	110	51.5-138	
Benzene	ug/kg	2500	2500	100	60-140	
Bromodichloromethane	ug/kg	2500	2700	108	60-140	

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(920)469-2436

QUALITY CONTROL DATA

Project: 6119.00.020
Pace Project No.: 40278528

LABORATORY CONTROL SAMPLE: 2721929

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromoform	ug/kg	2500	2360	94	60-140	
Chlorobenzene	ug/kg	2500	2470	99	85.8-121	
Chloroform	ug/kg	2500	2640	105	78.4-117	
Chloromethane	ug/kg	2500	2050	82	60-140	
Dibromochloromethane	ug/kg	2500	2540	102	60-140	
m&p-Xylene	ug/kg	5000	4760	95	60-140	
Methyl-tert-butyl ether	ug/kg	2500	2530	101	60-140	
Methylene Chloride	ug/kg	2500	2340	94	60-140	
Tetrachloroethene	ug/kg	2500	2390	96	76.3-149	
Toluene	ug/kg	2500	2430	97	60-140	
trans-1,2-Dichloroethene	ug/kg	2500	2500	100	60.9-136	
Trichloroethene	ug/kg	2500	2860	114	79.8-128	
Trichlorofluoromethane	ug/kg	2500	2290	92	49-141	
1,2-Dichlorobenzene-d4 (S)	%			102	60-140	
4-Bromofluorobenzene (S)	%			98	66-143	
Toluene-d8 (S)	%			102	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2721930 2721931

Parameter	Units	40278528079 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/kg	<11.3	765	608	848	697	111	115	60-140	20	50	
1,1,2-Trichlorotrifluoroethane	ug/kg	<14.4	765	608	665	548	87	90	60-140	19	50	
1,1-Dichloroethene	ug/kg	<14.7	765	608	745	613	97	101	62.9-142	19	50	
1,2-Dichloroethane	ug/kg	<10.2	765	608	902	706	118	116	51.5-138	24	50	
Benzene	ug/kg	<10.5	765	608	789	649	103	107	60-140	19	50	
Bromodichloromethane	ug/kg	<10.5	765	608	891	676	116	111	60-140	27	50	
Bromoform	ug/kg	<194	765	608	741	552	97	91	60-140	29	50	
Chlorobenzene	ug/kg	<5.3	765	608	819	631	107	104	85.8-121	26	50	
Chloroform	ug/kg	<31.6	765	608	853	667	111	110	78.4-117	25	50	
Chloromethane	ug/kg	<16.8	765	608	608	557	79	92	60-140	9	50	
Dibromochloromethane	ug/kg	<151	765	608	839	577	110	95	60-140	37	50	
m&p-Xylene	ug/kg	<18.6	1530	1220	1640	1250	107	103	60-140	26	50	
Methyl-tert-butyl ether	ug/kg	<13.0	765	608	771	610	101	100	60-140	23	50	
Methylene Chloride	ug/kg	<12.3	765	608	747	643	98	106	60-140	15	50	
Tetrachloroethene	ug/kg	<17.1	765	608	792	599	104	99	76.3-149	28	50	
Toluene	ug/kg	<11.1	765	608	836	639	109	105	60-140	27	50	
trans-1,2-Dichloroethene	ug/kg	<9.6	765	608	817	680	107	112	60.9-136	18	50	
Trichloroethene	ug/kg	<16.5	765	608	907	785	119	129	79.8-128	14	50	M1
Trichlorofluoromethane	ug/kg	<12.8	765	608	748	645	98	106	21-141	15	28	
1,2-Dichlorobenzene-d4 (S)	%						107	104	60-140			
4-Bromofluorobenzene (S)	%						103	102	66-143			
Toluene-d8 (S)	%						109	107	60-140			

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QUALITY CONTROL DATA

Project: 6119.00.020
Pace Project No.: 40278528

QC Batch: 475243
QC Batch Method: EPA 3546
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Med Level MAE
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40278528068, 40278528069, 40278528070, 40278528071, 40278528072, 40278528073, 40278528074, 40278528075, 40278528076, 40278528077, 40278528078, 40278528080, 40278528081, 40278528082, 40278528083, 40278528084, 40278528085, 40278528086, 40278528087, 40278528088

METHOD BLANK: 2721932
Matrix: Solid
Associated Lab Samples: 40278528068, 40278528069, 40278528070, 40278528071, 40278528072, 40278528073, 40278528074, 40278528075, 40278528076, 40278528077, 40278528078, 40278528080, 40278528081, 40278528082, 40278528083, 40278528084, 40278528085, 40278528086, 40278528087, 40278528088

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/kg	<12.8	50.0	12.8	05/24/24 19:13	
1,1,2-Trichlorotrifluoroethane	ug/kg	<16.3	50.0	16.3	05/24/24 19:13	
1,1-Dichloroethene	ug/kg	<16.6	50.0	16.6	05/24/24 19:13	
1,2-Dichloroethane	ug/kg	<11.5	50.0	11.5	05/24/24 19:13	
2-Butanone (MEK)	ug/kg	<158	1250	158	05/24/24 19:13	
2-Hexanone	ug/kg	<496	1250	496	05/24/24 19:13	
2-Propanol	ug/kg	<1590	5000	1590	05/24/24 19:13	
Acetone	ug/kg	<304	1250	304	05/24/24 19:13	
Benzene	ug/kg	<11.9	20.0	11.9	05/24/24 19:13	
Bromodichloromethane	ug/kg	<11.9	50.0	11.9	05/24/24 19:13	
Bromoform	ug/kg	<220	250	220	05/24/24 19:13	
Chlorobenzene	ug/kg	<6.0	50.0	6.0	05/24/24 19:13	
Chloroform	ug/kg	<35.8	250	35.8	05/24/24 19:13	
Chloromethane	ug/kg	<19.0	50.0	19.0	05/24/24 19:13	
Dibromochloromethane	ug/kg	<171	250	171	05/24/24 19:13	
Dichlorofluoromethane	ug/kg	<14.1	50.0	14.1	05/24/24 19:13	
m&p-Xylene	ug/kg	<21.1	100	21.1	05/24/24 19:13	
Methyl-tert-butyl ether	ug/kg	<14.7	50.0	14.7	05/24/24 19:13	
Methylene Chloride	ug/kg	<13.9	50.0	13.9	05/24/24 19:13	
Tetrachloroethene	ug/kg	<19.4	50.0	19.4	05/24/24 19:13	
Toluene	ug/kg	<12.6	50.0	12.6	05/24/24 19:13	
trans-1,2-Dichloroethene	ug/kg	<10.9	50.0	10.9	05/24/24 19:13	
Trichloroethene	ug/kg	<18.7	50.0	18.7	05/24/24 19:13	
Trichlorofluoromethane	ug/kg	<14.5	50.0	14.5	05/24/24 19:13	
1,2-Dichlorobenzene-d4 (S)	%	115	60-140		05/24/24 19:13	
4-Bromofluorobenzene (S)	%	114	66-143		05/24/24 19:13	
Toluene-d8 (S)	%	117	60-140		05/24/24 19:13	

LABORATORY CONTROL SAMPLE & LCSD: 2721933 2721934

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2520	2460	101	99	60-140	2	30	
1,1,2-Trichlorotrifluoroethane	ug/kg	2500	2460	2080	98	83	60-140	17	30	
1,1-Dichloroethene	ug/kg	2500	2400	2220	96	89	62.9-142	8	30	
1,2-Dichloroethane	ug/kg	2500	2460	2400	98	96	51.5-138	3	30	

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QUALITY CONTROL DATA

Project: 6119.00.020
Pace Project No.: 40278528

LABORATORY CONTROL SAMPLE & LCSD: 2721933 2721934

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Benzene	ug/kg	2500	2570	2430	103	97	60-140	6	30	
Bromodichloromethane	ug/kg	2500	2470	2560	99	102	60-140	3	30	
Bromoform	ug/kg	2500	2100	2090	84	84	60-140	0	30	
Chlorobenzene	ug/kg	2500	2550	2520	102	101	85.8-121	1	30	
Chloroform	ug/kg	2500	2440	2340	97	94	78.4-117	4	30	
Chloromethane	ug/kg	2500	2110	1690	85	68	60-140	22	30	
Dibromochloromethane	ug/kg	2500	2430	2430	97	97	60-140	0	30	
m&p-Xylene	ug/kg	5000	5170	5110	103	102	60-140	1	30	
Methyl-tert-butyl ether	ug/kg	2500	2250	2290	90	92	60-140	2	30	
Methylene Chloride	ug/kg	2500	2400	2340	96	94	60-140	2	30	
Tetrachloroethene	ug/kg	2500	2520	2520	101	101	76.3-149	0	30	
Toluene	ug/kg	2500	2510	2490	100	100	60-140	1	30	
trans-1,2-Dichloroethene	ug/kg	2500	2550	2380	102	95	60.9-136	7	30	
Trichloroethene	ug/kg	2500	2960	2720	118	109	79.8-128	9	30	
Trichlorofluoromethane	ug/kg	2500	2330	1900	93	76	49-141	20	20	
1,2-Dichlorobenzene-d4 (S)	%				114	114	60-140			
4-Bromofluorobenzene (S)	%				115	115	66-143			
Toluene-d8 (S)	%				116	112	60-140			

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QUALIFIERS

Project: 6119.00.020
Pace Project No.: 40278528

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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TNI - The NELAC Institute.

ANALYTE QUALIFIERS

L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
v1	The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 6119.00.020
Pace Project No.: 40278528

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40278528001	**300-001-GSV-76.6_20240514**	EPA 3546	475000	EPA 8260	475057
40278528002	**300-001-GSV-76.9_20240514**	EPA 3546	475000	EPA 8260	475057
40278528003	**300-001-GSV-77.55_20240514**	EPA 3546	475000	EPA 8260	475057
40278528004	**300-001-GSV-77.77_20240514**	EPA 3546	475000	EPA 8260	475057
40278528005	**300-001-GSV-96.1_20240514**	EPA 3546	475000	EPA 8260	475057
40278528006	**300-001-GSV-104.4_20240515**	EPA 3546	475000	EPA 8260	475057
40278528007	**300-001-GSV-106.5_20240515**	EPA 3546	475000	EPA 8260	475057
40278528008	**300-001-GSV-107.75_20240515**	EPA 3546	475000	EPA 8260	475057
40278528009	**300-001-GSV-108_20240515**	EPA 3546	475000	EPA 8260	475057
40278528010	**300-001-GSV-113.3_20240515**	EPA 3546	475000	EPA 8260	475057
40278528011	**300-001-GSV-112.9_20240515**	EPA 3546	475000	EPA 8260	475057
40278528012	**300-001-GSV-114.95_20240515**	EPA 3546	475000	EPA 8260	475057
40278528013	**300-001-GSV-117.4_20240515**	EPA 3546	475000	EPA 8260	475057
40278528014	**300-001-GSV-119.3_20240515**	EPA 3546	475000	EPA 8260	475057
40278528015	**300-001-GSV-120.55_20240515**	EPA 3546	475000	EPA 8260	475057
40278528016	**300-001-GSV-124_20240515**	EPA 3546	475000	EPA 8260	475057
40278528017	**300-001-GSV-124.7_20240515**	EPA 3546	475000	EPA 8260	475057
40278528018	**300-001-GSV-126_20240515**	EPA 3546	475000	EPA 8260	475057
40278528019	**300-001-GSV-128.2_20240515**	EPA 3546	475000	EPA 8260	475057
40278528020	**300-001-GSV-128.2-DUP_20240515**	EPA 3546	475000	EPA 8260	475057
40278528021	**300-001-GSV-129.6_20240515**	EPA 3546	475089	EPA 8260	475157
40278528022	**300-001-GSV-134.8_20240515**	EPA 3546	475089	EPA 8260	475157
40278528023	**300-001-GSV-136.5_20240515**	EPA 3546	475089	EPA 8260	475157
40278528024	**300-001-GSV-139_20240515**	EPA 3546	475089	EPA 8260	475157
40278528025	**300-001-GSV-139.6_20240515**	EPA 3546	475089	EPA 8260	475157
40278528026	**300-001-GSV-140.5_20240515**	EPA 3546	475089	EPA 8260	475157
40278528027	**300-001-GSV-144.3_20240515**	EPA 3546	475089	EPA 8260	475157
40278528028	**300-001-GSV-146.05_20240515**	EPA 3546	475089	EPA 8260	475157
40278528029	**300-001-GSV-148_20240516**	EPA 3546	475089	EPA 8260	475157
40278528030	**300-001-GSV-149.7_20240516**	EPA 3546	475089	EPA 8260	475157
40278528031	**TB-04**	EPA 3546	475089	EPA 8260	475157
40278528032	**300-001-GSV-158.75_20240516**	EPA 3546	475089	EPA 8260	475157
40278528033	**300-001-GSV-162.4_20240516**	EPA 3546	475089	EPA 8260	475157
40278528034	**300-001-GSV-162.7_20240516**	EPA 3546	475089	EPA 8260	475157
40278528035	**300-001-GSV-165.35_20240516**	EPA 3546	475089	EPA 8260	475157
40278528036	**300-001-GSV-168.05_20240517**	EPA 3546	475089	EPA 8260	475157
40278528037	**300-001-GSV-170.3_20240517**	EPA 3546	475089	EPA 8260	475157
40278528038	**300-001-GSV-171.4_20240517**	EPA 3546	475089	EPA 8260	475157
40278528039	**300-001-GSV-173.2_20240517**	EPA 3546	475089	EPA 8260	475157
40278528040	**300-001-GSV-173.2-DUP_20240517**	EPA 3546	475089	EPA 8260	475157
40278528041	**300-001-GSV-174.05_20240517**	EPA 3546	475115	EPA 8260	475170
40278528042	**300-001-GSV-181.5_20240517**	EPA 3546	475115	EPA 8260	475170
40278528043	**300-001-GSV-182.8_20240517**	EPA 3546	475115	EPA 8260	475170
40278528044	**300-001-GSV-184.9_20240517**	EPA 3546	475115	EPA 8260	475170
40278528045	**300-001-GSV-185.85_20240517**	EPA 3546	475115	EPA 8260	475170
40278528046	**300-001-GSV-189.45_20240517**	EPA 3546	475115	EPA 8260	475170

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 6119.00.020
Pace Project No.: 40278528

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40278528047	**300-001-GSV-189.55_20240517**	EPA 3546	475115	EPA 8260	475170
40278528048	**300-001-GSV-189.9_20240517**	EPA 3546	475115	EPA 8260	475170
40278528049	**300-001-GSV-194.9_20240517**	EPA 3546	475115	EPA 8260	475170
40278528050	**300-001-GSV-195.5_20240517**	EPA 3546	475115	EPA 8260	475170
40278528051	**300-001-GSV-196.1_20240517**	EPA 3546	475115	EPA 8260	475170
40278528052	**300-001-GSV-197.55_20240517**	EPA 3546	475115	EPA 8260	475170
40278528053	**300-001-GSV-198.4_20240517**	EPA 3546	475115	EPA 8260	475170
40278528054	**300-001-GSV-201.4_20240517**	EPA 3546	475242	EPA 8260	475285
40278528055	**300-001-GSV-204.6_20240517**	EPA 3546	475242	EPA 8260	475285
40278528056	**300-001-GSV-205.9_20240517**	EPA 3546	475242	EPA 8260	475285
40278528057	**300-001-GSV-209.45_20240518**	EPA 3546	475242	EPA 8260	475285
40278528058	**300-001-GSV-210.65_20240518**	EPA 3546	475242	EPA 8260	475285
40278528059	**300-001-GSV-211.65_20240518**	EPA 3546	475242	EPA 8260	475285
40278528060	**300-001-GSV-212.8_20240518**	EPA 3546	475115	EPA 8260	475170
40278528061	**300-001-GSV-212.8-DUP_20240518**	EPA 3546	475242	EPA 8260	475285
40278528062	**TB-05**	EPA 3546	475242	EPA 8260	475285
40278528063	**300-001-GSV-214.85_20240518**	EPA 3546	475242	EPA 8260	475285
40278528064	**300-001-GSV-216.9_20240518**	EPA 3546	475242	EPA 8260	475285
40278528065	**300-001-GSV-220.35_20240518**	EPA 3546	475242	EPA 8260	475285
40278528066	**300-001-GSV-220.9_20240518**	EPA 3546	475242	EPA 8260	475285
40278528067	**300-001-GSV-224.4_20240518**	EPA 3546	475242	EPA 8260	475285
40278528068	**300-001-GSV-225.6_20240518**	EPA 3546	475243	EPA 8260	475286
40278528069	**300-001-GSV-226.55_20240518**	EPA 3546	475243	EPA 8260	475286
40278528070	**300-001-GSV-230.75_20240518**	EPA 3546	475243	EPA 8260	475286
40278528071	**300-001-GSV-233.25_20240518**	EPA 3546	475243	EPA 8260	475286
40278528072	**300-001-GSV-234.4_20240518**	EPA 3546	475243	EPA 8260	475286
40278528073	**300-001-GSV-236.25_20240518**	EPA 3546	475243	EPA 8260	475286
40278528074	**300-001-GSV-238.1_20240518**	EPA 3546	475243	EPA 8260	475286
40278528075	**300-001-GSV-240_20240518**	EPA 3546	475243	EPA 8260	475286
40278528076	**300-001-GSV-240.3_20240518**	EPA 3546	475243	EPA 8260	475286
40278528077	**300-001-GSV-249.5_20240518**	EPA 3546	475243	EPA 8260	475286
40278528078	**300-001-GSV-250.3_20240518**	EPA 3546	475243	EPA 8260	475286
40278528079	**300-001-GSV-251.8_20240518**	EPA 3546	475242	EPA 8260	475285
40278528080	**300-001-GSV-251.8-DUP_20240518**	EPA 3546	475243	EPA 8260	475286
40278528081	**EB-06**	EPA 3546	475243	EPA 8260	475286
40278528082	**EB-07**	EPA 3546	475243	EPA 8260	475286
40278528083	**EB-08**	EPA 3546	475243	EPA 8260	475286
40278528084	**EB-09**	EPA 3546	475243	EPA 8260	475286
40278528085	**EB-10**	EPA 3546	475243	EPA 8260	475286
40278528086	**TB-06**	EPA 3546	475243	EPA 8260	475286
40278528087	**MB-02**	EPA 3546	475243	EPA 8260	475286
40278528088	**MB-03**	EPA 3546	475243	EPA 8260	475286

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COOLER #1

SANBORN HEAD

CHAIN OF CUSTODY FORM

Client Name/Address:	Project ID:
Sanborn Head & Associates 6 Bedford Farms Drive, Suite 201 Bedford, NH 03110	6119 00 020
Project Manager:	**Phone Number:**
Jessica Bulova	+1 802 279 7698
Sampler:	**Fax Number:**
Erica Bosse	

Lab ID	Sample No.	Sample Description	Sample Matrix	Rock Mass (g)	Container Type	# of Containers	Sample Date/Time	Preservative	Analyses Required: VOCs ECD			Comments
W1	VOC-0102	300-001-GSV-76 6-VOC_20240514	Rock	28.92	VOA	1	5/14/24 13:05	MeOH	X			
W2	VOC-0103	300-001-GSV-76.9-VOC_20240514	Rock	27.27	VOA	1	5/14/24 13:05	MeOH	X			
W3	VOC-0104	300-001-GSV-77.55-VOC_20240514	Rock	26 98	VOA	1	5/14/24 13:52	MeOH	X			
W4	VOC-0105	300-001-GSV-77.77-VOC_20240514	Rock	26.85	VOA	1	5/14/24 13:52	MeOH	X			
W5	VOC-0106	300-001-GSV-96.1-VOC_20240514	Rock	26 14	VOA	1	5/14/24 16:30	MeOH	X			
W6	VOC-0107	300-001-GSV-104 4-VOC_20240515	Rock	31.34	VOA	1	5/15/24 9:53	MeOH	X			
W7	VOC-0108	300-001-GSV-106 5-VOC_20240515	Rock	29.78	VOA	1	5/15/24 9:55	MeOH	X			
W8	VOC-0109	300-001-GSV-107.75-VOC_20240515	Rock	28.47	VOA	1	5/15/24 10:30	MeOH	X			
W9	VOC-0110	300-001-GSV-108-VOC_20240515	Rock	26 61	VOA	1	5/15/24 10.32	MeOH	X			
010	VOC-0111	300-001-GSV-113 3-VOC_20240515	Rock	24.90	VOA	1	5/15/24 10:34	MeOH	X			
011	VOC-0112	300-001-GSV-112.9-VOC_20240515	Rock	29.85	VOA	1	5/15/24 11:03	MeOH	X			
012	VOC-0113	300-001-GSV-114.95-VOC_20240515	Rock	24 57	VOA	1	5/15/24 11:05	MeOH	X			
013	VOC-0114	300-001-GSV-117.4-VOC_20240515	Rock	35.68	VOA	1	5/15/24 11:45	MeOH	X			
014	VOC-0115	300-001-GSV-119.3-VOC_20240515	Rock	30.04	VOA	1	5/15/24 11:46	MeOH	X			
015	VOC-0116	300-001-GSV-120 55-VOC_20240515	Rock	26.20	VOA	1	5/15/24 11:47	MeOH	X			
016	VOC-0117	300-001-GSV-124-VOC_20240515	Rock	28.71	VOA	1	5/15/24 12:11	MeOH	X			
017	VOC-0118	300-001-GSV-124 7-VOC_20240515	Rock	34 68	VOA	1	5/15/24 12:12	MeOH	X			
018	VOC-0119	300-001-GSV-126-VOC_20240515	Rock	26 77	VOA	1	5/15/24 12:13	MeOH	X			
019	VOC-0120	300-001-GSV-128 2-VOC_20240515	Rock	34 52	VOA	1	5/15/24 13:20	MeOH	X			
020	VOC-0121	300-001-GSV-128.2-VOC-DUP_20240515	Rock	28.14	VOA	1	5/15/24 13:20	MeOH	X			
019 021	VOC-0122	300-001-GSV-128 2-VOC-MS_20240515	Rock	27 99	VOA	1	5/15/24 13:20	MeOH	X			
019 022	VOC-0123	300-001-GSV-128 2-VOC-MSD_20240515	Rock	25.55	VOA	1	5/15/24 13:20	MeOH	X			
021 023	VOC-0124	300-001-GSV-129.6-VOC_20240515	Rock	24.54	VOA	1	5/15/24 13:21	MeOH	X			
022 024	VOC-0125	300-001-GSV-134 8-VOC_20240515	Rock	39 79	VOA	1	5/15/24 13:55	MeOH	X			
023 025	VOC-0126	300-001-GSV-136.5-VOC_20240515	Rock	40.02	VOA	1	5/15/24 13.57	MeOH	X			
024 026	VOC-0127	300-001-GSV-139-VOC_20240515	Rock	20 00	VOA	1	5/15/24 14:57	MeOH	X			
025 027	VOC-0128	300-001-GSV-139.6-VOC_20240515	Rock	23 57	VOA	1	5/15/24 14:58	MeOH	X			
026 028	VOC-0129	300-001-GSV-140.5-VOC_20240515	Rock	27.56	VOA	1	5/15/24 14:59	MeOH	X			
027 029	VOC-0130	300-001-GSV-144.3-VOC_20240515	Rock	32 36	VOA	1	5/15/24 16 50	MeOH	X			
028 030	VOC-0131	300-001-GSV-146 05-VOC_20240515	Rock	28.11	VOA	1	5/15/24 16:51	MeOH	X			
029 031	VOC-0132	300-001-GSV-148-VOC_20240516	Rock	26 53	VOA	1	5/16/24 9 33	MeOH	X			
030 032	VOC-0133	300-001-GSV-149.7-VOC_20240516	Rock	34 64	VOA	1	5/16/24 10:35	MeOH	X			
031 033	VOC-0189	TB-04	MeOH	NA	VOA	1	5/19/24 0845	MeOH	X			

mh 5/21/24

Relinquished by: Erica Bosse	Date: 5.20.24	Time: 0900	Received by: Fed-EX	Date: 5.20.24	Time: 0900
Relinquished by: Fedex	Date: 5/21/24	Time: 0855	Received by:	Date: 5/21/24	Time: 0855
Relinquished by	Date	Time	Received by	Date	Time

402785528
cooler #2

SANBORN HEAD

CHAIN OF CUSTODY FORM

Client Name/Address:	Project ID:
Sanborn Head & Associates 6 Bedford Farms Drive, Suite 201 Bedford, NH 03110	6119.00.020
Project Manager:	**Phone Number:**
Jessica Bulova	+1 802 279 7698
Sampler:	**Fax Number:**
Erica Bosse	

	Lab ID	Sample No.	Sample Description	Sample Matrix	Rock Mass (g)	Container Type	# of Containers	Sample Date/Time	Preservative	Analyses Required: VOCs EGD			Comments
032	034	VOC-0134	300-001-GSV-158.75-VOC_20240516	Rock	29.94	VOA	1	5/16/24 15:12	MeOH	X			
033	035	VOC-0135	300-001-GSV-162 4-VOC_20240516	Rock	29 83	VOA	1	5/16/24 15:38	MeOH	X			
034	036	VOC-0136	300-001-GSV-162.7-VOC_20240516	Rock	29.66	VOA	1	5/16/24 15:39	MeOH	X			
035	037	VOC-0137	300-001-GSV-165 35-VOC_20240516	Rock	28 07	VOA	1	5/16/24 15:40	MeOH	X			
036	038	VOC-0138	300-001-GSV-168 05-VOC_20240517	Rock	20.26	VOA	1	5/17/24 9:20	MeOH	X			
037	039	VOC-0139	300-001-GSV-170.3-VOC_20240517	Rock	24 30	VOA	1	5/17/24 9:21	MeOH	X			
038	040	VOC-0140	300-001-GSV-171.4-VOC_20240517	Rock	29 20	VOA	1	5/17/24 9:22	MeOH	X			
039	041	VOC-0141	300-001-GSV-173.2-VOC_20240517	Rock	23.59	VOA	1	5/17/24 10:15	MeOH	X			
040	042	VOC-0142	300-001-GSV-173.2-DUP-VOC_20240517	Rock	28 27	VOA	1	5/17/24 10.15	MeOH	X			
039	043	VOC-0143	300-001-GSV-173 2-MS-VOC_20240517	Rock	23 98	VOA	1	5/17/24 10:15	MeOH	X			
039	044	VOC-0144	300-001-GSV-173 2-MSD-VOC_20240517	Rock	26.08	VOA	1	5/17/24 10:15	MeOH	X			
041	045	VOC-0145	300-001-GSV-174.05-VOC_20240517	Rock	28 23	VOA	1	5/17/24 10:17	MeOH	X			
042	046	VOC-0146	300-001-GSV-181 5-VOC_20240517	Rock	28 83	VOA	1	5/17/24 11:15	MeOH	X			
043	047	VOC-0147	300-001-GSV-182.8-VOC_20240517	Rock	30.57	VOA	1	5/17/24 12:11	MeOH	X			
044	048	VOC-0148	300-001-GSV-184.9-VOC_20240517	Rock	35.50	VOA	1	5/17/24 12:12	MeOH	X			
045	049	VOC-0149	300-001-GSV-185.85-VOC_20240517	Rock	30 05	VOA	1	5/17/24 12:13	MeOH	X			
046	050	VOC-0150	300-001-GSV-189 45-VOC_20240517	Rock	18 87	VOA	1	5/17/24 14:20	MeOH	X			
047	051	VOC-0151	300-001-GSV-189.55-VOC_20240517	Rock	21.48	VOA	1	5/17/24 14:21	MeOH	X			
048	052	VOC-0152	300-001-GSV-189 9-VOC_20240517	Rock	22.56	VOA	1	5/17/24 14:22	MeOH	X			
049	053	VOC-0153	300-001-GSV-194.9-VOC_20240517	Rock	26 62	VOA	1	5/17/24 15:15	MeOH	X			
050	054	VOC-0154	300-001-GSV-195.5-VOC_20240517	Rock	26 72	VOA	1	5/17/24 15:16	MeOH	X			
051	055	VOC-0155	300-001-GSV-196 1-VOC_20240517	Rock	20.00	VOA	1	5/17/24 15:17	MeOH	X			
052	056	VOC-0156	300-001-GSV-197.55-VOC_20240517	Rock	25 04	VOA	1	5/17/24 16.02	MeOH	X			
053	057	VOC-0157	300-001-GSV-198 4-VOC_20240517	Rock	29.10	VOA	1	5/17/24 16:03	MeOH	X			
054	058	VOC-0158	300-001-GSV-201 4-VOC_20240517	Rock	26 56	VOA	1	5/17/24 16.04	MeOH	X			
055	059	VOC-0159	300-001-GSV-204.6-VOC_20240517	Rock	29.81	VOA	1	5/17/24 16:50	MeOH	X			
056	060	VOC-0160	300-001-GSV-205.9-VOC_20240517	Rock	30 06	VOA	1	5/17/24 16:51	MeOH	X			
057	061	VOC-0161	300-001-GSV-209.45-VOC_20240518	Rock	30 08	VOA	1	5/18/24 8:25	MeOH	X			
058	062	VOC-0162	300-001-GSV-210 65-VOC_20240518	Rock	37.56	VOA	1	5/18/24 8.26	MeOH	X			
059	063	VOC-0163	300-001-GSV-211.65-VOC_20240518	Rock	41 86	VOA	1	5/18/24 8:27	MeOH	X			
060	064	VOC-0164	300-001-GSV-212 8-VOC_20240518	Rock	33.97	VOA	1	5/18/24 8:50	MeOH	X			
061	065	VOC-0165	300-001-GSV-212 8-VOC-DUP_20240518	Rock	25 55	VOA	1	5/18/24 8:50	MeOH	X			
062	066	VOC-0190	TB-05	MeOH	NA	VOA	1	5/19/24 8:45	MeOH	X			

5/21/24 MH

Relinquished by: Erica Bosse	Date: 5.20.24	Time: 0900	Received by: Fed-Ex	Date: 5.20.24	Time: 0900
Relinquished by: Fedex	Date: 5/21/24	Time: 0855	Received by: [signature]	Date: 5/21/24	Time: 0855
Relinquished by	Date:	Time	Received by	Date	Time

Cooler # 3

SANBORN HEAD

CHAIN OF CUSTODY FORM

Client Name/Address:	Project ID:
Sanborn Head & Associates 6 Bedford Farms Drive, Suite 201 Bedford, NH 03110	6119.00.020
Project Manager:	**Phone Number:**
Jessica Bulova	+1 802 279 7698
Sampler:	**Fax Number:**
Erica Bosse	

	Lab ID	Sample No.	Sample Description	Sample Matrix	Rock Mass (g)	Container Type	# of Containers	Sample Date/Time	Preservative	Analyses Required: VOCs ECD			Comments
060	064	VOC-0166	300-001-GSV-212 8-VOC-MS_20240518	Rock	32.48	VOA	1	5/18/24 8:50	MeOH	X			
060	064	VOC-0167	300-001-GSV-212.8-VOC-MSD_20240518	Rock	28.98	VOA	1	5/18/24 8.50	MeOH	X			
063	067	VOC-0168	300-001-GSV-214.85-VOC_20240518	Rock	27.09	VOA	1	5/18/24 8·51	MeOH	X			
064	068	VOC-0169	300-001-GSV-216 9-VOC_20240518	Rock	38.07	VOA	1	5/18/24 9:15	MeOH	X			
065	069	VOC-0170	300-001-GSV-220 35-VOC_20240518	Rock	33 88	VOA	1	5/18/24 9:51	MeOH	X			
066	070	VOC-0171	300-001-GSV-220.9-VOC_20240518	Rock	29 89	VOA	1	5/18/24 10:32	MeOH	X			
067	071	VOC-0172	300-001-GSV-224.4-VOC_20240518	Rock	36.21	VOA	1	5/18/24 11:05	MeOH	X			
068	072	VOC-0173	300-001-GSV-225 6-VOC_20240518	Rock	27.61	VOA	1	5/18/24 11:06	MeOH	X			
069	073	VOC-0174	300-001-GSV-226.55-VOC_20240518	Rock	46 22	VOA	1	5/18/24 11·07	MeOH	X			
		~~VOC-0175~~	~~300-001-GSV-230.05-VOC_20240518~~	~~Rock~~	~~34 24~~	~~VOA~~	~~1~~	~~5/18/24 12:15~~	~~MeOH~~	~~X~~			
070	074	VOC-0176	300-001-GSV-230.75-VOC_20240518	Rock	32.75	VOA	1	5/18/24 12:16	MeOH	X			
071	075	VOC-0177	300-001-GSV-233.25-VOC_20240518	Rock	32.43	VOA	1	5/18/24 13:25	MeOH	X			
072	076	VOC-0178	300-001-GSV-234.4-VOC_20240518	Rock	27.14	VOA	1	5/18/24 13 26	MeOH	X			
073	077	VOC-0179	300-001-GSV-236.25-VOC_20240518	Rock	39.63	VOA	1	5/18/24 13:27	MeOH	X			
074	078	VOC-0180	300-001-GSV-238 1-VOC_20240518	Rock	27.88	VOA	1	5/18/24 14:32	MeOH	X			
075	079	VOC-0181	300-001-GSV-240-VOC_20240518	Rock	28.4	VOA	1	5/18/24 14:33	MeOH	X			
076	080	VOC-0182	300-001-GSV-240 3-VOC_20240518	Rock	22.95	VOA	1	5/18/24 14.34	MeOH	X			
077	081	VOC-0183	300-001-GSV-249.5-VOC_20240518	Rock	26 29	VOA	1	5/18/24 16 55	MeOH	X			
078	082	VOC-0184	300-001-GSV-250.3-VOC_20240518	Rock	27.06	VOA	1	5/18/24 16:56	MeOH	X			
079	083	VOC-0185	300-001-GSV-251 8-VOC_20240518	Rock	26 13	VOA	1	5/18/24 16 57	MeOH	X			
080	084	VOC-0186	300-001-GSV-251.8-VOC-DUP_20240518	Rock	27.49	VOA	1	5/18/24 16:57	MeOH	X			
077	085	VOC-0187	300-001-GSV-251 8-VOC-MS_20240518	Rock	22.66	VOA	1	5/18/24 16:57	MeOH	X			
079	086	VOC-0188	300-001-GSV-251.8-VOC-MSD_20240518	Rock	32 91	VOA	1	5/18/24 16·57	MeOH	X			
081	087	VOC-0007	EB-06	MeOH	NA	VOA	1	5/14/24 10:49	MeOH	X			
082	088	VOC-0095	EB-07	MeOH	NA	VOA	1	5/15/24 13.31	MeOH	X			
083	089	VOC-0096	EB-08	MeOH	NA	VOA	1	5/17/24 9:44	MeOH	X			
084	090	VOC-0097	EB-09	MeOH	NA	VOA	1	5/18/24 8.42	MeOH	X			
085	091	VOC-0098	EB-10	MeOH	NA	VOA	1	5/18/24 17:13	MeOH	X			
086	092	VOC-0191	TB-06	MeOH	NA	VOA	1	5/19/24 8 45	MeOH	X			
087	093	V0C-0101	MB-02	MeOH	NA	VOA	1	5/14/24 8:45	MeOH	X			
088	094	VOC-0192	MB-03	MeOH	NA	VOA	1	5/19/24 8:45	MeOH	X			

5/17/24

Relinquished by:	Erica Bosse	Date: 5.20.24	Time: 0900	Received by:	Fed-Ex	Date: 5.20.24	Time: 0900
Relinquished by:	Fedex	Date: 5/21/24	Time: 0855	Received by:		Date: 5/21/24	Time: 0855
Relinquished by:		Date	Time	Received by:		Date	Time

Sample Preservation Receipt Form

Client Name: Sanborn Project # 40278528

All containers needing preservation have been checked and noted below. ☐Yes ☐No ~~☐N/A~~

Lab Lot# of pH paper: Lab Std #ID of preservation (if pH adjusted). Initial when completed: Date/ Time:

Pace Lab #	Glass							Plastic						Vials						Jars				General				VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2							
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020																																		2.5 / 5

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: Headspace in VOA Vials (>6mm) : ☐Yes ☐No ~~☐N/A~~ ***If yes look in headspace column**

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	VG9C	40 mL clear ascorbic w/ HCl
BG1U	1 liter clear glass	BP3U	250 mL plastic unpres	DG9T	40 mL amber Na Thio
AG1H	1 liter amber glass HCL	BP3B	250 mL plastic NaOH	VG9U	40 mL clear vial unpres
AG4S	125 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9H	40 mL clear vial HCL
AG5U	100 mL amber glass unpres	BP3S	250 mL plastic H2SO4	VG9M	40 mL clear vial MeOH
AG2S	500 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH + Zn	VG9D	40 mL clear vial DI
BG3U	250 mL clear glass unpres				

JGFU	4 oz amber jar unpres
JG9U	9 oz amber jar unpres
WGFU	4 oz clear jar unpres
WPFU	4 oz plastic jar unpres
SP5T	120 mL plastic Na Thiosulfate
ZPLC	ziploc bag
GN 1	
GN 2	

Page 1 of 5

Sample Preservation Receipt Form

Client Name: Sanborn Project #: 40278528

Pace Lab #	Glass							Plastic						Vials						Jars				General				VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2							
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Sample Preservation Receipt Form

Client Name: Sanborn Project #: 40278528

Pace Lab #	Glass							Plastic						Vials						Jars				General				VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2							
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Page 3 of 5

Sample Preservation Receipt Form

Client Name: Sanborn Project #: 40278528

Pace Lab #	Glass							Plastic						Vials						Jars				General				VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2							
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MH 5/24/24

Sample Condition Upon Receipt Form (SCUR)

Project #:

WO# : 40278528

40278528

Client Name: Sanborn

Courier: ☐ CS Logistics ☒ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco ☐ Client ☐ Pace Other:

Tracking #: 2748 7147 5836, 2748 7147 5825

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☒ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other

Thermometer Used SR - 120 **Type of Ice:** (Wet) Blue Dry None ☐ Meltwater Only

Cooler Temperature Uncorr: 1,1,2 /Corr: 1,1,2

Temp Blank Present: ☐ yes ☒ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Person examining contents: Date: 5/21/24 /Initials: mH

Labeled By Initials: NR

Chain of Custody Present:	☒Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☒Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☒Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☐Yes ☒No ☐N/A	4.
Samples Arrived within Hold Time:	☒Yes ☐No	5.
- DI VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time.
Short Hold Time Analysis (<72hr):	☐Yes ☒No	6.
Rush Turn Around Time Requested:	☐Yes ☒No	7.
Sufficient Volume:	mH 5/21/24	8.
For Analysis: ☒Yes ☐No MS/MSD:	☒Yes ☐No ☐N/A	
Correct Containers Used:	☒Yes ☐No	9.
Correct Type: Pace Green Bay, Pace IR, Non-Pace		
Containers Intact:	☒Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☒N/A	11.
Sample Labels match COC:	☐Yes ☒No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: S		No date or time mH 5/21/24
Trip Blank Present:	☐Yes ☐No ☒N/A	13.
Trip Blank Custody Seals Present	☐Yes ☐No ☒N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: Date/Time:

Comments/ Resolution: 2748 7147 5847 mH 5/21/24

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample logi

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

June 05, 2024

Jessica Bulova
Sanborn, Head & Associates
20 Foundry Street
Concord, NH 03301

RE: Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Dear Jessica Bulova:

Enclosed are the analytical results for sample(s) received by the laboratory on May 21, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Green Bay

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tod Noltemeyer

Tod Noltemeyer
tod.noltemeyer@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Jeff Austin, NASA
Goeff Giles, NASA-WSTF-Navarro

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Pace Analytical Services Green Bay
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
Texas Certification #: T104704529-21-8
Virginia VELAP Certification ID: 11873
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-21-00008
Federal Fish & Wildlife Permit #: 51774A

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40278540001	300-001-GSV-76.6_20240514	Solid	05/14/24 13:05	05/21/24 08:55
40278540002	300-001-GSV-76.9_20240514	Solid	05/14/24 13:05	05/21/24 08:55
40278540003	300-001-GSV-77.55_20240514	Solid	05/14/24 13:52	05/21/24 08:55
40278540004	300-001-GSV-77.77_20240514	Solid	05/14/24 13:52	05/21/24 08:55
40278540005	300-001-GSV-96.1_20240514	Solid	05/14/24 16:30	05/21/24 08:55
40278540006	300-001-GSV-104.4_20240515	Solid	05/15/24 09:53	05/21/24 08:55
40278540007	300-001-GSV-106.5_20240515	Solid	05/15/24 09:55	05/21/24 08:55
40278540008	300-001-GSV-107.75_20240515	Solid	05/15/24 10:30	05/21/24 08:55
40278540009	300-001-GSV-108_20240515	Solid	05/15/24 10:32	05/21/24 08:55
40278540010	300-001-GSV-113.3_20240515	Solid	05/15/24 10:34	05/21/24 08:55
40278540011	300-001-GSV-112.9_20240515	Solid	05/15/24 11:03	05/21/24 08:55
40278540012	300-001-GSV-114.95_20240515	Solid	05/15/24 11:05	05/21/24 08:55
40278540013	300-001-GSV-117.4_20240515	Solid	05/15/24 11:45	05/21/24 08:55
40278540014	300-001-GSV-119.3_20240515	Solid	05/15/24 11:46	05/21/24 08:55
40278540015	300-001-GSV-120.55_20240515	Solid	05/15/24 11:47	05/21/24 08:55
40278540016	300-001-GSV-124_20240515	Solid	05/15/24 12:11	05/21/24 08:55
40278540017	300-001-GSV-124.7_20240515	Solid	05/15/24 12:12	05/21/24 08:55
40278540018	300-001-GSV-126_20240515	Solid	05/15/24 12:13	05/21/24 08:55
40278540019	300-001-GSV-128.2_20240515	Solid	05/15/24 13:20	05/21/24 08:55
40278540020	300-001-GSV-128.2-DUP_20240515	Solid	05/15/24 13:20	05/21/24 08:55
40278540021	300-001-GSV-129.6_20240515	Solid	05/15/24 13:21	05/21/24 08:55
40278540022	300-001-GSV-134.8_20240515	Solid	05/15/24 13:55	05/21/24 08:55
40278540023	300-001-GSV-136.5_20240515	Solid	05/15/24 13:57	05/21/24 08:55
40278540024	300-001-GSV-139_20240515	Solid	05/15/24 14:57	05/21/24 08:55
40278540025	300-001-GSV-139.6_20240515	Solid	05/15/24 14:58	05/21/24 08:55
40278540026	300-001-GSV-140.5_20240515	Solid	05/15/24 14:59	05/21/24 08:55
40278540027	300-001-GSV-144.3_20240515	Solid	05/15/24 16:50	05/21/24 08:55
40278540028	300-001-GSV-146.05_20240515	Solid	05/15/24 16:51	05/21/24 08:55
40278540029	300-001-GSV-148_20240516	Solid	05/16/24 09:33	05/21/24 08:55
40278540030	300-001-GSV-149.7_20240516	Solid	05/16/24 10:35	05/21/24 08:55
40278540031	300-001-GSV-158.75_20240516	Solid	05/16/24 15:12	05/21/24 08:55
40278540032	300-001-GSV-162.4_20240516	Solid	05/16/24 15:38	05/21/24 08:55
40278540033	300-001-GSV-162.7_20240516	Solid	05/16/24 15:39	05/21/24 08:55
40278540034	300-001-GSV-165.35_20240516	Solid	05/16/24 15:40	05/21/24 08:55
40278540035	300-001-GSV-168.05_20240517	Solid	05/17/24 09:20	05/21/24 08:55
40278540036	300-001-GSV-170.3_20240517	Solid	05/17/24 09:21	05/21/24 08:55
40278540037	300-001-GSV-171.4_20240517	Solid	05/17/24 09:22	05/21/24 08:55

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40278540038	300-001-GSV-173.2_20240517	Solid	05/17/24 10:15	05/21/24 08:55
40278540039	300-001-GSV-173.2-DUP_20240517	Solid	05/17/24 10:15	05/21/24 08:55
40278540040	300-001-GSV-174.05_20240517	Solid	05/17/24 10:17	05/21/24 08:55
40278540041	300-001-GSV-181.5_20240517	Solid	05/17/24 11:15	05/21/24 08:55
40278540042	300-001-GSV-182.8_20240517	Solid	05/17/24 12:11	05/21/24 08:55
40278540043	300-001-GSV-184.9_20240517	Solid	05/17/24 12:12	05/21/24 08:55
40278540044	300-001-GSV-185.85_20240517	Solid	05/17/24 12:13	05/21/24 08:55
40278540045	300-001-GSV-189.45_20240517	Solid	05/17/24 14:20	05/21/24 08:55
40278540046	300-001-GSV-189.55_20240517	Solid	05/17/24 14:21	05/21/24 08:55
40278540047	300-001-GSV-189.9_20240517	Solid	05/17/24 14:22	05/21/24 08:55
40278540048	300-001-GSV-194.9_20240517	Solid	05/17/24 15:15	05/21/24 08:55
40278540049	300-001-GSV-195.5_20240517	Solid	05/17/24 15:16	05/21/24 08:55
40278540050	300-001-GSV-196.1_20240517	Solid	05/17/24 15:17	05/21/24 08:55
40278540051	300-001-GSV-197.55_20240517	Solid	05/17/24 16:02	05/21/24 08:55
40278540052	300-001-GSV-198.4_20240517	Solid	05/17/24 16:03	05/21/24 08:55
40278540053	300-001-GSV-201.4_20240517	Solid	05/17/24 16:04	05/21/24 08:55
40278540054	300-001-GSV-204.6_20240517	Solid	05/17/24 16:50	05/21/24 08:55
40278540055	300-001-GSV-205.9_20240517	Solid	05/17/24 16:51	05/21/24 08:55
40278540056	300-001-GSV-209.45_20240518	Solid	05/18/24 08:25	05/21/24 08:55
40278540057	300-001-GSV-210.65_20240518	Solid	05/18/24 08:26	05/21/24 08:55
40278540058	300-001-GSV-211.65_20240518	Solid	05/18/24 08:27	05/21/24 08:55
40278540059	300-001-GSV-212.8_20240518	Solid	05/18/24 08:50	05/21/24 08:55
40278540060	300-001-GSV-212.8-DUP_20240518	Solid	05/18/24 08:50	05/21/24 08:55
40278540061	300-001-GSV-214.85_20240518	Solid	05/18/24 08:51	05/21/24 08:55
40278540062	300-001-GSV-216.9_20240518	Solid	05/18/24 09:15	05/21/24 08:55
40278540063	300-001-GSV-220.35_20240518	Solid	05/18/24 09:51	05/21/24 08:55
40278540064	300-001-GSV-220.9_20240518	Solid	05/18/24 10:32	05/21/24 08:55
40278540065	300-001-GSV-224.4_20240518	Solid	05/18/24 11:05	05/21/24 08:55
40278540066	300-001-GSV-225.6_20240518	Solid	05/18/24 11:06	05/21/24 08:55
40278540067	300-001-GSV-226.55_20240518	Solid	05/18/24 11:07	05/21/24 08:55
40278540068	300-001-GSV-230.05_20240518	Solid	05/18/24 12:15	05/21/24 08:55
40278540069	300-001-GSV-230.75_20240518	Solid	05/18/24 12:16	05/21/24 08:55
40278540070	300-001-GSV-233.25_20240518	Solid	05/18/24 13:25	05/21/24 08:55
40278540071	300-001-GSV-234.44_20240518	Solid	05/18/24 13:26	05/21/24 08:55
40278540072	300-001-GSV-236.25_20240518	Solid	05/18/24 13:27	05/21/24 08:55
40278540073	300-001-GSV-238.1_20240518	Solid	05/18/24 14:32	05/21/24 08:55
40278540074	300-001-GSV-240_20240518	Solid	05/18/24 14:33	05/21/24 08:55

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40278540075	**300-001-GSV-240.3_20240518**	Solid	05/18/24 14:34	05/21/24 08:55
40278540076	**300-001-GSV-249.5_20240518**	Solid	05/18/24 16:55	05/21/24 08:55
40278540077	**300-001-GSV-250.3_20240518**	Solid	05/18/24 16:56	05/21/24 08:55
40278540078	**300-001-GSV-251.8_20240518**	Solid	05/18/24 16:57	05/21/24 08:55
40278540079	**300-001-GSV-251.8-DUP_20240518**	Solid	05/18/24 16:57	05/21/24 08:55
40278540080	**EB-06**	Water	05/14/24 10:49	05/21/24 08:55
40278540081	**EB-07**	Water	05/15/24 13:31	05/21/24 08:55
40278540082	**EB-08**	Water	05/17/24 09:44	05/21/24 08:55
40278540083	**EB-09**	Water	05/18/24 08:42	05/21/24 08:55
40278540084	**EB-10**	Water	05/18/24 17:13	05/21/24 08:55

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SAMPLE ANALYTE COUNT

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40278540001	300-001-GSV-76.6_20240514	EPA 8270E	TPO	11
40278540002	300-001-GSV-76.9_20240514	EPA 8270E	TPO	11
40278540003	300-001-GSV-77.55_20240514	EPA 8270E	TPO	11
40278540004	300-001-GSV-77.77_20240514	EPA 8270E	TPO	11
40278540005	300-001-GSV-96.1_20240514	EPA 8270E	TPO	11
40278540006	300-001-GSV-104.4_20240515	EPA 8270E	TPO	11
40278540007	300-001-GSV-106.5_20240515	EPA 8270E	TPO	11
40278540008	300-001-GSV-107.75_20240515	EPA 8270E	TPO	11
40278540009	300-001-GSV-108_20240515	EPA 8270E	TPO	11
40278540010	300-001-GSV-113.3_20240515	EPA 8270E	TPO	11
40278540011	300-001-GSV-112.9_20240515	EPA 8270E	TPO	11
40278540012	300-001-GSV-114.95_20240515	EPA 8270E	TPO	11
40278540013	300-001-GSV-117.4_20240515	EPA 8270E	TPO	11
40278540014	300-001-GSV-119.3_20240515	EPA 8270E	TPO	11
40278540015	300-001-GSV-120.55_20240515	EPA 8270E	TPO	11
40278540016	300-001-GSV-124_20240515	EPA 8270E	TPO	11
40278540017	300-001-GSV-124.7_20240515	EPA 8270E	TPO	11
40278540018	300-001-GSV-126_20240515	EPA 8270E	TPO	11
40278540019	300-001-GSV-128.2_20240515	EPA 8270E	TPO	11
40278540020	300-001-GSV-128.2-DUP_20240515	EPA 8270E	TPO	11
40278540021	300-001-GSV-129.6_20240515	EPA 8270E	TPO	11
40278540022	300-001-GSV-134.8_20240515	EPA 8270E	TPO	11
40278540023	300-001-GSV-136.5_20240515	EPA 8270E	TPO	11
40278540024	300-001-GSV-139_20240515	EPA 8270E	TPO	11
40278540025	300-001-GSV-139.6_20240515	EPA 8270E	TPO	11
40278540026	300-001-GSV-140.5_20240515	EPA 8270E	TPO	11
40278540027	300-001-GSV-144.3_20240515	EPA 8270E	TPO	11
40278540028	300-001-GSV-146.05_20240515	EPA 8270E	TPO	11
40278540029	300-001-GSV-148_20240516	EPA 8270E	TPO	11
40278540030	300-001-GSV-149.7_20240516	EPA 8270E	TPO	11
40278540031	300-001-GSV-158.75_20240516	EPA 8270E	TPO	11
40278540032	300-001-GSV-162.4_20240516	EPA 8270E	TPO	11
40278540033	300-001-GSV-162.7_20240516	EPA 8270E	TPO	11
40278540034	300-001-GSV-165.35_20240516	EPA 8270E	TPO	11
40278540035	300-001-GSV-168.05_20240517	EPA 8270E	TPO	11
40278540036	300-001-GSV-170.3_20240517	EPA 8270E	RJN	10
40278540037	300-001-GSV-171.4_20240517	EPA 8270E	RJN	10

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40278540038	300-001-GSV-173.2_20240517	EPA 8270E	TPO	11
40278540039	300-001-GSV-173.2-DUP_20240517	EPA 8270E	RJN	10
40278540040	300-001-GSV-174.05_20240517	EPA 8270E	RJN	10
40278540041	300-001-GSV-181.5_20240517	EPA 8270E	RJN	10
40278540042	300-001-GSV-182.8_20240517	EPA 8270E	RJN	10
40278540043	300-001-GSV-184.9_20240517	EPA 8270E	RJN	10
40278540044	300-001-GSV-185.85_20240517	EPA 8270E	RJN	10
40278540045	300-001-GSV-189.45_20240517	EPA 8270E	RJN	10
40278540046	300-001-GSV-189.55_20240517	EPA 8270E	RJN	10
40278540047	300-001-GSV-189.9_20240517	EPA 8270E	RJN	10
40278540048	300-001-GSV-194.9_20240517	EPA 8270E	RJN	10
40278540049	300-001-GSV-195.5_20240517	EPA 8270E	RJN	10
40278540050	300-001-GSV-196.1_20240517	EPA 8270E	RJN	10
40278540051	300-001-GSV-197.55_20240517	EPA 8270E	RJN	10
40278540052	300-001-GSV-198.4_20240517	EPA 8270E	RJN	10
40278540053	300-001-GSV-201.4_20240517	EPA 8270E	RJN	10
40278540054	300-001-GSV-204.6_20240517	EPA 8270E	RJN	10
40278540055	300-001-GSV-205.9_20240517	EPA 8270E	RJN	10
40278540056	300-001-GSV-209.45_20240518	EPA 8270E	RJN	10
40278540057	300-001-GSV-210.65_20240518	EPA 8270E	RJN	10
40278540058	300-001-GSV-211.65_20240518	EPA 8270E	RJN	10
40278540059	300-001-GSV-212.8_20240518	EPA 8270E	TPO	11
40278540060	300-001-GSV-212.8-DUP_20240518	EPA 8270E	RJN	10
40278540061	300-001-GSV-214.85_20240518	EPA 8270E	RJN	10
40278540062	300-001-GSV-216.9_20240518	EPA 8270E	RJN	10
40278540063	300-001-GSV-220.35_20240518	EPA 8270E	RJN	10
40278540064	300-001-GSV-220.9_20240518	EPA 8270E	RJN	10
40278540065	300-001-GSV-224.4_20240518	EPA 8270E	RJN	10
40278540066	300-001-GSV-225.6_20240518	EPA 8270E	RJN	10
40278540067	300-001-GSV-226.55_20240518	EPA 8270E	RJN	10
40278540068	300-001-GSV-230.05_20240518	EPA 8270E	RJN	10
40278540069	300-001-GSV-230.75_20240518	EPA 8270E	TPO	11
40278540070	300-001-GSV-233.25_20240518	EPA 8270E	TPO	11
40278540071	300-001-GSV-234.44_20240518	EPA 8270E	TPO	11
40278540072	300-001-GSV-236.25_20240518	EPA 8270E	TPO	11
40278540073	300-001-GSV-238.1_20240518	EPA 8270E	TPO	11
40278540074	300-001-GSV-240_20240518	EPA 8270E	TPO	11

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40278540075	**300-001-GSV-240.3_20240518**	EPA 8270E	TPO	11
40278540076	**300-001-GSV-249.5_20240518**	EPA 8270E	TPO	11
40278540077	**300-001-GSV-250.3_20240518**	EPA 8270E	TPO	11
40278540078	**300-001-GSV-251.8_20240518**	EPA 8270E	TPO	11
40278540079	**300-001-GSV-251.8-DUP_20240518**	EPA 8270E	TPO	11
40278540080	**EB-06**	EPA 8270E	RJN	10
40278540081	**EB-07**	EPA 8270E	RJN	10
40278540082	**EB-08**	EPA 8270E	RJN	10
40278540083	**EB-09**	EPA 8270E	RJN	10
40278540084	**EB-10**	EPA 8270E	RJN	10

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Method: **EPA 8270E**
Description: 8270E MSSV FULL LIST MICROWAVE
Client: Sanborn, Head & Associates
Date: June 05, 2024

General Information:
79 samples were analyzed for EPA 8270E by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 475338

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- 300-001-GSV-107.75_20240515 (Lab ID: 40278540008)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-108_20240515 (Lab ID: 40278540009)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-112.9_20240515 (Lab ID: 40278540011)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-113.3_20240515 (Lab ID: 40278540010)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-114.95_20240515 (Lab ID: 40278540012)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-117.4_20240515 (Lab ID: 40278540013)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-119.3_20240515 (Lab ID: 40278540014)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-120.55_20240515 (Lab ID: 40278540015)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-124.7_20240515 (Lab ID: 40278540017)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-124_20240515 (Lab ID: 40278540016)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-126_20240515 (Lab ID: 40278540018)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-128.2-DUP_20240515 (Lab ID: 40278540020)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-129.6_20240515 (Lab ID: 40278540021)
  - 2,4,6-Tribromophenol (S)

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Method: **EPA 8270E**
Description: 8270E MSSV FULL LIST MICROWAVE
Client: Sanborn, Head & Associates
Date: June 05, 2024

QC Batch: 475338

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- 300-001-GSV-134.8_20240515 (Lab ID: 40278540022)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-136.5_20240515 (Lab ID: 40278540023)
  - 2,4,6-Tribromophenol (S)

QC Batch: 475340

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- 300-001-GSV-140.5_20240515 (Lab ID: 40278540026)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-144.3_20240515 (Lab ID: 40278540027)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-146.05_20240515 (Lab ID: 40278540028)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-148_20240516 (Lab ID: 40278540029)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-149.7_20240516 (Lab ID: 40278540030)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-158.75_20240516 (Lab ID: 40278540031)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-162.4_20240516 (Lab ID: 40278540032)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-162.7_20240516 (Lab ID: 40278540033)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-165.35_20240516 (Lab ID: 40278540034)
  - 2,4,6-Tribromophenol (S)
- MS (Lab ID: 2722897)
  - 2,4,6-Tribromophenol (S)
- MSD (Lab ID: 2722898)
  - 2,4,6-Tribromophenol (S)

QC Batch: 475611

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- 300-001-GSV-212.8_20240518 (Lab ID: 40278540059)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-230.75_20240518 (Lab ID: 40278540069)
  - 2,4,6-Tribromophenol (S)
- 300-001-GSV-233.25_20240518 (Lab ID: 40278540070)
  - 2,4,6-Tribromophenol (S)
- BLANK (Lab ID: 2724020)
  - 2,4,6-Tribromophenol (S)
- LCS (Lab ID: 2724021)
  - 2,4,6-Tribromophenol (S)
- MS (Lab ID: 2724022)
  - 2,4,6-Tribromophenol (S)

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Method: **EPA 8270E**
Description: 8270E MSSV FULL LIST MICROWAVE
Client: Sanborn, Head & Associates
Date: June 05, 2024

QC Batch: 475611

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
- MSD (Lab ID: 2724023)
  - 2,4,6-Tribromophenol (S)

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 475483

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40278671004

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 2723303)
  - N-Nitrodimethylamine
- MSD (Lab ID: 2723304)
  - N-Nitrodimethylamine

QC Batch: 475755

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40278540078

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 2724600)
  - N-Nitrodimethylamine
- MSD (Lab ID: 2724601)
  - N-Nitrodimethylamine

Additional Comments:

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Method: **EPA 8270E**
Description: 8270E MSSV Low Volume
Client: Sanborn, Head & Associates
Date: June 05, 2024

General Information:
5 samples were analyzed for EPA 8270E by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H3: Sample was received or analysis requested beyond the recognized method holding time.
- EB-06 (Lab ID: 40278540080)

Sample Preparation:
The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 475007

L1: Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high.
- LCS (Lab ID: 2720610)
  - N-Nitrosodimethylamine
- LCSD (Lab ID: 2720611)
  - N-Nitrosodimethylamine

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 475007

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

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PROJECT NARRATIVE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Method: **EPA 8270E**
Description: 8270E MSSV Low Volume
Client: Sanborn, Head & Associates
Date: June 05, 2024

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-76.6_20240514 **Lab ID: 40278540001** Collected: 05/14/24 13:05 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/23/24 12:58	05/24/24 16:53	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/23/24 12:58	05/24/24 16:53	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/23/24 12:58	05/24/24 16:53	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/23/24 12:58	05/24/24 16:53	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/23/24 12:58	05/24/24 16:53	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	77	%	16-120		1	05/23/24 12:58	05/24/24 16:53	4165-60-0	
2-Fluorobiphenyl (S)	89	%	19-120		1	05/23/24 12:58	05/24/24 16:53	321-60-8	
Terphenyl-d14 (S)	98	%	25-127		1	05/23/24 12:58	05/24/24 16:53	1718-51-0	
Phenol-d6 (S)	72	%	10-120		1	05/23/24 12:58	05/24/24 16:53	13127-88-3	
2-Fluorophenol (S)	68	%	10-120		1	05/23/24 12:58	05/24/24 16:53	367-12-4	
2,4,6-Tribromophenol (S)	107	%	10-142		1	05/23/24 12:58	05/24/24 16:53	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-76.9_20240514 **Lab ID: 40278540002** Collected: 05/14/24 13:05 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/23/24 12:58	05/24/24 17:14	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/23/24 12:58	05/24/24 17:14	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/23/24 12:58	05/24/24 17:14	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/23/24 12:58	05/24/24 17:14	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/23/24 12:58	05/24/24 17:14	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	79	%	16-120		1	05/23/24 12:58	05/24/24 17:14	4165-60-0	
2-Fluorobiphenyl (S)	87	%	19-120		1	05/23/24 12:58	05/24/24 17:14	321-60-8	
Terphenyl-d14 (S)	86	%	25-127		1	05/23/24 12:58	05/24/24 17:14	1718-51-0	
Phenol-d6 (S)	72	%	10-120		1	05/23/24 12:58	05/24/24 17:14	13127-88-3	
2-Fluorophenol (S)	71	%	10-120		1	05/23/24 12:58	05/24/24 17:14	367-12-4	
2,4,6-Tribromophenol (S)	91	%	10-142		1	05/23/24 12:58	05/24/24 17:14	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-77.55_20240514 **Lab ID: 40278540003** Collected: 05/14/24 13:52 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/23/24 12:58	05/24/24 17:35	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/23/24 12:58	05/24/24 17:35	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/23/24 12:58	05/24/24 17:35	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/23/24 12:58	05/24/24 17:35	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/23/24 12:58	05/24/24 17:35	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	93	%	16-120		1	05/23/24 12:58	05/24/24 17:35	4165-60-0	
2-Fluorobiphenyl (S)	101	%	19-120		1	05/23/24 12:58	05/24/24 17:35	321-60-8	
Terphenyl-d14 (S)	105	%	25-127		1	05/23/24 12:58	05/24/24 17:35	1718-51-0	
Phenol-d6 (S)	85	%	10-120		1	05/23/24 12:58	05/24/24 17:35	13127-88-3	
2-Fluorophenol (S)	83	%	10-120		1	05/23/24 12:58	05/24/24 17:35	367-12-4	
2,4,6-Tribromophenol (S)	104	%	10-142		1	05/23/24 12:58	05/24/24 17:35	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-77.77_20240514 **Lab ID: 40278540004** Collected: 05/14/24 13:52 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/23/24 12:58	05/24/24 17:57	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/23/24 12:58	05/24/24 17:57	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/23/24 12:58	05/24/24 17:57	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/23/24 12:58	05/24/24 17:57	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	05/23/24 12:58	05/24/24 17:57	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	94	%	16-120		1	05/23/24 12:58	05/24/24 17:57	4165-60-0	
2-Fluorobiphenyl (S)	102	%	19-120		1	05/23/24 12:58	05/24/24 17:57	321-60-8	
Terphenyl-d14 (S)	104	%	25-127		1	05/23/24 12:58	05/24/24 17:57	1718-51-0	
Phenol-d6 (S)	89	%	10-120		1	05/23/24 12:58	05/24/24 17:57	13127-88-3	
2-Fluorophenol (S)	88	%	10-120		1	05/23/24 12:58	05/24/24 17:57	367-12-4	
2,4,6-Tribromophenol (S)	115	%	10-142		1	05/23/24 12:58	05/24/24 17:57	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-96.1_20240514 **Lab ID: 40278540005** Collected: 05/14/24 16:30 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/23/24 12:58	05/24/24 18:18	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/23/24 12:58	05/24/24 18:18	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/23/24 12:58	05/24/24 18:18	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/23/24 12:58	05/24/24 18:18	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/23/24 12:58	05/24/24 18:18	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	93	%	16-120		1	05/23/24 12:58	05/24/24 18:18	4165-60-0	
2-Fluorobiphenyl (S)	106	%	19-120		1	05/23/24 12:58	05/24/24 18:18	321-60-8	
Terphenyl-d14 (S)	112	%	25-127		1	05/23/24 12:58	05/24/24 18:18	1718-51-0	
Phenol-d6 (S)	90	%	10-120		1	05/23/24 12:58	05/24/24 18:18	13127-88-3	
2-Fluorophenol (S)	88	%	10-120		1	05/23/24 12:58	05/24/24 18:18	367-12-4	
2,4,6-Tribromophenol (S)	120	%	10-142		1	05/23/24 12:58	05/24/24 18:18	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-104.4_20240515 **Lab ID: 40278540006** Collected: 05/15/24 09:53 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/28/24 12:16	05/29/24 20:16	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 12:16	05/29/24 20:16	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/28/24 12:16	05/29/24 20:16	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 12:16	05/29/24 20:16	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/28/24 12:16	05/29/24 20:16	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	81	%	16-120		1	05/28/24 12:16	05/29/24 20:16	4165-60-0	
2-Fluorobiphenyl (S)	89	%	19-120		1	05/28/24 12:16	05/29/24 20:16	321-60-8	
Terphenyl-d14 (S)	87	%	25-127		1	05/28/24 12:16	05/29/24 20:16	1718-51-0	
Phenol-d6 (S)	77	%	10-120		1	05/28/24 12:16	05/29/24 20:16	13127-88-3	
2-Fluorophenol (S)	76	%	10-120		1	05/28/24 12:16	05/29/24 20:16	367-12-4	
2,4,6-Tribromophenol (S)	94	%	10-142		1	05/28/24 12:16	05/29/24 20:16	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-106.5_20240515 **Lab ID: 40278540007** Collected: 05/15/24 09:55 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/28/24 12:16	05/29/24 20:37	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 12:16	05/29/24 20:37	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/28/24 12:16	05/29/24 20:37	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 12:16	05/29/24 20:37	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/28/24 12:16	05/29/24 20:37	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	95	%	16-120		1	05/28/24 12:16	05/29/24 20:37	4165-60-0	
2-Fluorobiphenyl (S)	110	%	19-120		1	05/28/24 12:16	05/29/24 20:37	321-60-8	
Terphenyl-d14 (S)	112	%	25-127		1	05/28/24 12:16	05/29/24 20:37	1718-51-0	
Phenol-d6 (S)	88	%	10-120		1	05/28/24 12:16	05/29/24 20:37	13127-88-3	
2-Fluorophenol (S)	86	%	10-120		1	05/28/24 12:16	05/29/24 20:37	367-12-4	
2,4,6-Tribromophenol (S)	125	%	10-142		1	05/28/24 12:16	05/29/24 20:37	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-107.75_20240515 **Lab ID: 40278540008** Collected: 05/15/24 10:30 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/28/24 12:16	05/30/24 20:35	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/28/24 12:16	05/30/24 20:35	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/28/24 12:16	05/30/24 20:35	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/28/24 12:16	05/30/24 20:35	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	05/28/24 12:16	05/30/24 20:35	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	88	%	16-120		1	05/28/24 12:16	05/30/24 20:35	4165-60-0	
2-Fluorobiphenyl (S)	96	%	19-120		1	05/28/24 12:16	05/30/24 20:35	321-60-8	
Terphenyl-d14 (S)	103	%	25-127		1	05/28/24 12:16	05/30/24 20:35	1718-51-0	
Phenol-d6 (S)	81	%	10-120		1	05/28/24 12:16	05/30/24 20:35	13127-88-3	
2-Fluorophenol (S)	83	%	10-120		1	05/28/24 12:16	05/30/24 20:35	367-12-4	
2,4,6-Tribromophenol (S)	109	%	10-142		1	05/28/24 12:16	05/30/24 20:35	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-108_20240515 **Lab ID: 40278540009** Collected: 05/15/24 10:32 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/28/24 12:16	05/30/24 20:56	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 12:16	05/30/24 20:56	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/28/24 12:16	05/30/24 20:56	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 12:16	05/30/24 20:56	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/28/24 12:16	05/30/24 20:56	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	89	%	16-120		1	05/28/24 12:16	05/30/24 20:56	4165-60-0	
2-Fluorobiphenyl (S)	100	%	19-120		1	05/28/24 12:16	05/30/24 20:56	321-60-8	
Terphenyl-d14 (S)	108	%	25-127		1	05/28/24 12:16	05/30/24 20:56	1718-51-0	
Phenol-d6 (S)	85	%	10-120		1	05/28/24 12:16	05/30/24 20:56	13127-88-3	
2-Fluorophenol (S)	83	%	10-120		1	05/28/24 12:16	05/30/24 20:56	367-12-4	
2,4,6-Tribromophenol (S)	114	%	10-142		1	05/28/24 12:16	05/30/24 20:56	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-113.3_20240515 **Lab ID: 40278540010** Collected: 05/15/24 10:34 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 12:16	05/30/24 21:17	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 12:16	05/30/24 21:17	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/28/24 12:16	05/30/24 21:17	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 12:16	05/30/24 21:17	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 12:16	05/30/24 21:17	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	91	%	16-120		1	05/28/24 12:16	05/30/24 21:17	4165-60-0	
2-Fluorobiphenyl (S)	102	%	19-120		1	05/28/24 12:16	05/30/24 21:17	321-60-8	
Terphenyl-d14 (S)	112	%	25-127		1	05/28/24 12:16	05/30/24 21:17	1718-51-0	
Phenol-d6 (S)	86	%	10-120		1	05/28/24 12:16	05/30/24 21:17	13127-88-3	
2-Fluorophenol (S)	81	%	10-120		1	05/28/24 12:16	05/30/24 21:17	367-12-4	
2,4,6-Tribromophenol (S)	120	%	10-142		1	05/28/24 12:16	05/30/24 21:17	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-112.9_20240515 **Lab ID: 40278540011** Collected: 05/15/24 11:03 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/28/24 12:16	05/30/24 21:38	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 12:16	05/30/24 21:38	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/28/24 12:16	05/30/24 21:38	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 12:16	05/30/24 21:38	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/28/24 12:16	05/30/24 21:38	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	73	%	16-120		1	05/28/24 12:16	05/30/24 21:38	4165-60-0	
2-Fluorobiphenyl (S)	80	%	19-120		1	05/28/24 12:16	05/30/24 21:38	321-60-8	
Terphenyl-d14 (S)	82	%	25-127		1	05/28/24 12:16	05/30/24 21:38	1718-51-0	
Phenol-d6 (S)	69	%	10-120		1	05/28/24 12:16	05/30/24 21:38	13127-88-3	
2-Fluorophenol (S)	69	%	10-120		1	05/28/24 12:16	05/30/24 21:38	367-12-4	
2,4,6-Tribromophenol (S)	86	%	10-142		1	05/28/24 12:16	05/30/24 21:38	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-114.95_20240515 **Lab ID: 40278540012** Collected: 05/15/24 11:05 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 12:16	05/30/24 21:59	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/28/24 12:16	05/30/24 21:59	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/28/24 12:16	05/30/24 21:59	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/28/24 12:16	05/30/24 21:59	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 12:16	05/30/24 21:59	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	82	%	16-120		1	05/28/24 12:16	05/30/24 21:59	4165-60-0	
2-Fluorobiphenyl (S)	89	%	19-120		1	05/28/24 12:16	05/30/24 21:59	321-60-8	
Terphenyl-d14 (S)	93	%	25-127		1	05/28/24 12:16	05/30/24 21:59	1718-51-0	
Phenol-d6 (S)	73	%	10-120		1	05/28/24 12:16	05/30/24 21:59	13127-88-3	
2-Fluorophenol (S)	73	%	10-120		1	05/28/24 12:16	05/30/24 21:59	367-12-4	
2,4,6-Tribromophenol (S)	98	%	10-142		1	05/28/24 12:16	05/30/24 21:59	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-117.4_20240515 **Lab ID: 40278540013** Collected: 05/15/24 11:45 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/28/24 12:16	05/30/24 22:20	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/28/24 12:16	05/30/24 22:20	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/28/24 12:16	05/30/24 22:20	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/28/24 12:16	05/30/24 22:20	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	05/28/24 12:16	05/30/24 22:20	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	87	%	16-120		1	05/28/24 12:16	05/30/24 22:20	4165-60-0	
2-Fluorobiphenyl (S)	96	%	19-120		1	05/28/24 12:16	05/30/24 22:20	321-60-8	
Terphenyl-d14 (S)	108	%	25-127		1	05/28/24 12:16	05/30/24 22:20	1718-51-0	
Phenol-d6 (S)	80	%	10-120		1	05/28/24 12:16	05/30/24 22:20	13127-88-3	
2-Fluorophenol (S)	78	%	10-120		1	05/28/24 12:16	05/30/24 22:20	367-12-4	
2,4,6-Tribromophenol (S)	111	%	10-142		1	05/28/24 12:16	05/30/24 22:20	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-119.3_20240515 **Lab ID: 40278540014** Collected: 05/15/24 11:46 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 12:16	05/30/24 22:41	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 12:16	05/30/24 22:41	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/28/24 12:16	05/30/24 22:41	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 12:16	05/30/24 22:41	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 12:16	05/30/24 22:41	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	86	%	16-120		1	05/28/24 12:16	05/30/24 22:41	4165-60-0	
2-Fluorobiphenyl (S)	92	%	19-120		1	05/28/24 12:16	05/30/24 22:41	321-60-8	
Terphenyl-d14 (S)	94	%	25-127		1	05/28/24 12:16	05/30/24 22:41	1718-51-0	
Phenol-d6 (S)	79	%	10-120		1	05/28/24 12:16	05/30/24 22:41	13127-88-3	
2-Fluorophenol (S)	79	%	10-120		1	05/28/24 12:16	05/30/24 22:41	367-12-4	
2,4,6-Tribromophenol (S)	102	%	10-142		1	05/28/24 12:16	05/30/24 22:41	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-120.55_20240515 **Lab ID: 40278540015** Collected: 05/15/24 11:47 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/28/24 12:16	05/30/24 23:02	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/28/24 12:16	05/30/24 23:02	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/28/24 12:16	05/30/24 23:02	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/28/24 12:16	05/30/24 23:02	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	05/28/24 12:16	05/30/24 23:02	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	94	%	16-120		1	05/28/24 12:16	05/30/24 23:02	4165-60-0	
2-Fluorobiphenyl (S)	104	%	19-120		1	05/28/24 12:16	05/30/24 23:02	321-60-8	
Terphenyl-d14 (S)	113	%	25-127		1	05/28/24 12:16	05/30/24 23:02	1718-51-0	
Phenol-d6 (S)	90	%	10-120		1	05/28/24 12:16	05/30/24 23:02	13127-88-3	
2-Fluorophenol (S)	89	%	10-120		1	05/28/24 12:16	05/30/24 23:02	367-12-4	
2,4,6-Tribromophenol (S)	120	%	10-142		1	05/28/24 12:16	05/30/24 23:02	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-124_20240515 **Lab ID: 40278540016** Collected: 05/15/24 12:11 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 12:16	05/30/24 23:23	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 12:16	05/30/24 23:23	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/28/24 12:16	05/30/24 23:23	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 12:16	05/30/24 23:23	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 12:16	05/30/24 23:23	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	88	%	16-120		1	05/28/24 12:16	05/30/24 23:23	4165-60-0	
2-Fluorobiphenyl (S)	95	%	19-120		1	05/28/24 12:16	05/30/24 23:23	321-60-8	
Terphenyl-d14 (S)	98	%	25-127		1	05/28/24 12:16	05/30/24 23:23	1718-51-0	
Phenol-d6 (S)	72	%	10-120		1	05/28/24 12:16	05/30/24 23:23	13127-88-3	
2-Fluorophenol (S)	71	%	10-120		1	05/28/24 12:16	05/30/24 23:23	367-12-4	
2,4,6-Tribromophenol (S)	88	%	10-142		1	05/28/24 12:16	05/30/24 23:23	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-124.7_20240515 **Lab ID: 40278540017** Collected: 05/15/24 12:12 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/28/24 12:16	05/30/24 23:44	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 12:16	05/30/24 23:44	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/28/24 12:16	05/30/24 23:44	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 12:16	05/30/24 23:44	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/28/24 12:16	05/30/24 23:44	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	94	%	16-120		1	05/28/24 12:16	05/30/24 23:44	4165-60-0	
2-Fluorobiphenyl (S)	105	%	19-120		1	05/28/24 12:16	05/30/24 23:44	321-60-8	
Terphenyl-d14 (S)	106	%	25-127		1	05/28/24 12:16	05/30/24 23:44	1718-51-0	
Phenol-d6 (S)	89	%	10-120		1	05/28/24 12:16	05/30/24 23:44	13127-88-3	
2-Fluorophenol (S)	86	%	10-120		1	05/28/24 12:16	05/30/24 23:44	367-12-4	
2,4,6-Tribromophenol (S)	117	%	10-142		1	05/28/24 12:16	05/30/24 23:44	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-126_20240515 **Lab ID: 40278540018** Collected: 05/15/24 12:13 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 12:16	05/31/24 00:05	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 12:16	05/31/24 00:05	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/28/24 12:16	05/31/24 00:05	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 12:16	05/31/24 00:05	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 12:16	05/31/24 00:05	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	92	%	16-120		1	05/28/24 12:16	05/31/24 00:05	4165-60-0	
2-Fluorobiphenyl (S)	104	%	19-120		1	05/28/24 12:16	05/31/24 00:05	321-60-8	
Terphenyl-d14 (S)	110	%	25-127		1	05/28/24 12:16	05/31/24 00:05	1718-51-0	
Phenol-d6 (S)	89	%	10-120		1	05/28/24 12:16	05/31/24 00:05	13127-88-3	
2-Fluorophenol (S)	87	%	10-120		1	05/28/24 12:16	05/31/24 00:05	367-12-4	
2,4,6-Tribromophenol (S)	119	%	10-142		1	05/28/24 12:16	05/31/24 00:05	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-128.2_20240515 **Lab ID: 40278540019** Collected: 05/15/24 13:20 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/28/24 12:16	05/29/24 19:13	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/28/24 12:16	05/29/24 19:13	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/28/24 12:16	05/29/24 19:13	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/28/24 12:16	05/29/24 19:13	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 12:16	05/29/24 19:13	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	88	%	16-120		1	05/28/24 12:16	05/29/24 19:13	4165-60-0	
2-Fluorobiphenyl (S)	98	%	19-120		1	05/28/24 12:16	05/29/24 19:13	321-60-8	
Terphenyl-d14 (S)	99	%	25-127		1	05/28/24 12:16	05/29/24 19:13	1718-51-0	
Phenol-d6 (S)	78	%	10-120		1	05/28/24 12:16	05/29/24 19:13	13127-88-3	
2-Fluorophenol (S)	76	%	10-120		1	05/28/24 12:16	05/29/24 19:13	367-12-4	
2,4,6-Tribromophenol (S)	103	%	10-142		1	05/28/24 12:16	05/29/24 19:13	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-128.2-DUP_20240515 **Lab ID: 40278540020** Collected: 05/15/24 13:20 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 12:16	05/31/24 00:47	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 12:16	05/31/24 00:47	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/28/24 12:16	05/31/24 00:47	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 12:16	05/31/24 00:47	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 12:16	05/31/24 00:47	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	85	%	16-120		1	05/28/24 12:16	05/31/24 00:47	4165-60-0	
2-Fluorobiphenyl (S)	92	%	19-120		1	05/28/24 12:16	05/31/24 00:47	321-60-8	
Terphenyl-d14 (S)	95	%	25-127		1	05/28/24 12:16	05/31/24 00:47	1718-51-0	
Phenol-d6 (S)	76	%	10-120		1	05/28/24 12:16	05/31/24 00:47	13127-88-3	
2-Fluorophenol (S)	76	%	10-120		1	05/28/24 12:16	05/31/24 00:47	367-12-4	
2,4,6-Tribromophenol (S)	96	%	10-142		1	05/28/24 12:16	05/31/24 00:47	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-129.6_20240515 **Lab ID: 40278540021** Collected: 05/15/24 13:21 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 12:16	05/31/24 01:07	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/28/24 12:16	05/31/24 01:07	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/28/24 12:16	05/31/24 01:07	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/28/24 12:16	05/31/24 01:07	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 12:16	05/31/24 01:07	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	96	%	16-120		1	05/28/24 12:16	05/31/24 01:07	4165-60-0	
2-Fluorobiphenyl (S)	109	%	19-120		1	05/28/24 12:16	05/31/24 01:07	321-60-8	
Terphenyl-d14 (S)	112	%	25-127		1	05/28/24 12:16	05/31/24 01:07	1718-51-0	
Phenol-d6 (S)	90	%	10-120		1	05/28/24 12:16	05/31/24 01:07	13127-88-3	
2-Fluorophenol (S)	90	%	10-120		1	05/28/24 12:16	05/31/24 01:07	367-12-4	
2,4,6-Tribromophenol (S)	118	%	10-142		1	05/28/24 12:16	05/31/24 01:07	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-134.8_20240515 **Lab ID: 40278540022** Collected: 05/15/24 13:55 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/28/24 12:16	05/31/24 01:28	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/28/24 12:16	05/31/24 01:28	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/28/24 12:16	05/31/24 01:28	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/28/24 12:16	05/31/24 01:28	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	05/28/24 12:16	05/31/24 01:28	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	87	%	16-120		1	05/28/24 12:16	05/31/24 01:28	4165-60-0	
2-Fluorobiphenyl (S)	100	%	19-120		1	05/28/24 12:16	05/31/24 01:28	321-60-8	
Terphenyl-d14 (S)	109	%	25-127		1	05/28/24 12:16	05/31/24 01:28	1718-51-0	
Phenol-d6 (S)	83	%	10-120		1	05/28/24 12:16	05/31/24 01:28	13127-88-3	
2-Fluorophenol (S)	82	%	10-120		1	05/28/24 12:16	05/31/24 01:28	367-12-4	
2,4,6-Tribromophenol (S)	113	%	10-142		1	05/28/24 12:16	05/31/24 01:28	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-136.5_20240515 **Lab ID: 40278540023** Collected: 05/15/24 13:57 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/28/24 12:16	05/31/24 00:26	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/28/24 12:16	05/31/24 00:26	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/28/24 12:16	05/31/24 00:26	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/28/24 12:16	05/31/24 00:26	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 12:16	05/31/24 00:26	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	85	%	16-120		1	05/28/24 12:16	05/31/24 00:26	4165-60-0	
2-Fluorobiphenyl (S)	92	%	19-120		1	05/28/24 12:16	05/31/24 00:26	321-60-8	
Terphenyl-d14 (S)	93	%	25-127		1	05/28/24 12:16	05/31/24 00:26	1718-51-0	
Phenol-d6 (S)	72	%	10-120		1	05/28/24 12:16	05/31/24 00:26	13127-88-3	
2-Fluorophenol (S)	73	%	10-120		1	05/28/24 12:16	05/31/24 00:26	367-12-4	
2,4,6-Tribromophenol (S)	90	%	10-142		1	05/28/24 12:16	05/31/24 00:26	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-139_20240515 **Lab ID: 40278540024** Collected: 05/15/24 14:57 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/28/24 12:16	05/29/24 19:34	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 12:16	05/29/24 19:34	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/28/24 12:16	05/29/24 19:34	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 12:16	05/29/24 19:34	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/28/24 12:16	05/29/24 19:34	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	66	%	16-120		1	05/28/24 12:16	05/29/24 19:34	4165-60-0	
2-Fluorobiphenyl (S)	78	%	19-120		1	05/28/24 12:16	05/29/24 19:34	321-60-8	
Terphenyl-d14 (S)	73	%	25-127		1	05/28/24 12:16	05/29/24 19:34	1718-51-0	
Phenol-d6 (S)	46	%	10-120		1	05/28/24 12:16	05/29/24 19:34	13127-88-3	
2-Fluorophenol (S)	45	%	10-120		1	05/28/24 12:16	05/29/24 19:34	367-12-4	
2,4,6-Tribromophenol (S)	53	%	10-142		1	05/28/24 12:16	05/29/24 19:34	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-139.6_20240515 **Lab ID: 40278540025** Collected: 05/15/24 14:58 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/28/24 12:16	05/29/24 19:55	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 12:16	05/29/24 19:55	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/28/24 12:16	05/29/24 19:55	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 12:16	05/29/24 19:55	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/28/24 12:16	05/29/24 19:55	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	85	%	16-120		1	05/28/24 12:16	05/29/24 19:55	4165-60-0	
2-Fluorobiphenyl (S)	96	%	19-120		1	05/28/24 12:16	05/29/24 19:55	321-60-8	
Terphenyl-d14 (S)	95	%	25-127		1	05/28/24 12:16	05/29/24 19:55	1718-51-0	
Phenol-d6 (S)	82	%	10-120		1	05/28/24 12:16	05/29/24 19:55	13127-88-3	
2-Fluorophenol (S)	82	%	10-120		1	05/28/24 12:16	05/29/24 19:55	367-12-4	
2,4,6-Tribromophenol (S)	108	%	10-142		1	05/28/24 12:16	05/29/24 19:55	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-140.5_20240515 **Lab ID: 40278540026** Collected: 05/15/24 14:59 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/28/24 13:45	05/31/24 01:49	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 13:45	05/31/24 01:49	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/28/24 13:45	05/31/24 01:49	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 13:45	05/31/24 01:49	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/28/24 13:45	05/31/24 01:49	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	85	%	16-120		1	05/28/24 13:45	05/31/24 01:49	4165-60-0	
2-Fluorobiphenyl (S)	92	%	19-120		1	05/28/24 13:45	05/31/24 01:49	321-60-8	
Terphenyl-d14 (S)	98	%	25-127		1	05/28/24 13:45	05/31/24 01:49	1718-51-0	
Phenol-d6 (S)	77	%	10-120		1	05/28/24 13:45	05/31/24 01:49	13127-88-3	
2-Fluorophenol (S)	78	%	10-120		1	05/28/24 13:45	05/31/24 01:49	367-12-4	
2,4,6-Tribromophenol (S)	100	%	10-142		1	05/28/24 13:45	05/31/24 01:49	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-144.3_20240515 **Lab ID: 40278540027** Collected: 05/15/24 16:50 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 13:45	05/31/24 02:10	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 13:45	05/31/24 02:10	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/28/24 13:45	05/31/24 02:10	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 13:45	05/31/24 02:10	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 13:45	05/31/24 02:10	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	104	%	16-120		1	05/28/24 13:45	05/31/24 02:10	4165-60-0	
2-Fluorobiphenyl (S)	113	%	19-120		1	05/28/24 13:45	05/31/24 02:10	321-60-8	
Terphenyl-d14 (S)	118	%	25-127		1	05/28/24 13:45	05/31/24 02:10	1718-51-0	
Phenol-d6 (S)	96	%	10-120		1	05/28/24 13:45	05/31/24 02:10	13127-88-3	
2-Fluorophenol (S)	97	%	10-120		1	05/28/24 13:45	05/31/24 02:10	367-12-4	
2,4,6-Tribromophenol (S)	110	%	10-142		1	05/28/24 13:45	05/31/24 02:10	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-146.05_20240515 **Lab ID: 40278540028** Collected: 05/15/24 16:51 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/28/24 13:45	05/31/24 02:31	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/28/24 13:45	05/31/24 02:31	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/28/24 13:45	05/31/24 02:31	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/28/24 13:45	05/31/24 02:31	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	05/28/24 13:45	05/31/24 02:31	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	88	%	16-120		1	05/28/24 13:45	05/31/24 02:31	4165-60-0	
2-Fluorobiphenyl (S)	99	%	19-120		1	05/28/24 13:45	05/31/24 02:31	321-60-8	
Terphenyl-d14 (S)	101	%	25-127		1	05/28/24 13:45	05/31/24 02:31	1718-51-0	
Phenol-d6 (S)	83	%	10-120		1	05/28/24 13:45	05/31/24 02:31	13127-88-3	
2-Fluorophenol (S)	83	%	10-120		1	05/28/24 13:45	05/31/24 02:31	367-12-4	
2,4,6-Tribromophenol (S)	107	%	10-142		1	05/28/24 13:45	05/31/24 02:31	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-148_20240516 **Lab ID: 40278540029** Collected: 05/16/24 09:33 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/28/24 13:45	05/31/24 02:52	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/28/24 13:45	05/31/24 02:52	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/28/24 13:45	05/31/24 02:52	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/28/24 13:45	05/31/24 02:52	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 13:45	05/31/24 02:52	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	81	%	16-120		1	05/28/24 13:45	05/31/24 02:52	4165-60-0	
2-Fluorobiphenyl (S)	91	%	19-120		1	05/28/24 13:45	05/31/24 02:52	321-60-8	
Terphenyl-d14 (S)	95	%	25-127		1	05/28/24 13:45	05/31/24 02:52	1718-51-0	
Phenol-d6 (S)	75	%	10-120		1	05/28/24 13:45	05/31/24 02:52	13127-88-3	
2-Fluorophenol (S)	77	%	10-120		1	05/28/24 13:45	05/31/24 02:52	367-12-4	
2,4,6-Tribromophenol (S)	102	%	10-142		1	05/28/24 13:45	05/31/24 02:52	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-149.7_20240516 **Lab ID: 40278540030** Collected: 05/16/24 10:35 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 13:45	05/31/24 03:13	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 13:45	05/31/24 03:13	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/28/24 13:45	05/31/24 03:13	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 13:45	05/31/24 03:13	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 13:45	05/31/24 03:13	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	84	%	16-120		1	05/28/24 13:45	05/31/24 03:13	4165-60-0	
2-Fluorobiphenyl (S)	97	%	19-120		1	05/28/24 13:45	05/31/24 03:13	321-60-8	
Terphenyl-d14 (S)	113	%	25-127		1	05/28/24 13:45	05/31/24 03:13	1718-51-0	
Phenol-d6 (S)	81	%	10-120		1	05/28/24 13:45	05/31/24 03:13	13127-88-3	
2-Fluorophenol (S)	80	%	10-120		1	05/28/24 13:45	05/31/24 03:13	367-12-4	
2,4,6-Tribromophenol (S)	118	%	10-142		1	05/28/24 13:45	05/31/24 03:13	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-158.75_20240516 **Lab ID: 40278540031** Collected: 05/16/24 15:12 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.8**	ug/kg	168	90.8	1	05/28/24 13:45	05/31/24 04:16	123-91-1	
Di-n-butylphthalate	**<52.3**	ug/kg	168	52.3	1	05/28/24 13:45	05/31/24 04:16	84-74-2	
N-Nitrodimethylamine	**<81.4**	ug/kg	168	81.4	1	05/28/24 13:45	05/31/24 04:16	4164-28-7	
N-Nitrosodimethylamine	**<39.4**	ug/kg	168	39.4	1	05/28/24 13:45	05/31/24 04:16	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.2**	ug/kg	168	57.2	1	05/28/24 13:45	05/31/24 04:16	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	75	%	16-120		1	05/28/24 13:45	05/31/24 04:16	4165-60-0	
2-Fluorobiphenyl (S)	85	%	19-120		1	05/28/24 13:45	05/31/24 04:16	321-60-8	
Terphenyl-d14 (S)	97	%	25-127		1	05/28/24 13:45	05/31/24 04:16	1718-51-0	
Phenol-d6 (S)	72	%	10-120		1	05/28/24 13:45	05/31/24 04:16	13127-88-3	
2-Fluorophenol (S)	74	%	10-120		1	05/28/24 13:45	05/31/24 04:16	367-12-4	
2,4,6-Tribromophenol (S)	101	%	10-142		1	05/28/24 13:45	05/31/24 04:16	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-162.4_20240516 **Lab ID: 40278540032** Collected: 05/16/24 15:38 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 13:45	05/31/24 04:37	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 13:45	05/31/24 04:37	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/28/24 13:45	05/31/24 04:37	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 13:45	05/31/24 04:37	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 13:45	05/31/24 04:37	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	75	%	16-120		1	05/28/24 13:45	05/31/24 04:37	4165-60-0	
2-Fluorobiphenyl (S)	83	%	19-120		1	05/28/24 13:45	05/31/24 04:37	321-60-8	
Terphenyl-d14 (S)	95	%	25-127		1	05/28/24 13:45	05/31/24 04:37	1718-51-0	
Phenol-d6 (S)	64	%	10-120		1	05/28/24 13:45	05/31/24 04:37	13127-88-3	
2-Fluorophenol (S)	62	%	10-120		1	05/28/24 13:45	05/31/24 04:37	367-12-4	
2,4,6-Tribromophenol (S)	88	%	10-142		1	05/28/24 13:45	05/31/24 04:37	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-162.7_20240516 **Lab ID: 40278540033** Collected: 05/16/24 15:39 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 13:45	05/31/24 05:40	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 13:45	05/31/24 05:40	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/28/24 13:45	05/31/24 05:40	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 13:45	05/31/24 05:40	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 13:45	05/31/24 05:40	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	91	%	16-120		1	05/28/24 13:45	05/31/24 05:40	4165-60-0	
2-Fluorobiphenyl (S)	102	%	19-120		1	05/28/24 13:45	05/31/24 05:40	321-60-8	
Terphenyl-d14 (S)	113	%	25-127		1	05/28/24 13:45	05/31/24 05:40	1718-51-0	
Phenol-d6 (S)	86	%	10-120		1	05/28/24 13:45	05/31/24 05:40	13127-88-3	
2-Fluorophenol (S)	84	%	10-120		1	05/28/24 13:45	05/31/24 05:40	367-12-4	
2,4,6-Tribromophenol (S)	120	%	10-142		1	05/28/24 13:45	05/31/24 05:40	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-165.35_20240516 **Lab ID: 40278540034** Collected: 05/16/24 15:40 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 13:45	05/31/24 06:01	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 13:45	05/31/24 06:01	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/28/24 13:45	05/31/24 06:01	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 13:45	05/31/24 06:01	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 13:45	05/31/24 06:01	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	92	%	16-120		1	05/28/24 13:45	05/31/24 06:01	4165-60-0	
2-Fluorobiphenyl (S)	105	%	19-120		1	05/28/24 13:45	05/31/24 06:01	321-60-8	
Terphenyl-d14 (S)	115	%	25-127		1	05/28/24 13:45	05/31/24 06:01	1718-51-0	
Phenol-d6 (S)	88	%	10-120		1	05/28/24 13:45	05/31/24 06:01	13127-88-3	
2-Fluorophenol (S)	89	%	10-120		1	05/28/24 13:45	05/31/24 06:01	367-12-4	
2,4,6-Tribromophenol (S)	123	%	10-142		1	05/28/24 13:45	05/31/24 06:01	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-168.05_20240517 **Lab ID: 40278540035** Collected: 05/17/24 09:20 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/28/24 13:45	06/03/24 18:51	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/28/24 13:45	06/03/24 18:51	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/28/24 13:45	06/03/24 18:51	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/28/24 13:45	06/03/24 18:51	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	05/28/24 13:45	06/03/24 18:51	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	93	%	16-120		1	05/28/24 13:45	06/03/24 18:51	4165-60-0	
2-Fluorobiphenyl (S)	100	%	19-120		1	05/28/24 13:45	06/03/24 18:51	321-60-8	
Terphenyl-d14 (S)	106	%	25-127		1	05/28/24 13:45	06/03/24 18:51	1718-51-0	
Phenol-d6 (S)	89	%	10-120		1	05/28/24 13:45	06/03/24 18:51	13127-88-3	
2-Fluorophenol (S)	90	%	10-120		1	05/28/24 13:45	06/03/24 18:51	367-12-4	
2,4,6-Tribromophenol (S)	115	%	10-142		1	05/28/24 13:45	06/03/24 18:51	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-170.3_20240517 **Lab ID: 40278540036** Collected: 05/17/24 09:21 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 13:45	06/02/24 08:32	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/28/24 13:45	06/02/24 08:32	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/28/24 13:45	06/02/24 08:32	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/28/24 13:45	06/02/24 08:32	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 13:45	06/02/24 08:32	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	76	%	16-120		1	05/28/24 13:45	06/02/24 08:32	4165-60-0	
2-Fluorobiphenyl (S)	89	%	19-120		1	05/28/24 13:45	06/02/24 08:32	321-60-8	
Terphenyl-d14 (S)	104	%	25-127		1	05/28/24 13:45	06/02/24 08:32	1718-51-0	
Phenol-d6 (S)	66	%	10-120		1	05/28/24 13:45	06/02/24 08:32	13127-88-3	
2-Fluorophenol (S)	67	%	10-120		1	05/28/24 13:45	06/02/24 08:32	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-171.4_20240517 **Lab ID: 40278540037** Collected: 05/17/24 09:22 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/28/24 13:45	06/02/24 08:53	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/28/24 13:45	06/02/24 08:53	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/28/24 13:45	06/02/24 08:53	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/28/24 13:45	06/02/24 08:53	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 13:45	06/02/24 08:53	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	85	%	16-120		1	05/28/24 13:45	06/02/24 08:53	4165-60-0	
2-Fluorobiphenyl (S)	100	%	19-120		1	05/28/24 13:45	06/02/24 08:53	321-60-8	
Terphenyl-d14 (S)	104	%	25-127		1	05/28/24 13:45	06/02/24 08:53	1718-51-0	
Phenol-d6 (S)	85	%	10-120		1	05/28/24 13:45	06/02/24 08:53	13127-88-3	
2-Fluorophenol (S)	86	%	10-120		1	05/28/24 13:45	06/02/24 08:53	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-173.2_20240517 **Lab ID: 40278540038** Collected: 05/17/24 10:15 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 13:45	05/29/24 20:58	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 13:45	05/29/24 20:58	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/28/24 13:45	05/29/24 20:58	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 13:45	05/29/24 20:58	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 13:45	05/29/24 20:58	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	74	%	16-120		1	05/28/24 13:45	05/29/24 20:58	4165-60-0	
2-Fluorobiphenyl (S)	85	%	19-120		1	05/28/24 13:45	05/29/24 20:58	321-60-8	
Terphenyl-d14 (S)	94	%	25-127		1	05/28/24 13:45	05/29/24 20:58	1718-51-0	
Phenol-d6 (S)	73	%	10-120		1	05/28/24 13:45	05/29/24 20:58	13127-88-3	
2-Fluorophenol (S)	71	%	10-120		1	05/28/24 13:45	05/29/24 20:58	367-12-4	
2,4,6-Tribromophenol (S)	103	%	10-142		1	05/28/24 13:45	05/29/24 20:58	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-173.2-DUP_20240517 **Lab ID: 40278540039** Collected: 05/17/24 10:15 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 13:45	06/02/24 09:14	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 13:45	06/02/24 09:14	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/28/24 13:45	06/02/24 09:14	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 13:45	06/02/24 09:14	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 13:45	06/02/24 09:14	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	73	%	16-120		1	05/28/24 13:45	06/02/24 09:14	4165-60-0	
2-Fluorobiphenyl (S)	80	%	19-120		1	05/28/24 13:45	06/02/24 09:14	321-60-8	
Terphenyl-d14 (S)	79	%	25-127		1	05/28/24 13:45	06/02/24 09:14	1718-51-0	
Phenol-d6 (S)	68	%	10-120		1	05/28/24 13:45	06/02/24 09:14	13127-88-3	
2-Fluorophenol (S)	68	%	10-120		1	05/28/24 13:45	06/02/24 09:14	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-174.05_20240517 **Lab ID: 40278540040** Collected: 05/17/24 10:17 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/28/24 13:45	06/02/24 09:35	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 13:45	06/02/24 09:35	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/28/24 13:45	06/02/24 09:35	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 13:45	06/02/24 09:35	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/28/24 13:45	06/02/24 09:35	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	76	%	16-120		1	05/28/24 13:45	06/02/24 09:35	4165-60-0	
2-Fluorobiphenyl (S)	86	%	19-120		1	05/28/24 13:45	06/02/24 09:35	321-60-8	
Terphenyl-d14 (S)	94	%	25-127		1	05/28/24 13:45	06/02/24 09:35	1718-51-0	
Phenol-d6 (S)	69	%	10-120		1	05/28/24 13:45	06/02/24 09:35	13127-88-3	
2-Fluorophenol (S)	68	%	10-120		1	05/28/24 13:45	06/02/24 09:35	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-181.5_20240517 **Lab ID: 40278540041** Collected: 05/17/24 11:15 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 13:45	06/02/24 09:56	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 13:45	06/02/24 09:56	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/28/24 13:45	06/02/24 09:56	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 13:45	06/02/24 09:56	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 13:45	06/02/24 09:56	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	90	%	16-120		1	05/28/24 13:45	06/02/24 09:56	4165-60-0	
2-Fluorobiphenyl (S)	100	%	19-120		1	05/28/24 13:45	06/02/24 09:56	321-60-8	
Terphenyl-d14 (S)	106	%	25-127		1	05/28/24 13:45	06/02/24 09:56	1718-51-0	
Phenol-d6 (S)	87	%	10-120		1	05/28/24 13:45	06/02/24 09:56	13127-88-3	
2-Fluorophenol (S)	88	%	10-120		1	05/28/24 13:45	06/02/24 09:56	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-182.8_20240517 **Lab ID: 40278540042** Collected: 05/17/24 12:11 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/28/24 13:45	06/02/24 10:18	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 13:45	06/02/24 10:18	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/28/24 13:45	06/02/24 10:18	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 13:45	06/02/24 10:18	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/28/24 13:45	06/02/24 10:18	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	72	%	16-120		1	05/28/24 13:45	06/02/24 10:18	4165-60-0	
2-Fluorobiphenyl (S)	78	%	19-120		1	05/28/24 13:45	06/02/24 10:18	321-60-8	
Terphenyl-d14 (S)	79	%	25-127		1	05/28/24 13:45	06/02/24 10:18	1718-51-0	
Phenol-d6 (S)	64	%	10-120		1	05/28/24 13:45	06/02/24 10:18	13127-88-3	
2-Fluorophenol (S)	65	%	10-120		1	05/28/24 13:45	06/02/24 10:18	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-184.9_20240517 **Lab ID: 40278540043** Collected: 05/17/24 12:12 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/28/24 13:45	06/02/24 10:39	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 13:45	06/02/24 10:39	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/28/24 13:45	06/02/24 10:39	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 13:45	06/02/24 10:39	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/28/24 13:45	06/02/24 10:39	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	86	%	16-120		1	05/28/24 13:45	06/02/24 10:39	4165-60-0	
2-Fluorobiphenyl (S)	97	%	19-120		1	05/28/24 13:45	06/02/24 10:39	321-60-8	
Terphenyl-d14 (S)	102	%	25-127		1	05/28/24 13:45	06/02/24 10:39	1718-51-0	
Phenol-d6 (S)	79	%	10-120		1	05/28/24 13:45	06/02/24 10:39	13127-88-3	
2-Fluorophenol (S)	80	%	10-120		1	05/28/24 13:45	06/02/24 10:39	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-185.85_20240517 **Lab ID: 40278540044** Collected: 05/17/24 12:13 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/28/24 13:45	06/02/24 11:00	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 13:45	06/02/24 11:00	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/28/24 13:45	06/02/24 11:00	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 13:45	06/02/24 11:00	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/28/24 13:45	06/02/24 11:00	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	81	%	16-120		1	05/28/24 13:45	06/02/24 11:00	4165-60-0	
2-Fluorobiphenyl (S)	91	%	19-120		1	05/28/24 13:45	06/02/24 11:00	321-60-8	
Terphenyl-d14 (S)	93	%	25-127		1	05/28/24 13:45	06/02/24 11:00	1718-51-0	
Phenol-d6 (S)	76	%	10-120		1	05/28/24 13:45	06/02/24 11:00	13127-88-3	
2-Fluorophenol (S)	78	%	10-120		1	05/28/24 13:45	06/02/24 11:00	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-189.45_20240517 **Lab ID: 40278540045** Collected: 05/17/24 14:20 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/28/24 13:45	06/02/24 11:22	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/28/24 13:45	06/02/24 11:22	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/28/24 13:45	06/02/24 11:22	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/28/24 13:45	06/02/24 11:22	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/28/24 13:45	06/02/24 11:22	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	81	%	16-120		1	05/28/24 13:45	06/02/24 11:22	4165-60-0	
2-Fluorobiphenyl (S)	91	%	19-120		1	05/28/24 13:45	06/02/24 11:22	321-60-8	
Terphenyl-d14 (S)	94	%	25-127		1	05/28/24 13:45	06/02/24 11:22	1718-51-0	
Phenol-d6 (S)	78	%	10-120		1	05/28/24 13:45	06/02/24 11:22	13127-88-3	
2-Fluorophenol (S)	77	%	10-120		1	05/28/24 13:45	06/02/24 11:22	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-189.55_20240517 **Lab ID: 40278540046** Collected: 05/17/24 14:21 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/29/24 10:58	06/02/24 11:43	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/29/24 10:58	06/02/24 11:43	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/29/24 10:58	06/02/24 11:43	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/29/24 10:58	06/02/24 11:43	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/29/24 10:58	06/02/24 11:43	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	90	%	16-120		1	05/29/24 10:58	06/02/24 11:43	4165-60-0	
2-Fluorobiphenyl (S)	102	%	19-120		1	05/29/24 10:58	06/02/24 11:43	321-60-8	
Terphenyl-d14 (S)	108	%	25-127		1	05/29/24 10:58	06/02/24 11:43	1718-51-0	
Phenol-d6 (S)	84	%	10-120		1	05/29/24 10:58	06/02/24 11:43	13127-88-3	
2-Fluorophenol (S)	83	%	10-120		1	05/29/24 10:58	06/02/24 11:43	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-189.9_20240517 **Lab ID: 40278540047** Collected: 05/17/24 14:22 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/29/24 10:58	06/02/24 12:04	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/29/24 10:58	06/02/24 12:04	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/29/24 10:58	06/02/24 12:04	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/29/24 10:58	06/02/24 12:04	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	05/29/24 10:58	06/02/24 12:04	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	90	%	16-120		1	05/29/24 10:58	06/02/24 12:04	4165-60-0	
2-Fluorobiphenyl (S)	100	%	19-120		1	05/29/24 10:58	06/02/24 12:04	321-60-8	
Terphenyl-d14 (S)	102	%	25-127		1	05/29/24 10:58	06/02/24 12:04	1718-51-0	
Phenol-d6 (S)	85	%	10-120		1	05/29/24 10:58	06/02/24 12:04	13127-88-3	
2-Fluorophenol (S)	86	%	10-120		1	05/29/24 10:58	06/02/24 12:04	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-194.9_20240517 **Lab ID: 40278540048** Collected: 05/17/24 15:15 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/29/24 10:58	06/02/24 12:25	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/29/24 10:58	06/02/24 12:25	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/29/24 10:58	06/02/24 12:25	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/29/24 10:58	06/02/24 12:25	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/29/24 10:58	06/02/24 12:25	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	70	%	16-120		1	05/29/24 10:58	06/02/24 12:25	4165-60-0	
2-Fluorobiphenyl (S)	78	%	19-120		1	05/29/24 10:58	06/02/24 12:25	321-60-8	
Terphenyl-d14 (S)	80	%	25-127		1	05/29/24 10:58	06/02/24 12:25	1718-51-0	
Phenol-d6 (S)	67	%	10-120		1	05/29/24 10:58	06/02/24 12:25	13127-88-3	
2-Fluorophenol (S)	67	%	10-120		1	05/29/24 10:58	06/02/24 12:25	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-195.5_20240517 **Lab ID: 40278540049** Collected: 05/17/24 15:16 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/29/24 10:58	06/02/24 12:47	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/29/24 10:58	06/02/24 12:47	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/29/24 10:58	06/02/24 12:47	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/29/24 10:58	06/02/24 12:47	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/29/24 10:58	06/02/24 12:47	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	93	%	16-120		1	05/29/24 10:58	06/02/24 12:47	4165-60-0	
2-Fluorobiphenyl (S)	103	%	19-120		1	05/29/24 10:58	06/02/24 12:47	321-60-8	
Terphenyl-d14 (S)	107	%	25-127		1	05/29/24 10:58	06/02/24 12:47	1718-51-0	
Phenol-d6 (S)	90	%	10-120		1	05/29/24 10:58	06/02/24 12:47	13127-88-3	
2-Fluorophenol (S)	90	%	10-120		1	05/29/24 10:58	06/02/24 12:47	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-196.1_20240517 **Lab ID: 40278540050** Collected: 05/17/24 15:17 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/29/24 10:58	06/02/24 13:08	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/29/24 10:58	06/02/24 13:08	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/29/24 10:58	06/02/24 13:08	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/29/24 10:58	06/02/24 13:08	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/29/24 10:58	06/02/24 13:08	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	83	%	16-120		1	05/29/24 10:58	06/02/24 13:08	4165-60-0	
2-Fluorobiphenyl (S)	91	%	19-120		1	05/29/24 10:58	06/02/24 13:08	321-60-8	
Terphenyl-d14 (S)	91	%	25-127		1	05/29/24 10:58	06/02/24 13:08	1718-51-0	
Phenol-d6 (S)	78	%	10-120		1	05/29/24 10:58	06/02/24 13:08	13127-88-3	
2-Fluorophenol (S)	80	%	10-120		1	05/29/24 10:58	06/02/24 13:08	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-197.55_20240517 **Lab ID: 40278540051** Collected: 05/17/24 16:02 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/30/24 12:14	06/02/24 13:29	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/30/24 12:14	06/02/24 13:29	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/30/24 12:14	06/02/24 13:29	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/30/24 12:14	06/02/24 13:29	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/30/24 12:14	06/02/24 13:29	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	60	%	16-120		1	05/30/24 12:14	06/02/24 13:29	4165-60-0	
2-Fluorobiphenyl (S)	70	%	19-120		1	05/30/24 12:14	06/02/24 13:29	321-60-8	
Terphenyl-d14 (S)	82	%	25-127		1	05/30/24 12:14	06/02/24 13:29	1718-51-0	
Phenol-d6 (S)	52	%	10-120		1	05/30/24 12:14	06/02/24 13:29	13127-88-3	
2-Fluorophenol (S)	54	%	10-120		1	05/30/24 12:14	06/02/24 13:29	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-198.4_20240517 **Lab ID: 40278540052** Collected: 05/17/24 16:03 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/30/24 12:14	06/02/24 13:50	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/30/24 12:14	06/02/24 13:50	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/30/24 12:14	06/02/24 13:50	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/30/24 12:14	06/02/24 13:50	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/30/24 12:14	06/02/24 13:50	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	82	%	16-120		1	05/30/24 12:14	06/02/24 13:50	4165-60-0	
2-Fluorobiphenyl (S)	90	%	19-120		1	05/30/24 12:14	06/02/24 13:50	321-60-8	
Terphenyl-d14 (S)	91	%	25-127		1	05/30/24 12:14	06/02/24 13:50	1718-51-0	
Phenol-d6 (S)	79	%	10-120		1	05/30/24 12:14	06/02/24 13:50	13127-88-3	
2-Fluorophenol (S)	80	%	10-120		1	05/30/24 12:14	06/02/24 13:50	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-201.4_20240517 **Lab ID: 40278540053** Collected: 05/17/24 16:04 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/30/24 12:14	06/02/24 14:12	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/30/24 12:14	06/02/24 14:12	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/30/24 12:14	06/02/24 14:12	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/30/24 12:14	06/02/24 14:12	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/30/24 12:14	06/02/24 14:12	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	60	%	16-120		1	05/30/24 12:14	06/02/24 14:12	4165-60-0	
2-Fluorobiphenyl (S)	66	%	19-120		1	05/30/24 12:14	06/02/24 14:12	321-60-8	
Terphenyl-d14 (S)	60	%	25-127		1	05/30/24 12:14	06/02/24 14:12	1718-51-0	
Phenol-d6 (S)	39	%	10-120		1	05/30/24 12:14	06/02/24 14:12	13127-88-3	
2-Fluorophenol (S)	43	%	10-120		1	05/30/24 12:14	06/02/24 14:12	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-204.6_20240517 **Lab ID: 40278540054** Collected: 05/17/24 16:50 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/30/24 12:14	06/02/24 14:33	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/30/24 12:14	06/02/24 14:33	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/30/24 12:14	06/02/24 14:33	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/30/24 12:14	06/02/24 14:33	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	05/30/24 12:14	06/02/24 14:33	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	78	%	16-120		1	05/30/24 12:14	06/02/24 14:33	4165-60-0	
2-Fluorobiphenyl (S)	92	%	19-120		1	05/30/24 12:14	06/02/24 14:33	321-60-8	
Terphenyl-d14 (S)	102	%	25-127		1	05/30/24 12:14	06/02/24 14:33	1718-51-0	
Phenol-d6 (S)	70	%	10-120		1	05/30/24 12:14	06/02/24 14:33	13127-88-3	
2-Fluorophenol (S)	67	%	10-120		1	05/30/24 12:14	06/02/24 14:33	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-205.9_20240517 **Lab ID: 40278540055** Collected: 05/17/24 16:51 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.3**	ug/kg	167	90.3	1	05/30/24 12:14	06/02/24 14:54	123-91-1	
Di-n-butylphthalate	**<52.0**	ug/kg	167	52.0	1	05/30/24 12:14	06/02/24 14:54	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/30/24 12:14	06/02/24 14:54	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/30/24 12:14	06/02/24 14:54	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/30/24 12:14	06/02/24 14:54	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	87	%	16-120		1	05/30/24 12:14	06/02/24 14:54	4165-60-0	
2-Fluorobiphenyl (S)	99	%	19-120		1	05/30/24 12:14	06/02/24 14:54	321-60-8	
Terphenyl-d14 (S)	104	%	25-127		1	05/30/24 12:14	06/02/24 14:54	1718-51-0	
Phenol-d6 (S)	81	%	10-120		1	05/30/24 12:14	06/02/24 14:54	13127-88-3	
2-Fluorophenol (S)	80	%	10-120		1	05/30/24 12:14	06/02/24 14:54	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-209.45_20240518 **Lab ID: 40278540056** Collected: 05/18/24 08:25 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/30/24 12:14	06/02/24 15:16	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/30/24 12:14	06/02/24 15:16	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/30/24 12:14	06/02/24 15:16	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/30/24 12:14	06/02/24 15:16	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/30/24 12:14	06/02/24 15:16	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	69	%	16-120		1	05/30/24 12:14	06/02/24 15:16	4165-60-0	
2-Fluorobiphenyl (S)	79	%	19-120		1	05/30/24 12:14	06/02/24 15:16	321-60-8	
Terphenyl-d14 (S)	90	%	25-127		1	05/30/24 12:14	06/02/24 15:16	1718-51-0	
Phenol-d6 (S)	61	%	10-120		1	05/30/24 12:14	06/02/24 15:16	13127-88-3	
2-Fluorophenol (S)	58	%	10-120		1	05/30/24 12:14	06/02/24 15:16	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-210.65_20240518 **Lab ID: 40278540057** Collected: 05/18/24 08:26 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/30/24 12:14	06/02/24 15:37	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/30/24 12:14	06/02/24 15:37	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/30/24 12:14	06/02/24 15:37	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/30/24 12:14	06/02/24 15:37	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/30/24 12:14	06/02/24 15:37	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	83	%	16-120		1	05/30/24 12:14	06/02/24 15:37	4165-60-0	
2-Fluorobiphenyl (S)	95	%	19-120		1	05/30/24 12:14	06/02/24 15:37	321-60-8	
Terphenyl-d14 (S)	106	%	25-127		1	05/30/24 12:14	06/02/24 15:37	1718-51-0	
Phenol-d6 (S)	80	%	10-120		1	05/30/24 12:14	06/02/24 15:37	13127-88-3	
2-Fluorophenol (S)	79	%	10-120		1	05/30/24 12:14	06/02/24 15:37	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-211.65_20240518 **Lab ID: 40278540058** Collected: 05/18/24 08:27 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/30/24 12:14	06/02/24 15:58	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/30/24 12:14	06/02/24 15:58	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/30/24 12:14	06/02/24 15:58	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/30/24 12:14	06/02/24 15:58	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/30/24 12:14	06/02/24 15:58	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	90	%	16-120		1	05/30/24 12:14	06/02/24 15:58	4165-60-0	
2-Fluorobiphenyl (S)	98	%	19-120		1	05/30/24 12:14	06/02/24 15:58	321-60-8	
Terphenyl-d14 (S)	103	%	25-127		1	05/30/24 12:14	06/02/24 15:58	1718-51-0	
Phenol-d6 (S)	87	%	10-120		1	05/30/24 12:14	06/02/24 15:58	13127-88-3	
2-Fluorophenol (S)	86	%	10-120		1	05/30/24 12:14	06/02/24 15:58	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-212.8_20240518 **Lab ID: 40278540059** Collected: 05/18/24 08:50 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/30/24 12:14	05/30/24 20:14	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/30/24 12:14	05/30/24 20:14	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/30/24 12:14	05/30/24 20:14	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/30/24 12:14	05/30/24 20:14	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/30/24 12:14	05/30/24 20:14	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	80	%	16-120		1	05/30/24 12:14	05/30/24 20:14	4165-60-0	
2-Fluorobiphenyl (S)	86	%	19-120		1	05/30/24 12:14	05/30/24 20:14	321-60-8	
Terphenyl-d14 (S)	90	%	25-127		1	05/30/24 12:14	05/30/24 20:14	1718-51-0	
Phenol-d6 (S)	77	%	10-120		1	05/30/24 12:14	05/30/24 20:14	13127-88-3	
2-Fluorophenol (S)	76	%	10-120		1	05/30/24 12:14	05/30/24 20:14	367-12-4	
2,4,6-Tribromophenol (S)	92	%	10-142		1	05/30/24 12:14	05/30/24 20:14	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-212.8-DUP_20240518 **Lab ID: 40278540060** Collected: 05/18/24 08:50 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/30/24 12:14	06/02/24 16:20	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/30/24 12:14	06/02/24 16:20	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/30/24 12:14	06/02/24 16:20	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/30/24 12:14	06/02/24 16:20	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	05/30/24 12:14	06/02/24 16:20	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	87	%	16-120		1	05/30/24 12:14	06/02/24 16:20	4165-60-0	
2-Fluorobiphenyl (S)	94	%	19-120		1	05/30/24 12:14	06/02/24 16:20	321-60-8	
Terphenyl-d14 (S)	98	%	25-127		1	05/30/24 12:14	06/02/24 16:20	1718-51-0	
Phenol-d6 (S)	83	%	10-120		1	05/30/24 12:14	06/02/24 16:20	13127-88-3	
2-Fluorophenol (S)	85	%	10-120		1	05/30/24 12:14	06/02/24 16:20	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-214.85_20240518 **Lab ID: 40278540061** Collected: 05/18/24 08:51 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/30/24 12:14	06/02/24 16:41	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/30/24 12:14	06/02/24 16:41	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/30/24 12:14	06/02/24 16:41	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/30/24 12:14	06/02/24 16:41	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/30/24 12:14	06/02/24 16:41	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	96	%	16-120		1	05/30/24 12:14	06/02/24 16:41	4165-60-0	
2-Fluorobiphenyl (S)	106	%	19-120		1	05/30/24 12:14	06/02/24 16:41	321-60-8	
Terphenyl-d14 (S)	105	%	25-127		1	05/30/24 12:14	06/02/24 16:41	1718-51-0	
Phenol-d6 (S)	91	%	10-120		1	05/30/24 12:14	06/02/24 16:41	13127-88-3	
2-Fluorophenol (S)	90	%	10-120		1	05/30/24 12:14	06/02/24 16:41	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-216.9_20240518 **Lab ID: 40278540062** Collected: 05/18/24 09:15 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/30/24 12:14	06/02/24 17:02	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/30/24 12:14	06/02/24 17:02	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/30/24 12:14	06/02/24 17:02	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/30/24 12:14	06/02/24 17:02	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	05/30/24 12:14	06/02/24 17:02	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	64	%	16-120		1	05/30/24 12:14	06/02/24 17:02	4165-60-0	
2-Fluorobiphenyl (S)	71	%	19-120		1	05/30/24 12:14	06/02/24 17:02	321-60-8	
Terphenyl-d14 (S)	75	%	25-127		1	05/30/24 12:14	06/02/24 17:02	1718-51-0	
Phenol-d6 (S)	60	%	10-120		1	05/30/24 12:14	06/02/24 17:02	13127-88-3	
2-Fluorophenol (S)	61	%	10-120		1	05/30/24 12:14	06/02/24 17:02	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-220.35_20240518 **Lab ID: 40278540063** Collected: 05/18/24 09:51 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/30/24 12:14	06/02/24 17:23	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/30/24 12:14	06/02/24 17:23	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/30/24 12:14	06/02/24 17:23	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/30/24 12:14	06/02/24 17:23	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/30/24 12:14	06/02/24 17:23	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	79	%	16-120		1	05/30/24 12:14	06/02/24 17:23	4165-60-0	
2-Fluorobiphenyl (S)	85	%	19-120		1	05/30/24 12:14	06/02/24 17:23	321-60-8	
Terphenyl-d14 (S)	90	%	25-127		1	05/30/24 12:14	06/02/24 17:23	1718-51-0	
Phenol-d6 (S)	74	%	10-120		1	05/30/24 12:14	06/02/24 17:23	13127-88-3	
2-Fluorophenol (S)	74	%	10-120		1	05/30/24 12:14	06/02/24 17:23	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-220.9_20240518 **Lab ID: 40278540064** Collected: 05/18/24 10:32 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/30/24 12:14	06/02/24 17:45	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/30/24 12:14	06/02/24 17:45	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/30/24 12:14	06/02/24 17:45	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/30/24 12:14	06/02/24 17:45	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/30/24 12:14	06/02/24 17:45	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	87	%	16-120		1	05/30/24 12:14	06/02/24 17:45	4165-60-0	
2-Fluorobiphenyl (S)	96	%	19-120		1	05/30/24 12:14	06/02/24 17:45	321-60-8	
Terphenyl-d14 (S)	104	%	25-127		1	05/30/24 12:14	06/02/24 17:45	1718-51-0	
Phenol-d6 (S)	84	%	10-120		1	05/30/24 12:14	06/02/24 17:45	13127-88-3	
2-Fluorophenol (S)	83	%	10-120		1	05/30/24 12:14	06/02/24 17:45	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-224.4_20240518 **Lab ID: 40278540065** Collected: 05/18/24 11:05 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/30/24 12:14	06/02/24 18:06	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/30/24 12:14	06/02/24 18:06	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/30/24 12:14	06/02/24 18:06	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/30/24 12:14	06/02/24 18:06	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/30/24 12:14	06/02/24 18:06	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	69	%	16-120		1	05/30/24 12:14	06/02/24 18:06	4165-60-0	
2-Fluorobiphenyl (S)	78	%	19-120		1	05/30/24 12:14	06/02/24 18:06	321-60-8	
Terphenyl-d14 (S)	80	%	25-127		1	05/30/24 12:14	06/02/24 18:06	1718-51-0	
Phenol-d6 (S)	67	%	10-120		1	05/30/24 12:14	06/02/24 18:06	13127-88-3	
2-Fluorophenol (S)	68	%	10-120		1	05/30/24 12:14	06/02/24 18:06	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-225.6_20240518 **Lab ID: 40278540066** Collected: 05/18/24 11:06 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/30/24 12:14	06/02/24 18:27	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/30/24 12:14	06/02/24 18:27	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/30/24 12:14	06/02/24 18:27	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/30/24 12:14	06/02/24 18:27	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/30/24 12:14	06/02/24 18:27	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	85	%	16-120		1	05/30/24 12:14	06/02/24 18:27	4165-60-0	
2-Fluorobiphenyl (S)	95	%	19-120		1	05/30/24 12:14	06/02/24 18:27	321-60-8	
Terphenyl-d14 (S)	94	%	25-127		1	05/30/24 12:14	06/02/24 18:27	1718-51-0	
Phenol-d6 (S)	83	%	10-120		1	05/30/24 12:14	06/02/24 18:27	13127-88-3	
2-Fluorophenol (S)	83	%	10-120		1	05/30/24 12:14	06/02/24 18:27	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-226.55_20240518 **Lab ID: 40278540067** Collected: 05/18/24 11:07 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/30/24 12:14	06/02/24 18:48	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/30/24 12:14	06/02/24 18:48	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/30/24 12:14	06/02/24 18:48	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/30/24 12:14	06/02/24 18:48	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/30/24 12:14	06/02/24 18:48	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	76	%	16-120		1	05/30/24 12:14	06/02/24 18:48	4165-60-0	
2-Fluorobiphenyl (S)	86	%	19-120		1	05/30/24 12:14	06/02/24 18:48	321-60-8	
Terphenyl-d14 (S)	90	%	25-127		1	05/30/24 12:14	06/02/24 18:48	1718-51-0	
Phenol-d6 (S)	70	%	10-120		1	05/30/24 12:14	06/02/24 18:48	13127-88-3	
2-Fluorophenol (S)	70	%	10-120		1	05/30/24 12:14	06/02/24 18:48	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-230.05_20240518 **Lab ID: 40278540068** Collected: 05/18/24 12:15 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/30/24 12:14	06/02/24 19:10	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/30/24 12:14	06/02/24 19:10	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/30/24 12:14	06/02/24 19:10	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/30/24 12:14	06/02/24 19:10	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/30/24 12:14	06/02/24 19:10	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	69	%	16-120		1	05/30/24 12:14	06/02/24 19:10	4165-60-0	
2-Fluorobiphenyl (S)	78	%	19-120		1	05/30/24 12:14	06/02/24 19:10	321-60-8	
Terphenyl-d14 (S)	80	%	25-127		1	05/30/24 12:14	06/02/24 19:10	1718-51-0	
Phenol-d6 (S)	63	%	10-120		1	05/30/24 12:14	06/02/24 19:10	13127-88-3	
2-Fluorophenol (S)	62	%	10-120		1	05/30/24 12:14	06/02/24 19:10	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-230.75_20240518 **Lab ID: 40278540069** Collected: 05/18/24 12:16 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/30/24 12:14	06/04/24 17:47	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/30/24 12:14	06/04/24 17:47	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/30/24 12:14	06/04/24 17:47	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/30/24 12:14	06/04/24 17:47	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/30/24 12:14	06/04/24 17:47	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	77	%	16-120		1	05/30/24 12:14	06/04/24 17:47	4165-60-0	
2-Fluorobiphenyl (S)	86	%	19-120		1	05/30/24 12:14	06/04/24 17:47	321-60-8	
Terphenyl-d14 (S)	91	%	25-127		1	05/30/24 12:14	06/04/24 17:47	1718-51-0	
Phenol-d6 (S)	68	%	10-120		1	05/30/24 12:14	06/04/24 17:47	13127-88-3	
2-Fluorophenol (S)	69	%	10-120		1	05/30/24 12:14	06/04/24 17:47	367-12-4	
2,4,6-Tribromophenol (S)	93	%	10-142		1	05/30/24 12:14	06/04/24 17:47	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-233.25_20240518 **Lab ID: 40278540070** Collected: 05/18/24 13:25 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/30/24 12:14	06/04/24 18:08	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/30/24 12:14	06/04/24 18:08	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/30/24 12:14	06/04/24 18:08	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/30/24 12:14	06/04/24 18:08	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/30/24 12:14	06/04/24 18:08	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	90	%	16-120		1	05/30/24 12:14	06/04/24 18:08	4165-60-0	
2-Fluorobiphenyl (S)	97	%	19-120		1	05/30/24 12:14	06/04/24 18:08	321-60-8	
Terphenyl-d14 (S)	100	%	25-127		1	05/30/24 12:14	06/04/24 18:08	1718-51-0	
Phenol-d6 (S)	81	%	10-120		1	05/30/24 12:14	06/04/24 18:08	13127-88-3	
2-Fluorophenol (S)	81	%	10-120		1	05/30/24 12:14	06/04/24 18:08	367-12-4	
2,4,6-Tribromophenol (S)	91	%	10-142		1	05/30/24 12:14	06/04/24 18:08	118-79-6	CH

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-234.44_20240518 **Lab ID: 40278540071** Collected: 05/18/24 13:26 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/31/24 11:02	06/03/24 15:19	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/31/24 11:02	06/03/24 15:19	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/31/24 11:02	06/03/24 15:19	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/31/24 11:02	06/03/24 15:19	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/31/24 11:02	06/03/24 15:19	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	64	%	16-120		1	05/31/24 11:02	06/03/24 15:19	4165-60-0	
2-Fluorobiphenyl (S)	76	%	19-120		1	05/31/24 11:02	06/03/24 15:19	321-60-8	
Terphenyl-d14 (S)	99	%	25-127		1	05/31/24 11:02	06/03/24 15:19	1718-51-0	
Phenol-d6 (S)	61	%	10-120		1	05/31/24 11:02	06/03/24 15:19	13127-88-3	
2-Fluorophenol (S)	58	%	10-120		1	05/31/24 11:02	06/03/24 15:19	367-12-4	
2,4,6-Tribromophenol (S)	101	%	10-142		1	05/31/24 11:02	06/03/24 15:19	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-236.25_20240518 **Lab ID: 40278540072** Collected: 05/18/24 13:27 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/31/24 11:02	06/03/24 15:40	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/31/24 11:02	06/03/24 15:40	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/31/24 11:02	06/03/24 15:40	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/31/24 11:02	06/03/24 15:40	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/31/24 11:02	06/03/24 15:40	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	71	%	16-120		1	05/31/24 11:02	06/03/24 15:40	4165-60-0	
2-Fluorobiphenyl (S)	78	%	19-120		1	05/31/24 11:02	06/03/24 15:40	321-60-8	
Terphenyl-d14 (S)	83	%	25-127		1	05/31/24 11:02	06/03/24 15:40	1718-51-0	
Phenol-d6 (S)	66	%	10-120		1	05/31/24 11:02	06/03/24 15:40	13127-88-3	
2-Fluorophenol (S)	64	%	10-120		1	05/31/24 11:02	06/03/24 15:40	367-12-4	
2,4,6-Tribromophenol (S)	89	%	10-142		1	05/31/24 11:02	06/03/24 15:40	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-238.1_20240518 **Lab ID: 40278540073** Collected: 05/18/24 14:32 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/31/24 11:02	06/03/24 16:22	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/31/24 11:02	06/03/24 16:22	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/31/24 11:02	06/03/24 16:22	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/31/24 11:02	06/03/24 16:22	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/31/24 11:02	06/03/24 16:22	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	71	%	16-120		1	05/31/24 11:02	06/03/24 16:22	4165-60-0	
2-Fluorobiphenyl (S)	79	%	19-120		1	05/31/24 11:02	06/03/24 16:22	321-60-8	
Terphenyl-d14 (S)	85	%	25-127		1	05/31/24 11:02	06/03/24 16:22	1718-51-0	
Phenol-d6 (S)	66	%	10-120		1	05/31/24 11:02	06/03/24 16:22	13127-88-3	
2-Fluorophenol (S)	64	%	10-120		1	05/31/24 11:02	06/03/24 16:22	367-12-4	
2,4,6-Tribromophenol (S)	92	%	10-142		1	05/31/24 11:02	06/03/24 16:22	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-240_20240518 **Lab ID: 40278540074** Collected: 05/18/24 14:33 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/31/24 11:02	06/03/24 16:43	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/31/24 11:02	06/03/24 16:43	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/31/24 11:02	06/03/24 16:43	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/31/24 11:02	06/03/24 16:43	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	05/31/24 11:02	06/03/24 16:43	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	85	%	16-120		1	05/31/24 11:02	06/03/24 16:43	4165-60-0	
2-Fluorobiphenyl (S)	95	%	19-120		1	05/31/24 11:02	06/03/24 16:43	321-60-8	
Terphenyl-d14 (S)	105	%	25-127		1	05/31/24 11:02	06/03/24 16:43	1718-51-0	
Phenol-d6 (S)	80	%	10-120		1	05/31/24 11:02	06/03/24 16:43	13127-88-3	
2-Fluorophenol (S)	77	%	10-120		1	05/31/24 11:02	06/03/24 16:43	367-12-4	
2,4,6-Tribromophenol (S)	108	%	10-142		1	05/31/24 11:02	06/03/24 16:43	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-240.3_20240518 **Lab ID: 40278540075** Collected: 05/18/24 14:34 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/31/24 11:02	06/03/24 17:05	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/31/24 11:02	06/03/24 17:05	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/31/24 11:02	06/03/24 17:05	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/31/24 11:02	06/03/24 17:05	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/31/24 11:02	06/03/24 17:05	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	78	%	16-120		1	05/31/24 11:02	06/03/24 17:05	4165-60-0	
2-Fluorobiphenyl (S)	91	%	19-120		1	05/31/24 11:02	06/03/24 17:05	321-60-8	
Terphenyl-d14 (S)	105	%	25-127		1	05/31/24 11:02	06/03/24 17:05	1718-51-0	
Phenol-d6 (S)	73	%	10-120		1	05/31/24 11:02	06/03/24 17:05	13127-88-3	
2-Fluorophenol (S)	70	%	10-120		1	05/31/24 11:02	06/03/24 17:05	367-12-4	
2,4,6-Tribromophenol (S)	108	%	10-142		1	05/31/24 11:02	06/03/24 17:05	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-249.5_20240518 **Lab ID: 40278540076** Collected: 05/18/24 16:55 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/31/24 11:02	06/03/24 17:26	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/31/24 11:02	06/03/24 17:26	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/31/24 11:02	06/03/24 17:26	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/31/24 11:02	06/03/24 17:26	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.1**	ug/kg	167	57.1	1	05/31/24 11:02	06/03/24 17:26	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	62	%	16-120		1	05/31/24 11:02	06/03/24 17:26	4165-60-0	
2-Fluorobiphenyl (S)	81	%	19-120		1	05/31/24 11:02	06/03/24 17:26	321-60-8	
Terphenyl-d14 (S)	102	%	25-127		1	05/31/24 11:02	06/03/24 17:26	1718-51-0	
Phenol-d6 (S)	57	%	10-120		1	05/31/24 11:02	06/03/24 17:26	13127-88-3	
2-Fluorophenol (S)	52	%	10-120		1	05/31/24 11:02	06/03/24 17:26	367-12-4	
2,4,6-Tribromophenol (S)	105	%	10-142		1	05/31/24 11:02	06/03/24 17:26	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-250.3_20240518 **Lab ID: 40278540077** Collected: 05/18/24 16:56 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.4**	ug/kg	167	90.4	1	05/31/24 11:02	06/03/24 17:47	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/31/24 11:02	06/03/24 17:47	84-74-2	
N-Nitrodimethylamine	**<81.0**	ug/kg	167	81.0	1	05/31/24 11:02	06/03/24 17:47	4164-28-7	
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/31/24 11:02	06/03/24 17:47	62-75-9	
bis(2-Ethylhexyl)phthalate	**<56.9**	ug/kg	167	56.9	1	05/31/24 11:02	06/03/24 17:47	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	74	%	16-120		1	05/31/24 11:02	06/03/24 17:47	4165-60-0	
2-Fluorobiphenyl (S)	86	%	19-120		1	05/31/24 11:02	06/03/24 17:47	321-60-8	
Terphenyl-d14 (S)	93	%	25-127		1	05/31/24 11:02	06/03/24 17:47	1718-51-0	
Phenol-d6 (S)	71	%	10-120		1	05/31/24 11:02	06/03/24 17:47	13127-88-3	
2-Fluorophenol (S)	70	%	10-120		1	05/31/24 11:02	06/03/24 17:47	367-12-4	
2,4,6-Tribromophenol (S)	98	%	10-142		1	05/31/24 11:02	06/03/24 17:47	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-251.8_20240518 **Lab ID: 40278540078** Collected: 05/18/24 16:57 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.5**	ug/kg	167	90.5	1	05/31/24 11:02	06/03/24 14:57	123-91-1	
Di-n-butylphthalate	**<52.1**	ug/kg	167	52.1	1	05/31/24 11:02	06/03/24 14:57	84-74-2	
N-Nitrodimethylamine	**<81.1**	ug/kg	167	81.1	1	05/31/24 11:02	06/03/24 14:57	4164-28-7	M1
N-Nitrosodimethylamine	**<39.2**	ug/kg	167	39.2	1	05/31/24 11:02	06/03/24 14:57	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/31/24 11:02	06/03/24 14:57	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	71	%	16-120		1	05/31/24 11:02	06/03/24 14:57	4165-60-0	
2-Fluorobiphenyl (S)	85	%	19-120		1	05/31/24 11:02	06/03/24 14:57	321-60-8	
Terphenyl-d14 (S)	102	%	25-127		1	05/31/24 11:02	06/03/24 14:57	1718-51-0	
Phenol-d6 (S)	65	%	10-120		1	05/31/24 11:02	06/03/24 14:57	13127-88-3	
2-Fluorophenol (S)	61	%	10-120		1	05/31/24 11:02	06/03/24 14:57	367-12-4	
2,4,6-Tribromophenol (S)	108	%	10-142		1	05/31/24 11:02	06/03/24 14:57	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: 300-001-GSV-251.8-DUP_20240518 **Lab ID: 40278540079** Collected: 05/18/24 16:57 Received: 05/21/24 08:55 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270E Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<90.6**	ug/kg	167	90.6	1	05/31/24 11:02	06/03/24 18:30	123-91-1	
Di-n-butylphthalate	**<52.2**	ug/kg	167	52.2	1	05/31/24 11:02	06/03/24 18:30	84-74-2	
N-Nitrodimethylamine	**<81.2**	ug/kg	167	81.2	1	05/31/24 11:02	06/03/24 18:30	4164-28-7	
N-Nitrosodimethylamine	**<39.3**	ug/kg	167	39.3	1	05/31/24 11:02	06/03/24 18:30	62-75-9	
bis(2-Ethylhexyl)phthalate	**<57.0**	ug/kg	167	57.0	1	05/31/24 11:02	06/03/24 18:30	117-81-7	
Surrogates									
Nitrobenzene-d5 (S)	55	%	16-120		1	05/31/24 11:02	06/03/24 18:30	4165-60-0	
2-Fluorobiphenyl (S)	66	%	19-120		1	05/31/24 11:02	06/03/24 18:30	321-60-8	
Terphenyl-d14 (S)	88	%	25-127		1	05/31/24 11:02	06/03/24 18:30	1718-51-0	
Phenol-d6 (S)	49	%	10-120		1	05/31/24 11:02	06/03/24 18:30	13127-88-3	
2-Fluorophenol (S)	46	%	10-120		1	05/31/24 11:02	06/03/24 18:30	367-12-4	
2,4,6-Tribromophenol (S)	85	%	10-142		1	05/31/24 11:02	06/03/24 18:30	118-79-6	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: EB-06 **Lab ID: 40278540080** Collected: 05/14/24 10:49 Received: 05/21/24 08:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV Low Volume	Analytical Method: EPA 8270E Preparation Method: EPA 3510 Pace Analytical Services - Green Bay								
Di-n-butylphthalate	**<1.2**	ug/L	5.1	1.2	1	05/22/24 11:13	05/23/24 10:58	84-74-2	H3
bis(2-Ethylhexyl)phthalate	**<2.2**	ug/L	5.1	2.2	1	05/22/24 11:13	05/23/24 10:58	117-81-7	H3
N-Nitrosodimethylamine	**<1.5**	ug/L	5.1	1.5	1	05/22/24 11:13	05/23/24 10:58	62-75-9	H3,L1
1,4-Dioxane (p-Dioxane)	**<2.1**	ug/L	5.1	2.1	1	05/22/24 11:13	05/23/24 10:58	123-91-1	H3
N-Nitrodimethylamine	**<5.9**	ug/L	10.2	5.9	1	05/22/24 11:13	05/23/24 10:58	4164-28-7	H3
Surrogates									
Nitrobenzene-d5 (S)	89	%	38-130		1	05/22/24 11:13	05/23/24 10:58	4165-60-0	
2-Fluorobiphenyl (S)	66	%	23-130		1	05/22/24 11:13	05/23/24 10:58	321-60-8	
Terphenyl-d14 (S)	107	%	52-136		1	05/22/24 11:13	05/23/24 10:58	1718-51-0	
Phenol-d6 (S)	35	%	11-130		1	05/22/24 11:13	05/23/24 10:58	13127-88-3	
2-Fluorophenol (S)	52	%	10-130		1	05/22/24 11:13	05/23/24 10:58	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: EB-07 **Lab ID: 40278540081** Collected: 05/15/24 13:31 Received: 05/21/24 08:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV Low Volume	Analytical Method: EPA 8270E Preparation Method: EPA 3510 Pace Analytical Services - Green Bay								
Di-n-butylphthalate	**<1.2**	ug/L	4.8	1.2	1	05/22/24 11:13	05/23/24 11:20	84-74-2	
bis(2-Ethylhexyl)phthalate	**<2.0**	ug/L	4.8	2.0	1	05/22/24 11:13	05/23/24 11:20	117-81-7	
N-Nitrosodimethylamine	**<1.4**	ug/L	4.8	1.4	1	05/22/24 11:13	05/23/24 11:20	62-75-9	L1
1,4-Dioxane (p-Dioxane)	**<2.0**	ug/L	4.8	2.0	1	05/22/24 11:13	05/23/24 11:20	123-91-1	
N-Nitrodimethylamine	**<5.5**	ug/L	9.5	5.5	1	05/22/24 11:13	05/23/24 11:20	4164-28-7	
Surrogates									
Nitrobenzene-d5 (S)	80	%	38-130		1	05/22/24 11:13	05/23/24 11:20	4165-60-0	
2-Fluorobiphenyl (S)	70	%	23-130		1	05/22/24 11:13	05/23/24 11:20	321-60-8	
Terphenyl-d14 (S)	107	%	52-136		1	05/22/24 11:13	05/23/24 11:20	1718-51-0	
Phenol-d6 (S)	27	%	11-130		1	05/22/24 11:13	05/23/24 11:20	13127-88-3	
2-Fluorophenol (S)	40	%	10-130		1	05/22/24 11:13	05/23/24 11:20	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: EB-08 **Lab ID: 40278540082** Collected: 05/17/24 09:44 Received: 05/21/24 08:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV Low Volume	Analytical Method: EPA 8270E Preparation Method: EPA 3510 Pace Analytical Services - Green Bay								
Di-n-butylphthalate	**<1.2**	ug/L	5.0	1.2	1	05/22/24 11:13	05/23/24 11:42	84-74-2	
bis(2-Ethylhexyl)phthalate	**<2.1**	ug/L	5.0	2.1	1	05/22/24 11:13	05/23/24 11:42	117-81-7	
N-Nitrosodimethylamine	**<1.5**	ug/L	5.0	1.5	1	05/22/24 11:13	05/23/24 11:42	62-75-9	L1
1,4-Dioxane (p-Dioxane)	**<2.1**	ug/L	5.0	2.1	1	05/22/24 11:13	05/23/24 11:42	123-91-1	
N-Nitrodimethylamine	**<5.8**	ug/L	10.1	5.8	1	05/22/24 11:13	05/23/24 11:42	4164-28-7	
Surrogates									
Nitrobenzene-d5 (S)	87	%	38-130		1	05/22/24 11:13	05/23/24 11:42	4165-60-0	
2-Fluorobiphenyl (S)	75	%	23-130		1	05/22/24 11:13	05/23/24 11:42	321-60-8	
Terphenyl-d14 (S)	114	%	52-136		1	05/22/24 11:13	05/23/24 11:42	1718-51-0	
Phenol-d6 (S)	34	%	11-130		1	05/22/24 11:13	05/23/24 11:42	13127-88-3	
2-Fluorophenol (S)	53	%	10-130		1	05/22/24 11:13	05/23/24 11:42	367-12-4	

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: EB-09 **Lab ID: 40278540083** Collected: 05/18/24 08:42 Received: 05/21/24 08:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV Low Volume	Analytical Method: EPA 8270E Preparation Method: EPA 3510 Pace Analytical Services - Green Bay								
Di-n-butylphthalate	**<1.1**	ug/L	4.5	1.1	1	05/22/24 11:13	05/23/24 12:04	84-74-2	
bis(2-Ethylhexyl)phthalate	**<1.9**	ug/L	4.5	1.9	1	05/22/24 11:13	05/23/24 12:04	117-81-7	
N-Nitrosodimethylamine	**<1.3**	ug/L	4.5	1.3	1	05/22/24 11:13	05/23/24 12:04	62-75-9	L1
1,4-Dioxane (p-Dioxane)	**<1.9**	ug/L	4.5	1.9	1	05/22/24 11:13	05/23/24 12:04	123-91-1	
N-Nitrodimethylamine	**<5.2**	ug/L	9.1	5.2	1	05/22/24 11:13	05/23/24 12:04	4164-28-7	
Surrogates									
Nitrobenzene-d5 (S)	82	%	38-130		1	05/22/24 11:13	05/23/24 12:04	4165-60-0	
2-Fluorobiphenyl (S)	64	%	23-130		1	05/22/24 11:13	05/23/24 12:04	321-60-8	
Terphenyl-d14 (S)	103	%	52-136		1	05/22/24 11:13	05/23/24 12:04	1718-51-0	
Phenol-d6 (S)	28	%	11-130		1	05/22/24 11:13	05/23/24 12:04	13127-88-3	
2-Fluorophenol (S)	41	%	10-130		1	05/22/24 11:13	05/23/24 12:04	367-12-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Sample: EB-10 **Lab ID: 40278540084** Collected: 05/18/24 17:13 Received: 05/21/24 08:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV Low Volume	Analytical Method: EPA 8270E Preparation Method: EPA 3510 Pace Analytical Services - Green Bay								
Di-n-butylphthalate	**<1.2**	ug/L	5.1	1.2	1	05/22/24 11:13	05/23/24 12:26	84-74-2	
bis(2-Ethylhexyl)phthalate	**<2.1**	ug/L	5.1	2.1	1	05/22/24 11:13	05/23/24 12:26	117-81-7	
N-Nitrosodimethylamine	**<1.5**	ug/L	5.1	1.5	1	05/22/24 11:13	05/23/24 12:26	62-75-9	L1
1,4-Dioxane (p-Dioxane)	**<2.1**	ug/L	5.1	2.1	1	05/22/24 11:13	05/23/24 12:26	123-91-1	
N-Nitrodimethylamine	**<5.8**	ug/L	10.1	5.8	1	05/22/24 11:13	05/23/24 12:26	4164-28-7	
Surrogates									
Nitrobenzene-d5 (S)	87	%	38-130		1	05/22/24 11:13	05/23/24 12:26	4165-60-0	
2-Fluorobiphenyl (S)	70	%	23-130		1	05/22/24 11:13	05/23/24 12:26	321-60-8	
Terphenyl-d14 (S)	111	%	52-136		1	05/22/24 11:13	05/23/24 12:26	1718-51-0	
Phenol-d6 (S)	35	%	11-130		1	05/22/24 11:13	05/23/24 12:26	13127-88-3	
2-Fluorophenol (S)	54	%	10-130		1	05/22/24 11:13	05/23/24 12:26	367-12-4	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

QC Batch: 475103
QC Batch Method: EPA 3546
Analysis Method: EPA 8270E
Analysis Description: 8270E Solid MSSV Microwave
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40278540001, 40278540002, 40278540003, 40278540004, 40278540005

METHOD BLANK: 2721060 Matrix: Solid
Associated Lab Samples: 40278540001, 40278540002, 40278540003, 40278540004, 40278540005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg	<90.5	167	90.5	05/24/24 13:43	
bis(2-Ethylhexyl)phthalate	ug/kg	<57.0	167	57.0	05/24/24 13:43	
Di-n-butylphthalate	ug/kg	<52.1	167	52.1	05/24/24 13:43	
N-Nitrodimethylamine	ug/kg	<81.1	167	81.1	05/24/24 13:43	
N-Nitrosodimethylamine	ug/kg	<39.2	167	39.2	05/24/24 13:43	
2,4,6-Tribromophenol (S)	%	111	10-142		05/24/24 13:43	
2-Fluorobiphenyl (S)	%	101	19-120		05/24/24 13:43	
2-Fluorophenol (S)	%	86	10-120		05/24/24 13:43	
Nitrobenzene-d5 (S)	%	93	16-120		05/24/24 13:43	
Phenol-d6 (S)	%	87	10-120		05/24/24 13:43	
Terphenyl-d14 (S)	%	103	25-127		05/24/24 13:43	

LABORATORY CONTROL SAMPLE: 2721061

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg		<90.4			
bis(2-Ethylhexyl)phthalate	ug/kg	1660	1480	89	70-130	
Di-n-butylphthalate	ug/kg	1660	1630	98	69-130	
N-Nitrodimethylamine	ug/kg	1660	1260	75	70-130	
N-Nitrosodimethylamine	ug/kg	1660	1460	88	37-130	
2,4,6-Tribromophenol (S)	%			112	10-142	
2-Fluorobiphenyl (S)	%			101	19-120	
2-Fluorophenol (S)	%			86	10-120	
Nitrobenzene-d5 (S)	%			94	16-120	
Phenol-d6 (S)	%			90	10-120	
Terphenyl-d14 (S)	%			103	25-127	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2721062 2721063

Parameter	Units	40278521006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/kg	<107			<107	<107					20	
bis(2-Ethylhexyl)phthalate	ug/kg	<0.067 mg/kg	1960	1970	1790	1690	91	86	45-130	6	27	
Di-n-butylphthalate	ug/kg	<0.061 mg/kg	1960	1970	1980	1840	101	94	46-130	7	26	
N-Nitrodimethylamine	ug/kg	<0.096 mg/kg	1960	1970	1530	1470	78	75	70-130	4	20	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2721062 2721063

Parameter	Units	40278521006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
N-Nitrosodimethylamine	ug/kg	<46.3	1960	1970	1840	1740	94	89	14-130	6	45	
2,4,6-Tribromophenol (S)	%						114	106	10-142			
2-Fluorobiphenyl (S)	%						101	98	19-120			
2-Fluorophenol (S)	%						89	85	10-120			
Nitrobenzene-d5 (S)	%						94	92	16-120			
Phenol-d6 (S)	%						89	86	10-120			
Terphenyl-d14 (S)	%						102	98	25-127			

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

QC Batch: 475338
QC Batch Method: EPA 3546
Analysis Method: EPA 8270E
Analysis Description: 8270E Solid MSSV Microwave
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40278540006, 40278540007, 40278540008, 40278540009, 40278540010, 40278540011, 40278540012, 40278540013, 40278540014, 40278540015, 40278540016, 40278540017, 40278540018, 40278540019, 40278540020, 40278540021, 40278540022, 40278540023, 40278540024, 40278540025

METHOD BLANK: 2722887 Matrix: Solid
Associated Lab Samples: 40278540006, 40278540007, 40278540008, 40278540009, 40278540010, 40278540011, 40278540012, 40278540013, 40278540014, 40278540015, 40278540016, 40278540017, 40278540018, 40278540019, 40278540020, 40278540021, 40278540022, 40278540023, 40278540024, 40278540025

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg	<90.5	167	90.5	05/29/24 15:21	
bis(2-Ethylhexyl)phthalate	ug/kg	<57.0	167	57.0	05/29/24 15:21	
Di-n-butylphthalate	ug/kg	<52.1	167	52.1	05/29/24 15:21	
N-Nitrodimethylamine	ug/kg	<81.1	167	81.1	05/29/24 15:21	
N-Nitrosodimethylamine	ug/kg	<39.2	167	39.2	05/29/24 15:21	
2,4,6-Tribromophenol (S)	%	111	10-142		05/29/24 15:21	
2-Fluorobiphenyl (S)	%	101	19-120		05/29/24 15:21	
2-Fluorophenol (S)	%	85	10-120		05/29/24 15:21	
Nitrobenzene-d5 (S)	%	92	16-120		05/29/24 15:21	
Phenol-d6 (S)	%	86	10-120		05/29/24 15:21	
Terphenyl-d14 (S)	%	103	25-127		05/29/24 15:21	

LABORATORY CONTROL SAMPLE: 2722888

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg		<90.5			
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1510	90	70-130	
Di-n-butylphthalate	ug/kg	1670	1760	106	69-130	
N-Nitrodimethylamine	ug/kg	1670	1400	84	70-130	
N-Nitrosodimethylamine	ug/kg	1670	1670	100	37-130	
2,4,6-Tribromophenol (S)	%			125	10-142	
2-Fluorobiphenyl (S)	%			110	19-120	
2-Fluorophenol (S)	%			95	10-120	
Nitrobenzene-d5 (S)	%			103	16-120	
Phenol-d6 (S)	%			96	10-120	
Terphenyl-d14 (S)	%			111	25-127	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2722889 2722890

Parameter	Units	40278540019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/kg	<90.6			<90.5	<90.5					20	
bis(2-Ethylhexyl)phthalate	ug/kg	<57.0	1670	1670	1400	1350	84	81	45-130	3	27	
Di-n-butylphthalate	ug/kg	<52.2	1670	1670	1660	1570	100	94	46-130	6	26	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2722889 2722890

Parameter	Units	40278540019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
N-Nitrodimethylamine	ug/kg	<81.2	1670	1670	1210	1170	73	70	70-130	4	20	
N-Nitrosodimethylamine	ug/kg	<39.3	1670	1670	1460	1400	88	84	14-130	4	45	
2,4,6-Tribromophenol (S)	%						116	109	10-142			
2-Fluorobiphenyl (S)	%						100	95	19-120			
2-Fluorophenol (S)	%						85	80	10-120			
Nitrobenzene-d5 (S)	%						91	90	16-120			
Phenol-d6 (S)	%						85	80	10-120			
Terphenyl-d14 (S)	%						99	97	25-127			

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

QC Batch: 475340
QC Batch Method: EPA 3546
Analysis Method: EPA 8270E
Analysis Description: 8270E Solid MSSV Microwave
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40278540026, 40278540027, 40278540028, 40278540029, 40278540030, 40278540031, 40278540032, 40278540033, 40278540034, 40278540035, 40278540036, 40278540037, 40278540038, 40278540039, 40278540040, 40278540041, 40278540042, 40278540043, 40278540044, 40278540045

METHOD BLANK: 2722895 Matrix: Solid
Associated Lab Samples: 40278540026, 40278540027, 40278540028, 40278540029, 40278540030, 40278540031, 40278540032, 40278540033, 40278540034, 40278540035, 40278540036, 40278540037, 40278540038, 40278540039, 40278540040, 40278540041, 40278540042, 40278540043, 40278540044, 40278540045

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg	<90.6	167	90.6	05/29/24 15:42	
bis(2-Ethylhexyl)phthalate	ug/kg	<57.0	167	57.0	05/29/24 15:42	
Di-n-butylphthalate	ug/kg	<52.2	167	52.2	05/29/24 15:42	
N-Nitrodimethylamine	ug/kg	<81.2	167	81.2	05/29/24 15:42	
N-Nitrosodimethylamine	ug/kg	<39.3	167	39.3	05/29/24 15:42	
2,4,6-Tribromophenol (S)	%	111	10-142		05/29/24 15:42	
2-Fluorobiphenyl (S)	%	101	19-120		05/29/24 15:42	
2-Fluorophenol (S)	%	85	10-120		05/29/24 15:42	
Nitrobenzene-d5 (S)	%	93	16-120		05/29/24 15:42	
Phenol-d6 (S)	%	87	10-120		05/29/24 15:42	
Terphenyl-d14 (S)	%	103	25-127		05/29/24 15:42	

LABORATORY CONTROL SAMPLE: 2722896

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg		<90.5			
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1390	83	70-130	
Di-n-butylphthalate	ug/kg	1670	1650	99	69-130	
N-Nitrodimethylamine	ug/kg	1670	1270	76	70-130	
N-Nitrosodimethylamine	ug/kg	1670	1570	94	37-130	
2,4,6-Tribromophenol (S)	%			118	10-142	
2-Fluorobiphenyl (S)	%			104	19-120	
2-Fluorophenol (S)	%			89	10-120	
Nitrobenzene-d5 (S)	%			96	16-120	
Phenol-d6 (S)	%			89	10-120	
Terphenyl-d14 (S)	%			102	25-127	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2722897 2722898

Parameter	Units	40278540038 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/kg	<90.5			<90.5	<90.4					20	
bis(2-Ethylhexyl)phthalate	ug/kg	<57.0	1670	1660	1430	1260	86	76	45-130	13	27	
Di-n-butylphthalate	ug/kg	<52.1	1670	1660	1650	1510	99	91	46-130	9	26	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2722897 2722898

Parameter	Units	40278540038 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
N-Nitrodimethylamine	ug/kg	<81.1	1670	1660	1230	1220	74	73	70-130	1	20	
N-Nitrosodimethylamine	ug/kg	<39.2	1670	1660	1440	1470	86	88	14-130	2	45	
2,4,6-Tribromophenol (S)	%						117	109	10-142			CH
2-Fluorobiphenyl (S)	%						101	92	19-120			
2-Fluorophenol (S)	%						82	82	10-120			
Nitrobenzene-d5 (S)	%						91	88	16-120			
Phenol-d6 (S)	%						86	83	10-120			
Terphenyl-d14 (S)	%						102	92	25-127			

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

QC Batch: 475483
QC Batch Method: EPA 3546
Analysis Method: EPA 8270E
Analysis Description: 8270E Solid MSSV Microwave
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40278540046, 40278540047, 40278540048, 40278540049, 40278540050

METHOD BLANK: 2723301 Matrix: Solid
Associated Lab Samples: 40278540046, 40278540047, 40278540048, 40278540049, 40278540050

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg	<90.5	167	90.5	05/29/24 16:03	
bis(2-Ethylhexyl)phthalate	ug/kg	<57.0	167	57.0	05/29/24 16:03	
Di-n-butylphthalate	ug/kg	<52.2	167	52.2	05/29/24 16:03	
N-Nitrodimethylamine	ug/kg	<81.2	167	81.2	05/29/24 16:03	
N-Nitrosodimethylamine	ug/kg	<39.3	167	39.3	05/29/24 16:03	
2,4,6-Tribromophenol (S)	%	111	10-142		05/29/24 16:03	
2-Fluorobiphenyl (S)	%	101	19-120		05/29/24 16:03	
2-Fluorophenol (S)	%	82	10-120		05/29/24 16:03	
Nitrobenzene-d5 (S)	%	90	16-120		05/29/24 16:03	
Phenol-d6 (S)	%	84	10-120		05/29/24 16:03	
Terphenyl-d14 (S)	%	106	25-127		05/29/24 16:03	

LABORATORY CONTROL SAMPLE: 2723302

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg		<90.4			
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1460	88	70-130	
Di-n-butylphthalate	ug/kg	1670	1740	105	69-130	
N-Nitrodimethylamine	ug/kg	1670	1250	75	70-130	
N-Nitrosodimethylamine	ug/kg	1670	1620	97	37-130	
2,4,6-Tribromophenol (S)	%			119	10-142	
2-Fluorobiphenyl (S)	%			107	19-120	
2-Fluorophenol (S)	%			91	10-120	
Nitrobenzene-d5 (S)	%			98	16-120	
Phenol-d6 (S)	%			92	10-120	
Terphenyl-d14 (S)	%			105	25-127	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2723303 2723304

Parameter	Units	40278671004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/kg	<94.0			<94.0	<93.8					20	
bis(2-Ethylhexyl)phthalate	ug/kg	<0.059 mg/kg	1730	1730	1200	1440	69	83	45-130	19	27	
Di-n-butylphthalate	ug/kg	<0.054 mg/kg	1730	1730	1370	1640	79	95	46-130	18	26	
N-Nitrodimethylamine	ug/kg	<0.084 mg/kg	1730	1730	983	1120	57	65	70-130	13	20	M1

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2723303 2723304

Parameter	Units	40278671004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
N-Nitrosodimethylamine	ug/kg	<40.7	1730	1730	1230	1320	71	76	14-130	7	45	
2,4,6-Tribromophenol (S)	%						89	111	10-142			
2-Fluorobiphenyl (S)	%						75	90	19-120			
2-Fluorophenol (S)	%						65	70	10-120			
Nitrobenzene-d5 (S)	%						69	79	16-120			
Phenol-d6 (S)	%						66	75	10-120			
Terphenyl-d14 (S)	%						77	93	25-127			

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REPORT OF LABORATORY ANALYSIS

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(920)469-2436

QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

QC Batch: 475611
QC Batch Method: EPA 3546
Analysis Method: EPA 8270E
Analysis Description: 8270E Solid MSSV Microwave
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40278540051, 40278540052, 40278540053, 40278540054, 40278540055, 40278540056, 40278540057, 40278540058, 40278540059, 40278540060, 40278540061, 40278540062, 40278540063, 40278540064, 40278540065, 40278540066, 40278540067, 40278540068, 40278540069, 40278540070

METHOD BLANK: 2724020 Matrix: Solid
Associated Lab Samples: 40278540051, 40278540052, 40278540053, 40278540054, 40278540055, 40278540056, 40278540057, 40278540058, 40278540059, 40278540060, 40278540061, 40278540062, 40278540063, 40278540064, 40278540065, 40278540066, 40278540067, 40278540068, 40278540069, 40278540070

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg	<90.6	167	90.6	05/30/24 19:52	
bis(2-Ethylhexyl)phthalate	ug/kg	<57.0	167	57.0	05/30/24 19:52	
Di-n-butylphthalate	ug/kg	<52.2	167	52.2	05/30/24 19:52	
N-Nitrodimethylamine	ug/kg	<81.2	167	81.2	05/30/24 19:52	
N-Nitrosodimethylamine	ug/kg	<39.3	167	39.3	05/30/24 19:52	
2,4,6-Tribromophenol (S)	%	107	10-142		05/30/24 19:52	CH
2-Fluorobiphenyl (S)	%	97	19-120		05/30/24 19:52	
2-Fluorophenol (S)	%	83	10-120		05/30/24 19:52	
Nitrobenzene-d5 (S)	%	90	16-120		05/30/24 19:52	
Phenol-d6 (S)	%	84	10-120		05/30/24 19:52	
Terphenyl-d14 (S)	%	100	25-127		05/30/24 19:52	

LABORATORY CONTROL SAMPLE: 2724021

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg		<90.5			
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1580	95	70-130	
Di-n-butylphthalate	ug/kg	1670	1860	112	69-130	
N-Nitrodimethylamine	ug/kg	1670	1420	85	70-130	
N-Nitrosodimethylamine	ug/kg	1670	1740	104	37-130	
2,4,6-Tribromophenol (S)	%			123	10-142	CH
2-Fluorobiphenyl (S)	%			109	19-120	
2-Fluorophenol (S)	%			98	10-120	
Nitrobenzene-d5 (S)	%			102	16-120	
Phenol-d6 (S)	%			97	10-120	
Terphenyl-d14 (S)	%			108	25-127	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2724022 2724023

Parameter	Units	40278540059 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/kg	<90.6			<90.4	<90.5					20	
bis(2-Ethylhexyl)phthalate	ug/kg	<57.0	1660	1670	1480	1490	89	90	45-130	1	27	
Di-n-butylphthalate	ug/kg	<52.2	1660	1670	1750	1770	105	106	46-130	1	26	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2724022 2724023

Parameter	Units	40278540059 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
N-Nitrodimethylamine	ug/kg	<81.2	1660	1670	1320	1260	80	76	70-130	5	20	
N-Nitrosodimethylamine	ug/kg	<39.3	1660	1670	1640	1580	99	95	14-130	4	45	
2,4,6-Tribromophenol (S)	%						114	112	10-142			CH
2-Fluorobiphenyl (S)	%						105	102	19-120			
2-Fluorophenol (S)	%						91	86	10-120			
Nitrobenzene-d5 (S)	%						98	92	16-120			
Phenol-d6 (S)	%						90	88	10-120			
Terphenyl-d14 (S)	%						102	101	25-127			

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

QC Batch: 475755
QC Batch Method: EPA 3546
Analysis Method: EPA 8270E
Analysis Description: 8270E Solid MSSV Microwave
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40278540071, 40278540072, 40278540073, 40278540074, 40278540075, 40278540076, 40278540077, 40278540078, 40278540079

METHOD BLANK: 2724598 Matrix: Solid
Associated Lab Samples: 40278540071, 40278540072, 40278540073, 40278540074, 40278540075, 40278540076, 40278540077, 40278540078, 40278540079

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg	<90.4	167	90.4	06/03/24 10:21	
bis(2-Ethylhexyl)phthalate	ug/kg	<56.9	167	56.9	06/03/24 10:21	
Di-n-butylphthalate	ug/kg	<52.1	167	52.1	06/03/24 10:21	
N-Nitrodimethylamine	ug/kg	<81.0	167	81.0	06/03/24 10:21	
N-Nitrosodimethylamine	ug/kg	<39.2	167	39.2	06/03/24 10:21	
2,4,6-Tribromophenol (S)	%	103	10-142		06/03/24 10:21	
2-Fluorobiphenyl (S)	%	85	19-120		06/03/24 10:21	
2-Fluorophenol (S)	%	61	10-120		06/03/24 10:21	
Nitrobenzene-d5 (S)	%	72	16-120		06/03/24 10:21	
Phenol-d6 (S)	%	67	10-120		06/03/24 10:21	
Terphenyl-d14 (S)	%	108	25-127		06/03/24 10:21	

LABORATORY CONTROL SAMPLE: 2724599

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/kg		<90.6			
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1560	94	70-130	
Di-n-butylphthalate	ug/kg	1670	1770	106	69-130	
N-Nitrodimethylamine	ug/kg	1670	1280	77	70-130	
N-Nitrosodimethylamine	ug/kg	1670	1680	101	37-130	
2,4,6-Tribromophenol (S)	%			123	10-142	
2-Fluorobiphenyl (S)	%			108	19-120	
2-Fluorophenol (S)	%			93	10-120	
Nitrobenzene-d5 (S)	%			100	16-120	
Phenol-d6 (S)	%			93	10-120	
Terphenyl-d14 (S)	%			109	25-127	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2724600 2724601

Parameter	Units	40278540078 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/kg	<90.5			<90.5	<90.4					20	
bis(2-Ethylhexyl)phthalate	ug/kg	<57.0	1670	1670	1410	1450	84	86	45-130	3	27	
Di-n-butylphthalate	ug/kg	<52.1	1670	1670	1600	1650	96	99	46-130	3	26	
N-Nitrodimethylamine	ug/kg	<81.1	1670	1670	1030	1150	62	69	70-130	11	20	M1
N-Nitrosodimethylamine	ug/kg	<39.2	1670	1670	1120	1350	67	81	14-130	19	45	

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2724600 2724601

Parameter	Units	40278540078 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
2,4,6-Tribromophenol (S)	%						112	111	10-142			
2-Fluorobiphenyl (S)	%						94	98	19-120			
2-Fluorophenol (S)	%						67	78	10-120			
Nitrobenzene-d5 (S)	%						80	88	16-120			
Phenol-d6 (S)	%						73	80	10-120			
Terphenyl-d14 (S)	%						95	97	25-127			

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QUALITY CONTROL DATA

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

QC Batch: 475007
QC Batch Method: EPA 3510
Analysis Method: EPA 8270E
Analysis Description: 8270E Water MSSV Low Volume
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40278540080, 40278540081, 40278540082, 40278540083, 40278540084

METHOD BLANK: 2720609 Matrix: Water
Associated Lab Samples: 40278540080, 40278540081, 40278540082, 40278540083, 40278540084

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	<2.1	5.0	2.1	05/23/24 08:46	
bis(2-Ethylhexyl)phthalate	ug/L	<2.1	5.0	2.1	05/23/24 08:46	
Di-n-butylphthalate	ug/L	<1.2	5.0	1.2	05/23/24 08:46	
N-Nitrodimethylamine	ug/L	<5.8	10.0	5.8	05/23/24 08:46	
N-Nitrosodimethylamine	ug/L	<1.5	5.0	1.5	05/23/24 08:46	
2,4,6-Tribromophenol (S)	%	83	10-141		05/23/24 08:46	
2-Fluorobiphenyl (S)	%	69	23-130		05/23/24 08:46	
2-Fluorophenol (S)	%	42	10-130		05/23/24 08:46	
Nitrobenzene-d5 (S)	%	89	38-130		05/23/24 08:46	
Phenol-d6 (S)	%	35	11-130		05/23/24 08:46	
Terphenyl-d14 (S)	%	116	52-136		05/23/24 08:46	

LABORATORY CONTROL SAMPLE & LCSD: 2720610 2720611

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
bis(2-Ethylhexyl)phthalate	ug/L	50	37.8	37.7	76	75	50-130	0	20	
Di-n-butylphthalate	ug/L	50	45.5	46.0	91	92	60-130	1	20	
N-Nitrodimethylamine	ug/L	500	399	424	80	85	70-130	6	20	
N-Nitrosodimethylamine	ug/L	50	76.4	71.0	153	142	30-130	7	20	L1
2,4,6-Tribromophenol (S)	%				87	111	10-141			
2-Fluorobiphenyl (S)	%				75	77	23-130			
2-Fluorophenol (S)	%				47	60	10-130			
Nitrobenzene-d5 (S)	%				89	94	38-130			
Phenol-d6 (S)	%				36	42	11-130			
Terphenyl-d14 (S)	%				110	110	52-136			

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QUALIFIERS

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 475059

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
H3	Sample was received or analysis requested beyond the recognized method holding time.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40278540001	**300-001-GSV-76.6_20240514**	EPA 3546	475103	EPA 8270E	475186
40278540002	**300-001-GSV-76.9_20240514**	EPA 3546	475103	EPA 8270E	475186
40278540003	**300-001-GSV-77.55_20240514**	EPA 3546	475103	EPA 8270E	475186
40278540004	**300-001-GSV-77.77_20240514**	EPA 3546	475103	EPA 8270E	475186
40278540005	**300-001-GSV-96.1_20240514**	EPA 3546	475103	EPA 8270E	475186
40278540006	**300-001-GSV-104.4_20240515**	EPA 3546	475338	EPA 8270E	475421
40278540007	**300-001-GSV-106.5_20240515**	EPA 3546	475338	EPA 8270E	475421
40278540008	**300-001-GSV-107.75_20240515**	EPA 3546	475338	EPA 8270E	475421
40278540009	**300-001-GSV-108_20240515**	EPA 3546	475338	EPA 8270E	475421
40278540010	**300-001-GSV-113.3_20240515**	EPA 3546	475338	EPA 8270E	475421
40278540011	**300-001-GSV-112.9_20240515**	EPA 3546	475338	EPA 8270E	475421
40278540012	**300-001-GSV-114.95_20240515**	EPA 3546	475338	EPA 8270E	475421
40278540013	**300-001-GSV-117.4_20240515**	EPA 3546	475338	EPA 8270E	475421
40278540014	**300-001-GSV-119.3_20240515**	EPA 3546	475338	EPA 8270E	475421
40278540015	**300-001-GSV-120.55_20240515**	EPA 3546	475338	EPA 8270E	475421
40278540016	**300-001-GSV-124_20240515**	EPA 3546	475338	EPA 8270E	475421
40278540017	**300-001-GSV-124.7_20240515**	EPA 3546	475338	EPA 8270E	475421
40278540018	**300-001-GSV-126_20240515**	EPA 3546	475338	EPA 8270E	475421
40278540019	**300-001-GSV-128.2_20240515**	EPA 3546	475338	EPA 8270E	475421
40278540020	**300-001-GSV-128.2-DUP_20240515**	EPA 3546	475338	EPA 8270E	475421
40278540021	**300-001-GSV-129.6_20240515**	EPA 3546	475338	EPA 8270E	475421
40278540022	**300-001-GSV-134.8_20240515**	EPA 3546	475338	EPA 8270E	475421
40278540023	**300-001-GSV-136.5_20240515**	EPA 3546	475338	EPA 8270E	475421
40278540024	**300-001-GSV-139_20240515**	EPA 3546	475338	EPA 8270E	475421
40278540025	**300-001-GSV-139.6_20240515**	EPA 3546	475338	EPA 8270E	475421
40278540026	**300-001-GSV-140.5_20240515**	EPA 3546	475340	EPA 8270E	475442
40278540027	**300-001-GSV-144.3_20240515**	EPA 3546	475340	EPA 8270E	475442
40278540028	**300-001-GSV-146.05_20240515**	EPA 3546	475340	EPA 8270E	475442
40278540029	**300-001-GSV-148_20240516**	EPA 3546	475340	EPA 8270E	475442
40278540030	**300-001-GSV-149.7_20240516**	EPA 3546	475340	EPA 8270E	475442
40278540031	**300-001-GSV-158.75_20240516**	EPA 3546	475340	EPA 8270E	475442
40278540032	**300-001-GSV-162.4_20240516**	EPA 3546	475340	EPA 8270E	475442
40278540033	**300-001-GSV-162.7_20240516**	EPA 3546	475340	EPA 8270E	475442
40278540034	**300-001-GSV-165.35_20240516**	EPA 3546	475340	EPA 8270E	475442
40278540035	**300-001-GSV-168.05_20240517**	EPA 3546	475340	EPA 8270E	475442
40278540036	**300-001-GSV-170.3_20240517**	EPA 3546	475340	EPA 8270E	475442
40278540037	**300-001-GSV-171.4_20240517**	EPA 3546	475340	EPA 8270E	475442
40278540038	**300-001-GSV-173.2_20240517**	EPA 3546	475340	EPA 8270E	475442
40278540039	**300-001-GSV-173.2-DUP_20240517**	EPA 3546	475340	EPA 8270E	475442
40278540040	**300-001-GSV-174.05_20240517**	EPA 3546	475340	EPA 8270E	475442
40278540041	**300-001-GSV-181.5_20240517**	EPA 3546	475340	EPA 8270E	475442
40278540042	**300-001-GSV-182.8_20240517**	EPA 3546	475340	EPA 8270E	475442
40278540043	**300-001-GSV-184.9_20240517**	EPA 3546	475340	EPA 8270E	475442
40278540044	**300-001-GSV-185.85_20240517**	EPA 3546	475340	EPA 8270E	475442
40278540045	**300-001-GSV-189.45_20240517**	EPA 3546	475340	EPA 8270E	475442
40278540046	**300-001-GSV-189.55_20240517**	EPA 3546	475483	EPA 8270E	475540

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHITE SANDS 6119.00.020
Pace Project No.: 40278540

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40278540047	**300-001-GSV-189.9_20240517**	EPA 3546	475483	EPA 8270E	475540
40278540048	**300-001-GSV-194.9_20240517**	EPA 3546	475483	EPA 8270E	475540
40278540049	**300-001-GSV-195.5_20240517**	EPA 3546	475483	EPA 8270E	475540
40278540050	**300-001-GSV-196.1_20240517**	EPA 3546	475483	EPA 8270E	475540
40278540051	**300-001-GSV-197.55_20240517**	EPA 3546	475611	EPA 8270E	475683
40278540052	**300-001-GSV-198.4_20240517**	EPA 3546	475611	EPA 8270E	475683
40278540053	**300-001-GSV-201.4_20240517**	EPA 3546	475611	EPA 8270E	475683
40278540054	**300-001-GSV-204.6_20240517**	EPA 3546	475611	EPA 8270E	475683
40278540055	**300-001-GSV-205.9_20240517**	EPA 3546	475611	EPA 8270E	475683
40278540056	**300-001-GSV-209.45_20240518**	EPA 3546	475611	EPA 8270E	475683
40278540057	**300-001-GSV-210.65_20240518**	EPA 3546	475611	EPA 8270E	475683
40278540058	**300-001-GSV-211.65_20240518**	EPA 3546	475611	EPA 8270E	475683
40278540059	**300-001-GSV-212.8_20240518**	EPA 3546	475611	EPA 8270E	475683
40278540060	**300-001-GSV-212.8-DUP_20240518**	EPA 3546	475611	EPA 8270E	475683
40278540061	**300-001-GSV-214.85_20240518**	EPA 3546	475611	EPA 8270E	475683
40278540062	**300-001-GSV-216.9_20240518**	EPA 3546	475611	EPA 8270E	475683
40278540063	**300-001-GSV-220.35_20240518**	EPA 3546	475611	EPA 8270E	475683
40278540064	**300-001-GSV-220.9_20240518**	EPA 3546	475611	EPA 8270E	475683
40278540065	**300-001-GSV-224.4_20240518**	EPA 3546	475611	EPA 8270E	475683
40278540066	**300-001-GSV-225.6_20240518**	EPA 3546	475611	EPA 8270E	475683
40278540067	**300-001-GSV-226.55_20240518**	EPA 3546	475611	EPA 8270E	475683
40278540068	**300-001-GSV-230.05_20240518**	EPA 3546	475611	EPA 8270E	475683
40278540069	**300-001-GSV-230.75_20240518**	EPA 3546	475611	EPA 8270E	475683
40278540070	**300-001-GSV-233.25_20240518**	EPA 3546	475611	EPA 8270E	475683
40278540071	**300-001-GSV-234.44_20240518**	EPA 3546	475755	EPA 8270E	475798
40278540072	**300-001-GSV-236.25_20240518**	EPA 3546	475755	EPA 8270E	475798
40278540073	**300-001-GSV-238.1_20240518**	EPA 3546	475755	EPA 8270E	475798
40278540074	**300-001-GSV-240_20240518**	EPA 3546	475755	EPA 8270E	475798
40278540075	**300-001-GSV-240.3_20240518**	EPA 3546	475755	EPA 8270E	475798
40278540076	**300-001-GSV-249.5_20240518**	EPA 3546	475755	EPA 8270E	475798
40278540077	**300-001-GSV-250.3_20240518**	EPA 3546	475755	EPA 8270E	475798
40278540078	**300-001-GSV-251.8_20240518**	EPA 3546	475755	EPA 8270E	475798
40278540079	**300-001-GSV-251.8-DUP_20240518**	EPA 3546	475755	EPA 8270E	475798
40278540080	**EB-06**	EPA 3510	475007	EPA 8270E	475059
40278540081	**EB-07**	EPA 3510	475007	EPA 8270E	475059
40278540082	**EB-08**	EPA 3510	475007	EPA 8270E	475059
40278540083	**EB-09**	EPA 3510	475007	EPA 8270E	475059
40278540084	**EB-10**	EPA 3510	475007	EPA 8270E	475059

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SANBORN HEAD

CHAIN OF CUSTODY FORM

Client Name/Address:	Project ID:	Analyses Required
Sanborn Head & Associates 6 Bedford Farms Drive, Suite 201 Bedford, NH 03110	6119.00.020	
Project Manager:	**Phone Number:**	
Jessica Bulova	+1 802 279 7698	
Sampler:	**Fax Number:**	
Erica Bosse		

Lab ID	Sample No.	Sample Description	Sample Matrix	Rock Mass (g)	Container Type	# of Containers	Sample Date/Time	Preservative	SVOCs ECD			Comments
001	SVOC-0102	300-001-GSV-76.6-SVOC_20250514	Rock	42.63	Amber VOA	1	5/14/24 13:05	NA	X			
002	SVOC-0103	300-001-GSV-76.9-SVOC_20250514	Rock	45.42	Amber VOA	1	5/14/24 13:05	NA	X			
003	SVOC-0104	300-001-GSV-77.55-SVOC_20250514	Rock	37.32	Amber VOA	1	5/14/24 13:52	NA	X			
004	SVOC-0105	300-001-GSV-77.77-SVOC_20250514	Rock	41.18	Amber VOA	1	5/14/24 13:52	NA	X			
005	SVOC-0106	300-001-GSV-96.1-SVOC_20250514	Rock	47.72	Amber VOA	1	5/14/24 16:30	NA	X			
006	SVOC-0107	300-001-GSV-104.4-SVOC_20250515	Rock	40.31	Amber VOA	1	5/15/24 9:53	NA	X			
007	SVOC-0108	300-001-GSV-106.5-SVOC_20250515	Rock	46.40	Amber VOA	1	5/15/24 9:55	NA	X			
008	SVOC-0109	300-001-GSV-107.75-SVOC_20250515	Rock	40.09	Amber VOA	1	5/15/24 10:30	NA	X			
009	SVOC-0110	300-001-GSV-108-SVOC_20250515	Rock	43.46	Amber VOA	1	5/15/24 10:32	NA	X			
010	SVOC-0111	300-001-GSV-113.3-SVOC_20250515	Rock	40.69	Amber VOA	1	5/15/24 10:34	NA	X			
011	SVOC-0112	300-001-GSV-112.9-SVOC_20250515	Rock	44.64	Amber VOA	1	5/15/24 11:03	NA	X			
012	SVOC-0113	300-001-GSV-114.95-SVOC_20250515	Rock	44.55	Amber VOA	1	5/15/24 11:05	NA	X			
013	SVOC-0114	300-001-GSV-117.4-SVOC_20250515	Rock	39.71	Amber VOA	1	5/15/24 11:45	NA	X			
014	SVOC-0115	300-001-GSV-119.3-SVOC_20250515	Rock	44.92	Amber VOA	1	5/15/24 11:46	NA	X			
015	SVOC-0116	300-001-GSV-120.55-SVOC_20250515	Rock	37.65	Amber VOA	1	5/15/24 11:47	NA	X			
016	SVOC-0117	300-001-GSV-124-SVOC_20250515	Rock	35.76	Amber VOA	1	5/15/24 12:11	NA	X			
017	SVOC-0118	300-001-GSV-124.7-SVOC_20250515	Rock	39.51	Amber VOA	1	5/15/24 12:12	NA	X			
018	SVOC-0119	300-001-GSV-126-SVOC_20250515	Rock	40.71	Amber VOA	1	5/15/24 12:13	NA	X			
019	SVOC-0120	300-001-GSV-128.2-SVOC_20250515	Rock	34.08	Amber VOA	1	5/15/24 13:20	NA	X			
020	SVOC-0121	300-001-GSV-128.2-SVOC-DUP_20250515	Rock	31.81	Amber VOA	1	5/15/24 13:20	NA	X			
019	SVOC-0122	300-001-GSV-128.2-SVOC-MS_20250515	Rock	34.82	Amber VOA	1	5/15/24 13:20	NA	X			
019	SVOC-0123	300-001-GSV-128.2-SVOC-MSD_20250515	Rock	40.13	Amber VOA	1	5/15/24 13:20	NA	X			

Relinquished by: Erica Bosse	Date: 5.20.24	Time: 0900	Received by: Fed-Ex	Date: 5.20.24	Time: 0900
Relinquished by: Fedex	Date: 5/21/24	Time: 0855	Received by:	Date: 5/21/24	Time: 0855
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

SANBORN || HEAD

CHAIN OF CUSTODY FORM

Client Name/Address:	Project ID:	Analyses Required
Sanborn Head & Associates 6 Bedford Farms Drive, Suite 201 Bedford, NH 03110	6119.00.020	
Project Manager:	**Phone Number:**	
Jessica Bulova	+1 802 279 7698	
Sampler:	**Fax Number:**	
Erica Bosse		

Lab ID	Sample No.	Sample Description	Sample Matrix	Rock Mass (g)	Container Type	# of Containers	Sample Date/Time	Preservative	SVOCs ECD			Comments
021	SVOC-0124	300-001-GSV-129.6-SVOC_20250515	Rock	35.85	Amber VOA	1	5/15/24 13:21	NA	X			
022	SVOC-0125	300-001-GSV-134.8-SVOC_20250515	Rock	40.33	Amber VOA	1	5/15/24 13:55	NA	X			
023	SVOC-0126	300-001-GSV-136.5-SVOC_20250515	Rock	37.20	Amber VOA	1	5/15/24 13:57	NA	X			
024	SVOC-0127	300-001-GSV-139-SVOC_20250515	Rock	39.19	Amber VOA	1	5/15/24 14:57	NA	X			
025	SVOC-0128	300-001-GSV-139.6-SVOC_20250515	Rock	37.09	Amber VOA	1	5/15/24 14:58	NA	X			
026	SVOC-0129	300-001-GSV-140.5-SVOC_20250515	Rock	32.31	Amber VOA	1	5/15/24 14:59	NA	X			
027	SVOC-0130	300-001-GSV-144.3-SVOC_20250515	Rock	46.26	Amber VOA	1	5/15/24 16:50	NA	X			
028	SVOC-0131	300-001-GSV-146.05-SVOC_20250515	Rock	37.45	Amber VOA	1	5/15/24 16:51	NA	X			
029	SVOC-0132	300-001-GSV-148-SVOC_20250516	Rock	45.28	Amber VOA	1	5/16/24 9:33	NA	X			
030	SVOC-0133	300-001-GSV-149.7-SVOC_20250516	Rock	41.17	Amber VOA	1	5/16/24 10:35	NA	X			
031	SVOC-0134	300-001-GSV-158.75-SVOC_20250516	Rock	31.44	Amber VOA	1	5/16/24 15:12	NA	X			
032	SVOC-0135	300-001-GSV-162.4-SVOC_20250516	Rock	38.92	Amber VOA	1	5/16/24 15:38	NA	X			
033	SVOC-0136	300-001-GSV-162.7-SVOC_20250516	Rock	37.99	Amber VOA	1	5/16/24 15:39	NA	X			
034	SVOC-0137	300-001-GSV-165.35-SVOC_20250516	Rock	36.46	Amber VOA	1	5/16/24 15:40	NA	X			
035	SVOC-0138	300-001-GSV-168.05-SVOC_20250517	Rock	39.58	Amber VOA	1	5/17/24 9:20	NA	X			
036	SVOC-0139	300-001-GSV-170.3-SVOC_20250517	Rock	38.32	Amber VOA	1	5/17/24 9:21	NA	X			
037	SVOC-0140	300-001-GSV-171.4-SVOC_20250517	Rock	41.30	Amber VOA	1	5/17/24 9:22	NA	X			
038	SVOC-0141	300-001-GSV-173.2-SVOC_20250517	Rock	37.69	Amber VOA	1	5/17/24 10:15	NA	X			
039	SVOC-0142	300-001-GSV-173.2-DUP-SVOC_20250517	Rock	32.11	Amber VOA	1	5/17/24 10:15	NA	X			
035	SVOC-0143	300-001-GSV-173.2-MS-SVOC_20250517	Rock	41.95	Amber VOA	1	5/17/24 10:15	NA	X			
038	SVOC-0144	300-001-GSV-173.2-MSD-SVOC_20250517	Rock	36.80	Amber VOA	1	5/17/24 10:15	NA	X			
040	SVOC-0145	300-001-GSV-174.05-SVOC_20250517	Rock	38.28	Amber VOA	1	5/17/24 10:17	NA	X			
041	SVOC-0146	300-001-GSV-181.5-SVOC_20250517	Rock	35.74	Amber VOA	1	5/17/24 11:15	NA	X			
042	SVOC-0147	300-001-GSV-182.8-SVOC_20250517	Rock	38.44	Amber VOA	1	5/17/24 12:11	NA	X			
043	SVOC-0148	300-001-GSV-184.9-SVOC_20250517	Rock	37.16	Amber VOA	1	5/17/24 12:12	NA	X			
044	SVOC-0149	300-001-GSV-185.85-SVOC_20250517	Rock	34.98	Amber VOA	1	5/17/24 12:13	NA	X			
045	SVOC-0150	300-001-GSV-189.45-SVOC_20250517	Rock	34.58	Amber VOA	1	5/17/24 14:20	NA	X			
046	SVOC-0151	300-001-GSV-189.55-SVOC_20250517	Rock	35.03	Amber VOA	1	5/17/24 14:21	NA	X			
047	SVOC-0152	300-001-GSV-189.9-SVOC_20250517	Rock	34.71	Amber VOA	1	5/17/24 14:22	NA	X			
048	SVOC-0153	300-001-GSV-194.9-SVOC_20250517	Rock	37.49	Amber VOA	1	5/17/24 15:15	NA	X			
049	SVOC-0154	300-001-GSV-195.5-SVOC_20250517	Rock	38.41	Amber VOA	1	5/17/24 15:16	NA	X			
050	SVOC-0155	300-001-GSV-196.1-SVOC_20250517	Rock	33.28	Amber VOA	1	5/17/24 15:17	NA	X			

Relinquished by: Erica Bosse	Date: 5.20.24 Time: 0900	Received by: FedEx	Date: 5.20.24 Time: 0900
Relinquished by: Fedex	Date: 5/21/24 Time: 0855	Received by:	Date: 5/21/24 Time: 0855
Relinquished by:	Date: Time:	Received by:	Date: Time:

SANBORN HEAD

CHAIN OF CUSTODY FORM

Client Name/Address:	Project ID:
Sanborn Head & Associates 6 Bedford Farms Drive, Suite 201 Bedford, NH 03110	6119.00.020
Project Manager:	**Phone Number:**
Jessica Bulova	+1 802 279 7698
Sampler:	**Fax Number:**
Erica Bosse	

Lab ID	Sample No.	Sample Description	Sample Matrix	Rock Mass (g)	Container Type	# of Containers	Sample Date/Time	Preservative	Analyses Required: SVOCs ECD			Comments
051	SVOC-0156	300-001-GSV-197.55-SVOC_20250517	Rock	39.24	Amber VOA	1	5/17/24 16:02	NA	X			
052	SVOC-0157	300-001-GSV-198.4-SVOC_20250517	Rock	38.51	Amber VOA	1	5/17/24 16:03	NA	X			
053	SVOC-0158	300-001-GSV-201.4-SVOC_20250517	Rock	44.18	Amber VOA	1	5/17/24 16:04	NA	X			
054	SVOC-0159	300-001-GSV-204.6-SVOC_20250517	Rock	41.32	Amber VOA	1	5/17/24 16:50	NA	X			
055	SVOC-0160	300-001-GSV-205.9-SVOC_20250517	Rock	45.38	Amber VOA	1	5/17/24 16:51	NA	X			
056	SVOC-0161	300-001-GSV-209.45-SVOC_20250518	Rock	41.47	Amber VOA	1	5/18/24 8:25	NA	X			
057	SVOC-0162	300-001-GSV-210.65-SVOC_20250518	Rock	43.67	Amber VOA	1	5/18/24 8:26	NA	X			
058	SVOC-0163	300-001-GSV-211.65-SVOC_20250518	Rock	41.73	Amber VOA	1	5/18/24 8:27	NA	X			
059	SVOC-0164	300-001-GSV-212.8-SVOC_20250518	Rock	31.21	Amber VOA	1	5/18/24 8:50	NA	X			
060	SVOC-0165	300-001-GSV-212.8-SVOC-DUP_20250518	Rock	32.14	Amber VOA	1	5/18/24 8:50	NA	X			
059	SVOC-0166	300-001-GSV-212.8-SVOC-MS_20250518	Rock	30.01	Amber VOA	1	5/18/24 8:50	NA	X			
059	SVOC-0167	300-001-GSV-212.8-SVOC-MSD_20250518	Rock	31.48	Amber VOA	1	5/18/24 8:50	NA	X			
061	SVOC-0168	300-001-GSV-214.85-SVOC_20250518	Rock	37.58	Amber VOA	1	5/18/24 8:51	NA	X			
062	SVOC-0169	300-001-GSV-216.9-SVOC_20250518	Rock	38.19	Amber VOA	1	5/18/24 9:15	NA	X			
063	SVOC-0170	300-001-GSV-220.35-SVOC_20250518	Rock	45.6	Amber VOA	1	5/18/24 9:51	NA	X			
064	SVOC-0171	300-001-GSV-220.9-SVOC_20250518	Rock	43.26	Amber VOA	1	5/18/24 10:32	NA	X			
065	SVOC-0172	300-001-GSV-224.4-SVOC_20250518	Rock	47.80	Amber VOA	1	5/18/24 11:05	NA	X			
066	SVOC-0173	300-001-GSV-225.6-SVOC_20250518	Rock	45.62	Amber VOA	1	5/18/24 11:06	NA	X			
067	SVOC-0174	300-001-GSV-226.55-SVOC_20250518	Rock	44.69	Amber VOA	1	5/18/24 11:07	NA	X			
068	SVOC-0175	300-001-GSV-230.05-SVOC_20250518	Rock	40.58	Amber VOA	1	5/18/24 12:15	NA	X			
069	SVOC-0176	300-001-GSV-230.75-SVOC_20250518	Rock	41.42	Amber VOA	1	5/18/24 12:16	NA	X			
070	SVOC-0177	300-001-GSV-233.25-SVOC_20250518	Rock	40.59	Amber VOA	1	5/18/24 13:25	NA	X			
071	SVOC-0178	300-001-GSV-234.4-SVOC_20250518	Rock	43.44	Amber VOA	1	5/18/24 13:26	NA	X			
072	SVOC-0179	300-001-GSV-236.25-SVOC_20250518	Rock	39.88	Amber VOA	1	5/18/24 13:27	NA	X			
073	SVOC-0180	300-001-GSV-238.1-SVOC_20250518	Rock	45.43	Amber VOA	1	5/18/24 14:32	NA	X			
074	SVOC-0181	300-001-GSV-240-SVOC_20250518	Rock	37.76	Amber VOA	1	5/18/24 14:33	NA	X			
075	SVOC-0182	300-001-GSV-240.3-SVOC_20250518	Rock	37.11	Amber VOA	1	5/18/24 14:34	NA	X			
076	SVOC-0183	300-001-GSV-249.5-SVOC_20250518	Rock	43.96	Amber VOA	1	5/18/24 16:55	NA	X			
077	SVOC-0184	300-001-GSV-250.3-SVOC_20250518	Rock	39.83	Amber VOA	1	5/18/24 16:56	NA	X			
078	SVOC-0185	300-001-GSV-251.8-SVOC_20250518	Rock	32.45	Amber VOA	1	5/18/24 16:57	NA	X			
079	SVOC-0186	300-001-GSV-251.8-SVOC-DUP_20250518	Rock	33.01	Amber VOA	1	5/18/24 16:57	NA	X			
078	SVOC-0187	300-001-GSV-251.8-SVOC-MS_20250518	Rock	40.18	Amber VOA	1	5/18/24 16:57	NA	X			

Relinquished by: Erica Bosse	Date: 5.20.24	Time: 0900	Received by: Fed-Ex	Date: 5.20.24	Time: 0900
Relinquished by: Feeler	Date: 5/21/24	Time: 0855	Received by:	Date: 5/21/24	Time: 0858
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

SANBORN HEAD

CHAIN OF CUSTODY FORM

Client Name/Address:	Project ID:	Analyses Required
Sanborn Head & Associates 6 Bedford Farms Drive, Suite 201 Bedford, NH 03110	6119.00.020	
Project Manager:	**Phone Number:**	
Jessica Bulova	+1 802 279 7698	
Sampler:	**Fax Number:**	
Erica Bosse		

Lab ID	Sample No.	Sample Description	Sample Matrix	Rock Mass (g)	Container Type	# of Containers	Sample Date/Time	Preservative	SVOCs ECD			Comments
078	SVOC-0188	300-001-GSV-251.8-SVOC-MSD_20250518	Rock	36.75	Amber VOA	1	5/18/24 16:57	NA	X			
080	SVOC-0007	EB-06	Lab DI	NA	Amber 100mL	1	5/14/24 10:49	NA	X			
081	SVOC-0095	EB-07	Lab DI	NA	Amber 100mL	1	5/15/24 13:31	NA	X			
082	SVOC-0096	EB-08	Lab DI	NA	Amber 100mL	1	5/17/24 9:44	NA	X			
083	SVOC-0097	EB-09	Lab DI	NA	Amber 100mL	1	5/18/24 8:42	NA	X			
084	SVOC-0098	EB-10	Lab DI	NA	Amber 100mL	1	5/18/24 17:13	NA	X			

Relinquished by: Erica Bosse	Date: 5.20.24	Time: 0900	Received by: Fed-Ex	Date: 5.20.24	Time: 0900
Relinquished by: Fedex	Date: 5/21/24	Time: 0855	Received by:	Date: 5/21/24	Time: 0855
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

Sample Preservation Receipt Form

Client Name: Sanborn Project # 40278540

All containers needing preservation have been checked and noted below: ☐Yes ☐No ☑N/A Initial when completed: Date/ Time.

Lab Lot# of pH paper: Lab Std #ID of preservation (if pH adjusted):

Pace Lab #	Glass							Plastic						Vials						Jars				General				VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2							
001																																		2.5 / 5
002																																		2.5 / 5
003																																		2.5 / 5
004																																		2.5 / 5
005																																		2.5 / 5
006																																		2.5 / 5
007																																		2.5 / 5
008																																		2.5 / 5
009																																		2.5 / 5
010																																		2.5 / 5
011																																		2.5 / 5
012																																		2.5 / 5
013																																		2.5 / 5
014																																		2.5 / 5
015																																		2.5 / 5
016																																		2.5 / 5
017																																		2.5 / 5
018																																		2.5 / 5
019																3																		2.5 / 5
020																																		2.5 / 5

Exceptions to preservation check VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other_____ Headspace in VOA Vials (>6mm): ☐Yes ☐No ☑N/A *If yes look in headspace column

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	VG9C	40 mL clear ascorbic w/ HCl	JGFU	4 oz amber jar unpres
BG1U	1 liter clear glass	BP3U	250 mL plastic unpres	DG9T	40 mL amber Na Thio	JG9U	9 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP3B	250 mL plastic NaOH	VG9U	40 mL clear vial unpres	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9H	40 mL clear vial HCL	WPFU	4 oz plastic jar unpres
AG5U	100 mL amber glass unpres	BP3S	250 mL plastic H2SO4	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG2S	500 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH + Zn	VG9D	40 mL clear vial DI	ZPLC	ziploc bag
BG3U	250 mL clear glass unpres					GN 1	
						GN 2	

Page 1 of 5

Sample Preservation Receipt Form

Client Name: Sunbarn Project #: 40278540

	Glass							Plastic						Vials						Jars				General								
Pace Lab #	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
021																																		2.5 / 5
022																																		2.5 / 5
023																																		2.5 / 5
024																																		2.5 / 5
025																																		2.5 / 5
026																																		2.5 / 5
027																																		2.5 / 5
028																																		2.5 / 5
029																																		2.5 / 5
030																																		2.5 / 5
031																																		2.5 / 5
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034																																		2.5 / 5
035																																		2.5 / 5
036																																		2.5 / 5
037																																		2.5 / 5
038																3																		2.5 / 5
039																																		2.5 / 5
040																																		2.5 / 5
041																																		2.5 / 5
042																																		2.5 / 5
043																																		2.5 / 5
044																																		2.5 / 5
045																																		2.5 / 5
046																																		2.5 / 5
047																																		2.5 / 5
048																																		2.5 / 5

Sample Preservation Receipt Form

Client Name: Sanborn Project #: 40278540

Pace Lab #	Glass							Plastic						Vials						Jars				General				VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2							
049																3																		2.5 / 5
050																																		2.5 / 5
051																																		2.5 / 5
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068																																		2.5 / 5
069																																		2.5 / 5
070																																		2.5 / 5
071																																		2.5 / 5
072																																		2.5 / 5
073																																		2 5 / 5
074																																		2.5 / 5
075																																		2.5 / 5
076																																		2.5 / 5

Page 3 of 5

Sample Preservation Receipt Form

Client Name: Sanborn Project #: 40278540

Pace Lab #	Glass							Plastic						Vials						Jars				General				VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2							
077																1																		2.5 / 5
078																3																		2.5 / 5
079																1																		2.5 / 5
080					1																													2.5 / 5
081					1																													2.5 / 5
082					1																													2.5 / 5
083					1																													2.5 / 5
084					1																													2.5 / 5
085																																		2.5 / 5
086																																		2.5 / 5
087																																		2.5 / 5
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																																		2.5 / 5
																																		2.5 / 5

5/21/24 SG

Sample Condition Upon Receipt Form (SCUR)

Project #: WO#: 40278540

Client Name: Sanborn

Courier: ☐ CS Logistics ☑ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco ☐ Client ☐ Pace Other:

Tracking #: 7487147 5814

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Packing Material: ☑ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other

Thermometer Used SR - 139 **Type of Ice:** (Wet) Blue Dry None ☐ Meltwater Only

Cooler Temperature Uncorr: 0.5 /Corr. 1.0

Temp Blank Present: ☐ yes ☑ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Person examining contents: Date: 5/21/24 /Initials: SG

Labeled By Initials: mlt

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☐Yes ☑No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No	5.
- DI VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☑No	6.
Rush Turn Around Time Requested:	☐Yes ☑No	7.
Sufficient Volume: For Analysis: ☑Yes ☐No MS/MSD: ☐Yes ☑No ☐N/A		8.
Correct Containers Used:	☑Yes ☐No	9.
Correct Type: (Pace Green Bay, Pace IR, Non-Pace)		
Containers Intact: 5/21/24SG	☑Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: SL	☐Yes ☑No ☐N/A	12. no dates or dates 5/21/24SG dont used sample no. as ID
Trip Blank Present:	☐Yes ☐No ☑N/A	13.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: Date/Time:

Comments/ Resolution:

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample logi

Appendix B

WSP of Canada, Inc.

WSP Canada Inc.
6925 Century Ave.
Mississauga, ON L5N 7K2
(905) 567-4444

05/27/2024

Specific Gravity of Soil Solids by Water Pycnometer

ASTM D854-14 Method B

Testing Program #:	019968	Project Number:	CA-GLD-225363932 - 6000
Client:	Sanborn Head and Associates	Project Location:	
Project Name:	SHA/PorosityTesting/MississaugaLab	Sample Location:	
Source:		Borehole Type:	
Report Number:	MIS00188-24	Borehole Depth (m):	-
Sample Number:	300-002-GSV-116.5-116.9-PHYS-PROP_20240419	WSP Lab Number:	MIS24-00305
		Specimen Depth (m):	
		Date of Test:	05/01/2024
		Tested By:	Mohammed Imran

Proportions	
Percentage Passing 4.75mm (%)	
Percentage Retained 4.75mm (%)	

Fine Fraction (D854)	
Calibrated Mass of Pycnometer (g)	65.07
Calibrated Volume of Pycnometer (g)	99.89
Test Temperature (°C)	22.2
Mass of Pycnometer, Soil, and Water (g)	176.99
Mass of Tare (g)	65.07
Mass of Dry Soil and Tare (g)	84.37
Dry Mass of Soil Solids (g)	19.30
Specific Gravity at 20 °C	2.73

Coarse Fraction (C127)

Lab Testing Comments / Deviations:
General Comments:

Reviewed By: Angela Hunwicks Title: Laboratory Supervisor

Signature:

CERTIFIED BY CCIL

Notice: The test data given herein pertain to the sample provided and may not be applicable to other samples or to material from earlier or subsequent production. Reporting of these results constitutes a testing service only. Engineering interpretation and advice may be provided upon written request.

WSP Canada Inc.
6925 Century Ave.
Mississauga, ON L5N 7K2
(905) 567-4444

05/27/2024

Specific Gravity of Soil Solids by Water Pycnometer

ASTM D854-14 Method B

Testing Program #:	019968	Project Number:	CA-GLD-225363932 - 6000
Client:	Sanborn Head and Associates	Project Location:	
Project Name:	SHA/PorosityTesting/MississaugaLab	Sample Location:	
Source:		Borehole Type:	
Report Number:	MIS00188-24	Borehole Depth (m):	-
Sample Number:	300-002-GSV-126.3-126.75-PHYS-PROP_20240419	WSP Lab Number:	MIS24-00306
		Specimen Depth (m):	
		Date of Test:	05/01/2024
		Tested By:	Mohammed Imran

Proportions	
Percentage Passing 4.75mm (%)	
Percentage Retained 4.75mm (%)	

Fine Fraction (D854)	
Calibrated Mass of Pycnometer (g)	57.78
Calibrated Volume of Pycnometer (g)	99.83
Test Temperature (°C)	22.2
Mass of Pycnometer, Soil, and Water (g)	169.55
Mass of Tare (g)	57.78
Mass of Dry Soil and Tare (g)	76.91
Dry Mass of Soil Solids (g)	19.13
Specific Gravity at 20 °C	2.75

Coarse Fraction (C127)

Lab Testing Comments / Deviations:
General Comments:

Reviewed By: Angela Hunwicks Title: Laboratory Supervisor

Signature:

CERTIFIED BY CCIL

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6925 Century Ave.
Mississauga, ON L5N 7K2
(905) 567-4444

05/27/2024

Specific Gravity of Soil Solids by Water Pycnometer

ASTM D854-14 Method B

Testing Program #:	019968	Project Number:	CA-GLD-225363932 - 6000
Client:	Sanborn Head and Associates	Project Location:	
Project Name:	SHA/PorosityTesting/MississaugaLab	Sample Location:	
Source:		Borehole Type:	
Report Number:	MIS00188-24	Borehole Depth (m):	-
Sample Number:	300-002-GSV-143.2-143.7-PHYS-PROP_20240419	WSP Lab Number:	MIS24-00307
		Specimen Depth (m):	
		Date of Test:	05/01/2024
		Tested By:	Mohammed Imran

Proportions	
Percentage Passing 4.75mm (%)	
Percentage Retained 4.75mm (%)	

Fine Fraction (D854)	
Calibrated Mass of Pycnometer (g)	56.69
Calibrated Volume of Pycnometer (g)	99.88
Test Temperature (°C)	22.2
Mass of Pycnometer, Soil, and Water (g)	168.52
Mass of Tare (g)	56.69
Mass of Dry Soil and Tare (g)	75.90
Dry Mass of Soil Solids (g)	19.21
Specific Gravity at 20 °C	2.73

Coarse Fraction (C127)

Lab Testing Comments / Deviations:
General Comments:

Reviewed By: Angela Hunwicks Title: Laboratory Supervisor

Signature:

CERTIFIED BY CCIL

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Mississauga, ON L5N 7K2
(905) 567-4444

05/27/2024

Specific Gravity of Soil Solids by Water Pycnometer

ASTM D854-14 Method B

Testing Program #:	019968	Project Number:	CA-GLD-225363932 - 6000
Client:	Sanborn Head and Associates	Project Location:	
Project Name:	SHA/PorosityTesting/MississaugaLab	Sample Location:	
Source:		Borehole Type:	
Report Number:	MIS00188-24	Borehole Depth (m):	-
Sample Number:	300-002-GSV-160.25-160.75-PHYS-PROP_20240420	WSP Lab Number:	MIS24-00308
		Specimen Depth (m):	
		Date of Test:	05/01/2024
		Tested By:	Mohammed Imran

Proportions	
Percentage Passing 4.75mm (%)	
Percentage Retained 4.75mm (%)	

Fine Fraction (D854)	
Calibrated Mass of Pycnometer (g)	66.00
Calibrated Volume of Pycnometer (g)	99.83
Test Temperature (°C)	22.2
Mass of Pycnometer, Soil, and Water (g)	177.99
Mass of Tare (g)	66.00
Mass of Dry Soil and Tare (g)	85.45
Dry Mass of Soil Solids (g)	19.45
Specific Gravity at 20 °C	2.76

Coarse Fraction (C127)

Lab Testing Comments / Deviations:
General Comments:

Reviewed By: Angela Hunwicks Title: Laboratory Supervisor

Signature:

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Mississauga, ON L5N 7K2
(905) 567-4444

05/27/2024

Specific Gravity of Soil Solids by Water Pycnometer

ASTM D854-14 Method B

Testing Program #:	019968	Project Number:	CA-GLD-225363932 - 6000
Client:	Sanborn Head and Associates	Project Location:	
Project Name:	SHA/PorosityTesting/MississaugaLab	Sample Location:	
Source:		Borehole Type:	
Report Number:	MIS00188-24	Borehole Depth (m):	-
Sample Number:	300-002-GSV-171.15-171.65-PHYS-PROP_20240420	WSP Lab Number:	MIS24-00309
		Specimen Depth (m):	
		Date of Test:	05/07/2024
		Tested By:	Vaishali Gorde

Proportions	
Percentage Passing 4.75mm (%)	
Percentage Retained 4.75mm (%)	

Fine Fraction (D854)	
Calibrated Mass of Pycnometer (g)	66.26
Calibrated Volume of Pycnometer (g)	99.86
Test Temperature (°C)	23.7
Mass of Pycnometer, Soil, and Water (g)	178.64
Mass of Tare (g)	66.26
Mass of Dry Soil and Tare (g)	86.20
Dry Mass of Soil Solids (g)	19.94
Specific Gravity at 20 °C	2.77

Coarse Fraction (C127)

Lab Testing Comments / Deviations:
General Comments:

Reviewed By: Angela Hunwicks Title: Laboratory Supervisor

Signature:

CERTIFIED BY CCIL

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Mississauga, ON L5N 7K2
(905) 567-4444

05/27/2024

Specific Gravity of Soil Solids by Water Pycnometer

ASTM D854-14 Method B

Testing Program #:	019968	Project Number:	CA-GLD-225363932 - 6000
Client:	Sanborn Head and Associates	Project Location:	
Project Name:	SHA/PorosityTesting/MississaugaLab	Sample Location:	
Source:		Borehole Type:	
Report Number:	MIS00188-24	Borehole Depth (m):	-
Sample Number:	300-002-GSV-198.3-198.8-PHYS-PROP_20240421	WSP Lab Number:	MIS24-00310
		Specimen Depth (m):	
		Date of Test:	05/07/2024
		Tested By:	Vaishali Gorde

Proportions	
Percentage Passing 4.75mm (%)	
Percentage Retained 4.75mm (%)	

Fine Fraction (D854)	
Calibrated Mass of Pycnometer (g)	64.85
Calibrated Volume of Pycnometer (g)	99.85
Test Temperature (°C)	23.7
Mass of Pycnometer, Soil, and Water (g)	177.13
Mass of Tare (g)	64.85
Mass of Dry Soil and Tare (g)	84.69
Dry Mass of Soil Solids (g)	19.84
Specific Gravity at 20 °C	2.76

Coarse Fraction (C127)

Lab Testing Comments / Deviations:
General Comments:

Reviewed By: Angela Hunwicks Title: Laboratory Supervisor

Signature:

CERTIFIED BY CCIL

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WSP Canada Inc.
6925 Century Ave.
Mississauga, ON L5N 7K2
(905) 567-4444

05/27/2024

Specific Gravity of Soil Solids by Water Pycnometer

ASTM D854-14 Method B

Testing Program #:	019968	Project Number:	CA-GLD-225363932 - 6000
Client:	Sanborn Head and Associates	Project Location:	
Project Name:	SHA/PorosityTesting/MississaugaLab	Sample Location:	
Source:		Borehole Type:	
Report Number:	MIS00188-24	Borehole Depth (m):	-
Sample Number:	300-002-GSV-216.50-216.90-PHYS-PROP_20240421	WSP Lab Number:	MIS24-00311
		Specimen Depth (m):	
		Date of Test:	05/01/2024
		Tested By:	Mohammed Imran

Proportions	
Percentage Passing 4.75mm (%)	
Percentage Retained 4.75mm (%)	

Fine Fraction (D854)	
Calibrated Mass of Pycnometer (g)	70.38
Calibrated Volume of Pycnometer (g)	99.88
Test Temperature (°C)	22.2
Mass of Pycnometer, Soil, and Water (g)	182.25
Mass of Tare (g)	70.38
Mass of Dry Soil and Tare (g)	89.58
Dry Mass of Soil Solids (g)	19.20
Specific Gravity at 20 °C	2.75

Coarse Fraction (C127)

Lab Testing Comments / Deviations:
General Comments:

Reviewed By: Angela Hunwicks Title: Laboratory Supervisor

Signature:

CERTIFIED BY CCIL

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Mississauga, ON L5N 7K2
(905) 567-4444

05/27/2024

Specific Gravity of Soil Solids by Water Pycnometer

ASTM D854-14 Method B

Testing Program #:	019968	Project Number:	CA-GLD-225363932 - 6000
Client:	Sanborn Head and Associates	Project Location:	
Project Name:	SHA/PorosityTesting/MississaugaLab	Sample Location:	
Source:		Borehole Type:	
Report Number:	MIS00188-24	Borehole Depth (m):	-
Sample Number:	300-002-GSV-233.00-233.50-PHYS-PROP_20240422	WSP Lab Number:	MIS24-00312
		Specimen Depth (m):	
		Date of Test:	05/07/2024
		Tested By:	Vaishali Gorde

Proportions	
Percentage Passing 4.75mm (%)	
Percentage Retained 4.75mm (%)	

Fine Fraction (D854)	
Calibrated Mass of Pycnometer (g)	57.80
Calibrated Volume of Pycnometer (g)	99.83
Test Temperature (°C)	22.6
Mass of Pycnometer, Soil, and Water (g)	170.20
Mass of Tare (g)	57.80
Mass of Dry Soil and Tare (g)	77.91
Dry Mass of Soil Solids (g)	20.11
Specific Gravity at 20 °C	2.76

Coarse Fraction (C127)

Lab Testing Comments / Deviations:
General Comments:

Reviewed By: Angela Hunwicks Title: Laboratory Supervisor

Signature:

CERTIFIED BY CCIL

Notice: The test data given herein pertain to the sample provided and may not be applicable to other samples or to material from earlier or subsequent production. Reporting of these results constitutes a testing service only. Engineering interpretation and advice may be provided upon written request.

TOTAL ORGANIC CARBON CONTENT (TOC) ON ROCK

PROJECT NUMBER	CA-GLD-225363932 (6000)
PROJECT NAME	SHA/PorosityTesting/MississaugaLab
DATE TESTED	27 June, 2024

Sample No.	Depth (m)	TOC <0.6mm (%)
300-001-GSV-76-76.5-PHYS-PROP	-	0.09
300-001-GSV-105.7-106.2-PHYS-PROP	-	0.11
300-001-GSV-122.8-123.3-PHYS-PROP	-	0.05
300-001-GSV-164.9-165.4-PHYS-PROP	-	0.09
300-001-GSV-179.2-179.8-PHYS-PROP	-	0.05
300-001-GSV-206.1-206.6-PHYS-PROP	-	<0.01
300-001-GSV-219-219.5-PHYS-PROP	-	0.11
300-001-GSV-251-251.5-PHYS-PROP	-	0.05
300-001-GSV-251-251.5-PHYS-PROP (Repeat)	-	0.02

Notes:

1. Samples dried at 110 degree centigrade prior to testing.
2. Test performed on whole rock crushed to minus 600 microns, using the method of Walkley and Black (Walkley, 1946)

Checked By: AH

WSP Canada Inc.

Tested By: SK

TOTAL ORGANIC CARBON CONTENT (TOC) ON ROCK

PROJECT NUMBER	CA-GLD-22536393 (6000)
PROJECT NAME	SHA/PorosityTesting/MississaugaLab
DATE TESTED	5/16/24

Sample No.	Depth (m)	TOC <0.6mm (%)
300-002-GSV-116.5-116.9-PHYS-PROP_20240419	-	0.04
300-002-GSV-126.3-126.75-PHYS-PROP_20240419	-	0.12
300-002-GSV-143.2-143.7-PHYS-PROP_20240419	-	<0.01
300-002-GSV-160.25-160.75-PHYS-PROP_20240420	-	0.07
300-002-GSV-171.15-171.65-PHYS-PROP_20240420	-	0.09
300-002-GSV-198.3-198.8-PHYS-PROP_20240421	-	<0.01
300-002-GSV-216.50-216.90-PHYS-PROP_20240421	-	0.05
300-002-GSV-233.00-233.50-PHYS-PROP_20240422	-	0.11
300-002-GSV-233.00-233.50-PHYS-PROP_20240422	-	0.09

Notes:

1. Samples dried at 110 degree centigrade prior to testing.
2. Test performed on whole rock crushed to minus 600 microns, using the method of Walkley and Black (Walkley, 1946)

Checked By: AH

WSP Canada Inc.

Tested By: SK

WSP Canada Inc.
6925 Century Ave.
Mississauga, ON L5N 7K2
(905) 567-4444

05/16/2024

Water (Moisture) Content of Soils

Testing Standard: ASTM D2216-19 Method B

Testing Program #:	019968	Project Number:	CA-GLD-225363932 - 6000
Client:	Sanborn Head & Associates	Project Location:	
Project Name:	SHA/PorosityTesting/MississaugaLab	Report Number:	

Sample Location	Sample Number	Soil Description	Water Content (%)	WSP Lab Number	Tested By	Remarks
	300-002-GSV-116.5-116.9-PHYS-PROP_20240419	Parafilm, Foil, Vacuum	3.3	MIS24-00305	Shahab Khan	
	300-002-GSV-126.3-126.75-PHYS-PROP_20240419	Parafilm, Foil, Vacuum	2.6	MIS24-00306	Shahab Khan	
	300-002-GSV-143.2-143.7-PHYS-PROP_20240419	Parafilm, Foil, Vacuum	2.0	MIS24-00307	Shahab Khan	
	300-002-GSV-160.25-160.75-PHYS-PROP_20240420	Parafilm, Foil, Vacuum	7.4	MIS24-00308	Shahab Khan	
	300-002-GSV-171.15-171.65-PHYS-PROP_20240420	Parafilm, Foil, Vacuum	2.3	MIS24-00309	Shahab Khan	
	300-002-GSV-198.3-198.8-PHYS-PROP_20240421	Parafilm, Foil, Vacuum	2.7	MIS24-00310	Shahab Khan	
	300-002-GSV-216.50-216.90-PHYS-PROP_20240421	Parafilm, Foil, Vacuum	1.6	MIS24-00311	Shahab Khan	
	300-002-GSV-233.00-233.50-PHYS-PROP_20240422	Parafilm, Foil, Vacuum	0.3	MIS24-00312	Shahab Khan	

Reviewed By: A.Hunwicks Title: Lab Supervisor

Signature:

CERTIFIED BY CCIL

Notice: The test data given herein pertain to the sample provided and may not be applicable to other samples or to material from earlier or subsequent production. Reporting of these results constitutes a testing service only. Engineering interpretation and advice may be provided upon written request.

SPECIFIC GRAVITY TEST RESULTS

ASTM D 854 TEST METHOD B

PROJECT NUMBER	CA-GLD-22536393 (6000)
PROJECT NAME	SHA/PorosityTesting/MississaugaLab
DATE TESTED	June 2024

Borehole No.	Sample No.	Specific Gravity (Gs20°C)
-	300-001-GSV-76-76.5-PHYS-PROP	2.71
-	300-001-GSV-105.7-106.2-PHYS-PROP	2.84
-	300-001-GSV-122.8-123.3-PHYS-PROP	2.71
-	300-001-GSV-164.9-165.4-PHYS-PROP	2.69
-	300-001-GSV-179.2-179.8-PHYS-PROP	2.68
-	300-001-GSV-206.1-206.6-PHYS-PROP	2.72
-	300-001-GSV-219-219.5-PHYS-PROP	2.75
-	300-001-GSV-251-251.5-PHYS-PROP	2.69

Note: Test carried out on soil particles <2.00mm

Checked By: AH

WSP Canada Inc.

Tested By:SK/VG.DP

SUMMARY OF WATER CONTENT [1] / ATTERBERG LIMITS[2] DETERMINATIONS

[1]ASTM D2216 / [2]ASTM D4318

PROJECT NUMBER	CA-GLD-225363932
PROJECT NAME	SHA/PorosityTesting/MississaugaLab
DATE	3 July, 2024

Sample No.	Depth (ft)	Depth (m)	Water Content (%)	Atterberg Limits LL	PL	PI
300-001-GSV-76-76.5-PHYS-PROP	-	-	2.5			
300-001-GSV-105.7-106.2-PHYS-PROP	-	-	1.2			
300-001-GSV-122.8-123.3-PHYS-PROP	-	-	1.6			
300-001-GSV-164.9-165.4-PHYS-PROP	-	-	2.3			
300-001-GSV-179.2-179.8-PHYS-PROP	-	-	3.6			
300-001-GSV-206.1-206.6-PHYS-PROP	-	-	0.7			
300-001-GSV-219-219.5-PHYS-PROP	-	-	0.2			
300-001-GSV-251-251.5-PHYS-PROP	-	-	1.8			

DENSITY AND POROSITY DETERMINATIONS OF IRREGULAR SHAPE SAMPLES - ROCK
ASTM D 7263 Method A

Borehole Number	-		-	
Sample ID	300-001-GSV-76-76.5-PHYS-PROP		300-001-GSV-105.7-106.2-PHYS-PROP	
Depth, m	-		-	
Trial No.	1	2	1	2
Wet Mass of Rock in Air, g	97.97	55.45	51.55	35.16
Wet Mass of Rock + Wax in Air, g	101.1	58.30	54.48	36.83
Wet Mass of Rock + Wax in Water, g	59.59	33.49	32.25	21.99
Weight of Wax, g	3.130	2.850	2.930	1.670
Density of paraffin, g/cm^3	0.908	0.908	0.908	0.908
Displaced Wax, cm^3	3.447	3.139	3.227	1.839
Volume of Rock, cm^3	38.14	21.72	19.04	13.03
Specific Gravity, measured	2.71	2.71	2.84	2.84
Volume of Solids, cm^3	35.57	20.07	17.97	12.27
Volume of Voids, cm^3	2.571	1.649	1.075	0.760
Porosity	0.067	0.076	0.056	0.058
Water Content %, measured	1.641	1.964	1.019	0.918
Water Temperature °C	20.1	20.1	20.1	20.1
Density of Water at test temperature, g/cm^3	0.9982	0.9982	0.9982	0.9982
Wet Density, g/cm^3	2.569	2.553	2.707	2.699
Dry Density, g/cm^3	2.527	2.504	2.680	2.674

Notes: - If enough material was available then two trials were performed on one core specimen.
- Water contents determined from tested specimens

Project Number	CA-GLD-22536393 (6000)	Tested By	Shahab
Project Name	SHA/PorosityTesting/MississaugaLab	Checked By	AH
Date Tested	19 June, 2024		

DENSITY AND POROSITY DETERMINATIONS OF IRREGULAR SHAPE SAMPLES - ROCK
ASTM D 7263 Method A

Borehole Number	-		-	
Sample ID	300-001-GSV-122.8-123.3-PHYS-PROP		300-001-GSV-164.9-165.4-PHYS-PROP	
Depth, m	-		-	
Trial No.	1	2	1	2
Wet Mass of Rock in Air, g	151.2	92.01	63.23	53.95
Wet Mass of Rock + Wax in Air, g	159.0	96.56	66.58	57.09
Wet Mass of Rock + Wax in Water, g	91.13	55.17	36.69	31.80
Weight of Wax, g	7.840	4.550	3.350	3.140
Density of paraffin, g/cm^3	0.908	0.908	0.908	0.908
Displaced Wax, cm^3	8.634	5.011	3.689	3.458
Volume of Rock, cm^3	59.40	36.45	26.25	21.88
Specific Gravity, measured	2.71	2.71	2.69	2.69
Volume of Solids, cm^3	55.07	33.46	23.10	19.76
Volume of Voids, cm^3	4.331	2.996	3.156	2.119
Porosity	0.073	0.082	0.120	0.097
Water Content %, measured	1.317	1.477	1.763	1.503
Water Temperature ºC	20.1	20.1	20.1	20.1
Density of Water at test temperature, g/cm^3	0.9982	0.9982	0.9982	0.9982
Wet Density, g/cm^3	2.546	2.524	2.408	2.466
Dry Density, g/cm^3	2.512	2.487	2.367	2.429

Notes: - If enough material was available then two trials were performed on one core specimen.
- Water contents determined from tested specimens

Project Number	CA-GLD-22536393 (6000)	Tested By	Shahab
Project Name	SHA/PorosityTesting/MississaugaLab	Checked By	AH
Date Tested	19 June, 2024		

DENSITY AND POROSITY DETERMINATIONS OF IRREGULAR SHAPE SAMPLES - ROCK
ASTM D 7263 Method A

Borehole Number	-		-	
Sample ID	300-001-GSV-179.2-179.8-PHYS-PROP		300-001-GSV-206.1-206.6-PHYS-PROP	
Depth, m	-		-	
Trial No.	1	2	1	2
Wet Mass of Rock in Air, g	84.25	33.54	92.67	81.70
Wet Mass of Rock + Wax in Air, g	88.85	36.37	98.39	87.90
Wet Mass of Rock + Wax in Water, g	49.18	19.10	56.67	49.71
Weight of Wax, g	4.600	2.830	5.720	6.200
Density of paraffin, g/cm^3	0.908	0.908	0.908	0.908
Displaced Wax, cm^3	5.066	3.117	6.300	6.828
Volume of Rock, cm^3	34.68	14.18	35.50	31.43
Specific Gravity, measured	2.68	2.68	2.72	2.72
Volume of Solids, cm^3	30.73	12.25	33.90	29.75
Volume of Voids, cm^3	3.947	1.938	1.595	1.683
Porosity	0.114	0.137	0.045	0.054
Water Content %, measured	2.304	2.194	0.499	0.970
Water Temperature ^oC	20.1	20.1	20.1	20.1
Density of Water at test temperature, g/cm^3	0.9982	0.9982	0.9982	0.9982
Wet Density, g/cm^3	2.430	2.365	2.611	2.599
Dry Density, g/cm^3	2.375	2.314	2.598	2.574

Notes: - If enough material was available then two trials were performed on one core specimen.
- Water contents determined from tested specimens

Project Number	CA-GLD-22536393 (6000)	Tested By	Shahab
Project Name	SHA/PorosityTesting/MississaugaLab	Checked By	AH
Date Tested	19 June, 2024		

DENSITY AND POROSITY DETERMINATIONS OF IRREGULAR SHAPE SAMPLES - ROCK
ASTM D 7263 Method A

Borehole Number	-		-	
Sample ID	300-001-GSV-219-219.5-PHYS-PROP		300-001-GSV-251-251.5-PHYS-PROP	
Depth, m	-		-	
Trial No.	1	2	1	2
Wet Mass of Rock in Air, g	41.18	34.11	108.1	49.57
Wet Mass of Rock + Wax in Air, g	44.40	37.54	114.3	53.14
Wet Mass of Rock + Wax in Water, g	25.09	20.46	65.50	29.91
Weight of Wax, g	3.220	3.430	6.180	3.570
Density of paraffin, g/cm^3	0.908	0.908	0.908	0.908
Displaced Wax, cm^3	3.546	3.778	6.806	3.932
Volume of Rock, cm^3	15.80	13.33	42.03	19.34
Specific Gravity, measured	2.75	2.75	2.69	2.69
Volume of Solids, cm^3	14.87	12.36	39.44	18.05
Volume of Voids, cm^3	0.933	0.973	2.592	1.295
Porosity	0.059	0.073	0.062	0.067
Water Content %, measured	0.729	0.352	1.863	2.119
Water Temperature °C	20.1	20.1	20.1	20.1
Density of Water at test temperature, g/cm^3	0.9982	0.9982	0.9982	0.9982
Wet Density, g/cm^3	2.607	2.558	2.571	2.563
Dry Density, g/cm^3	2.588	2.549	2.524	2.510

Notes: - If enough material was available then two trials were performed on one core specimen.
- Water contents determined from tested specimens

Project Number	CA-GLD-22536393 (6000)	Tested By	Shahab
Project Name	SHA/PorosityTesting/MississaugaLab	Checked By	AH
Date Tested	19 June, 2024		

DENSITY AND POROSITY DETERMINATIONS OF IRREGULAR SHAPE SAMPLES - ROCK

ASTM D 7263 Method A

Sample ID	300-002-GSV-116.5-116.9-PHYS-Prop_20240419		300-002-GSV-126.3-126.75-PHYS-Prop_20240419	
Depth, m	-		-	
Trial No.	1	2	1	2
Wet Mass of Rock in Air, g	87.22	84.32	59.17	45.22
Wet Mass of Rock + Wax in Air, g	90.11	86.92	61.94	47.19
Wet Mass of Rock + Wax in Water, g	54.21	52.43	35.82	27.88
Weight of Wax, g	2.890	2.600	2.770	1.970
Density of paraffin, g/cm^3	0.908	0.908	0.908	0.908
Displaced Wax, cm^3	3.183	2.863	3.051	2.170
Volume of Rock, cm^3	32.80	31.71	23.13	17.18
Specific Gravity measured	2.73	2.73	2.75	2.75
Volume of Solids, cm^3	31.70	30.63	20.95	16.09
Volume of Voids, cm^3	1.100	1.080	2.184	1.097
Porosity	0.034	0.034	0.094	0.064
Water Content %, measured	0.7852	0.8488	2.724	2.211
Water Temperature °C	22.3	22.3	22.3	22.3
Density of Water at test temperature, g/cm³	0.99770	0.99770	0.99770	0.99770
Wet Density, g/cm^3	2.659	2.659	2.558	2.631
Dry Density, g/cm^3	2.638	2.637	2.490	2.574

Notes: - If enough material was available then two trials were performed on one core specimen.
- Water contents determined from tested specimens

Project Number	CA-GLD-225363932 (6000)	Tested By	SK
Project Name	SHA/PorosityTesting/MississaugaLab	Checked By	AH
Date Tested	14 May, 2024		

DENSITY AND POROSITY DETERMINATIONS OF IRREGULAR SHAPE SAMPLES - ROCK

ASTM D 7263 Method A

Sample ID	300-002-GSV-143.2-143.7-PHYS-Prop_20240419		300-002-GSV-160.25-160.75-PHYS-Prop_20240419	
Depth, m	-		-	
Trial No.	1	2	1	2
Wet Mass of Rock in Air, g	40.78	35.23	36.48	32.73
Wet Mass of Rock + Wax in Air, g	42.73	37.25	38.83	34.63
Wet Mass of Rock + Wax in Water, g	24.96	21.48	21.23	19.46
Weight of Wax, g	1.950	2.020	2.350	1.900
Density of paraffin, g/cm^3	0.908	0.908	0.908	0.908
Displaced Wax, cm^3	2.148	2.225	2.588	2.093
Volume of Rock, cm^3	15.66	13.58	15.05	13.11
Specific Gravity measured	2.73	2.73	2.76	2.76
Volume of Solids, cm^3	14.63	12.65	12.45	11.17
Volume of Voids, cm^3	1.035	0.937	2.599	1.941
Porosity	0.066	0.069	0.173	0.148
Water Content %, measured	2.114	2.053	6.137	6.154
Water Temperature °C	22.3	22.3	22.3	22.3
Density of Water at test temperature, g/cm³	0.99770	0.99770	0.99770	0.99770
Wet Density, g/cm^3	2.604	2.594	2.424	2.496
Dry Density, g/cm^3	2.550	2.542	2.283	2.351

Notes: - If enough material was available then two trials were performed on one core specimen.
- Water contents determined from tested specimens

Project Number	CA-GLD-225363932 (6000)	Tested By	SK
Project Name	SHA/PorosityTesting/MississaugaLab	Checked By	AH
Date Tested	14 May, 2024		

DENSITY AND POROSITY DETERMINATIONS OF IRREGULAR SHAPE SAMPLES - ROCK

ASTM D 7263 Method A

Sample ID	300-002-GSV-171.15-171.65-PHYS-Prop_20240419		300-002-GSV-198.3-198.8-PHYS-Prop_20240419	
Depth, m	-		-	
Trial No.	1	2	1	2
Wet Mass of Rock in Air, g	46.47	27.96	59.17	54.99
Wet Mass of Rock + Wax in Air, g	50.25	30.28	62.12	57.40
Wet Mass of Rock + Wax in Water, g	28.10	17.60	35.70	32.68
Weight of Wax, g	3.780	2.320	2.950	2.410
Density of paraffin, g/cm^3	0.908	0.908	0.908	0.908
Displaced Wax, cm^3	4.163	2.555	3.249	2.654
Volume of Rock, cm^3	18.04	10.15	23.23	22.12
Specific Gravity measured	2.77	2.77	2.76	2.76
Volume of Solids, cm^3	16.37	9.84	20.81	19.11
Volume of Voids, cm^3	1.667	0.317	2.425	3.016
Porosity	0.092	0.031	0.104	0.136
Water Content %, measured	2.473	2.609	3.033	4.275
Water Temperature ^{o}C	22.3	22.3	22.3	22.3
Density of Water at test temperature, g/cm^3	0.99770	0.99770	0.99770	0.99770
Wet Density, g/cm^3	2.576	2.754	2.547	2.486
Dry Density, g/cm^3	2.514	2.684	2.472	2.384

Notes: - If enough material was available then two trials were performed on one core specimen.
- Water contents determined from tested specimens

Project Number	CA-GLD-225363932 (6000)	Tested By	SK
Project Name	SHA/PorosityTesting/MississaugaLab	Checked By	AH
Date Tested	14 May, 2024		

DENSITY AND POROSITY DETERMINATIONS OF IRREGULAR SHAPE SAMPLES - ROCK

ASTM D 7263 Method A

Sample ID	300-002-GSV-216.50-216.90-PHYS-Prop_20240419		300-002-GSV-233.00-233.50-PHYS-Prop_20240419	
Depth, m	-		-	
Trial No.	1	2	1	2
Wet Mass of Rock in Air, g	110.8	82.85	104.6	103.3
Wet Mass of Rock + Wax in Air, g	115.0	87.28	109.6	108.4
Wet Mass of Rock + Wax in Water, g	68.14	51.50	64.52	63.60
Weight of Wax, g	4.210	4.430	5.020	5.110
Density of paraffin, g/cm^3	0.908	0.908	0.908	0.908
Displaced Wax, cm^3	4.637	4.879	5.529	5.628
Volume of Rock, cm^3	42.34	30.98	39.63	39.30
Specific Gravity measured	2.75	2.75	2.75	2.75
Volume of Solids, cm^3	39.66	29.70	37.65	37.21
Volume of Voids, cm^3	2.684	1.285	1.978	2.088
Porosity	0.063	0.041	0.050	0.053
Water Content %, measured	1.596	1.445	0.9849	0.9672
Water Temperature ^oC	22.3	22.3	22.3	22.3
Density of Water at test temperature, g/cm^3	0.99770	0.99770	0.99770	0.99770
Wet Density, g/cm^3	2.617	2.674	2.638	2.629
Dry Density, g/cm^3	2.576	2.636	2.613	2.604

Notes: - If enough material was available then two trials were performed on one core specimen.
- Water contents determined from tested specimens

Project Number	CA-GLD-225363932 (6000)	Tested By	SK
Project Name	SHA/PorosityTesting/MississaugaLab	Checked By	AH
Date Tested	14 May, 2024		

Appendix F Groundwater Analytical Data

Test Report

SwRI Project #:	26040.10.003
SwRI Task Order:	240816-1, 240822-1
Batch Number:	M607-952
Date Received:	08/16/2024, 08/20/2024, 08/22/24, 08/23/24
Purchase Order:	24EC009B

Prepared by:

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

Prepared for:

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

Alice Yau

Digitally signed by Alice Yau
Date: 2024.09.05 09:51:21 -05'00'

Authorized for Release
09/05/2024 12:00PM
Alice Yau, Project Manager
Alice.Yau@swri.org
210-522-5042

Elaine Wild

Digitally signed by Elaine Wild
Reason: FOR
Date: 2024.09.05 09:55:57 -05'00'

Mike Dammann
Laboratory Director

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

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

CLIENT: Navarro Research and Engineering Inc.
SwRI PROJECT #: 26040.10.003
TASK ORDERS: 240816-1 and 240822-1
NAVARRO PO #: 24EC009B

NARRATIVE

(M607-952)

CLIENT:	**Navarro Research and Engineering Inc.**
SwRI PROJECT #:	**26040.10.003**
BATCH #:	**M607-952**
TASK ORDERS:	**240816-1 and 240822-1**
REPORT DATE:	**09/06/2024**

NARRATIVE FOR NDMA/DMN/BROMACIL ANALYSIS

1. Samples were extracted with dichloromethane (DCM) and analyzed by GC/MS in selective ion monitoring mode for N-Nitrosodimethylamine (NDMA), N-Nitrodimethylamine (DMN) and Bromacil according to the modified Method 607.

2. All aqueous samples were extracted within 7 days of collection date and were analyzed within 28 days from extraction date.

3. The sample reporting limit is 0.01 ppb for 1-L aqueous extraction of samples. All targets were quantified within the calibration curve range 0.01 - 5 µg/L.

4. Laboratory control sample (LCS) and matrix spike samples (if any) were spiked at 0.50 ppb based on 1000 mL, then extracted and analyzed. The recoveries for all target compounds were within method recovery criteria of 13-110% for NDMA, 30-150% for DMN, and 40-190% for Bromacil.

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

6. Laboratory process blanks (PB) were extracted and analyzed with every extraction batch.

7. A "J" value was reported if the associated value was below reporting limits but above the MDL value.

8. All analyte concentrations are expressed in µg/L (ppb). Sample calculation:

$$\text{Concentration (µg/L)} = \frac{C\left(\frac{\mu g}{mL}\right) \times FV\ (mL) \times DF}{Vsamp(L)}$$

where:
- C = result of GC/MS analysis in µg/mL for water samples
- FV = final volume of sample in mL
- V_{samp} = sample volume taken for extraction in L
- DF = dilution factor, if any

9. NDMA and DMN were detected in sample 2408140832A (300-001-GSV) at levels exceeding calibration curve. Extract was diluted 100-fold prior to reanalysis. Surrogate recovery was reported from the non-diluted extract.

CLIENT: Navarro Research and Engineering Inc.
SwRI PROJECT #: 26040.10.003
TASK ORDERS: 240816-1 and 240822-1
NAVARRO PO #: 24EC009B

TASK ORDER AND CHAIN OF CUSTODY

(M607-952)

Southwest Research Institute

Laboratory Task Order

TO #: 240816-1 Revision: 1

Project(s): 26040.10.003
Manager(s): Yau, Alice
To Client: 09/10/24

SDG: M607-952

SRR #'s: 71578, 71593
Client(s): Navarro Research and Engineering Inc.

Instructions

Email results to Stephanie Portillo (Stephanie.Portillo@nasa.gov) and Troy Wiebe (donavon.t.wiebe@nasa.gov).
Rev 1: Samples from SRR: 71593 added to this task order.

Documents Related to this task order: 401995[COC for SRR 71578], 401996[Paperwork for SRR 71578], 402254[COC for SRR 71593], 402255[Paperwork for SRR 71593], 402679[COOLER Returns for SRR 71578]

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

Test: E607W Holding: 7 days from CED
Section: EXTLAB **EXTRACTION BY METHOD 607** Cnt: 9

System ID	Type	Cont	Matrix	Customer ID	CED	Method Date
723703		1	Aqueous	2408140832A (300-001-GSV)	14 Aug 24	21 Aug 24
723704		1	Aqueous	2408140921X (WB-5-345)	14 Aug 24	21 Aug 24
723705		1	Aqueous	2408150823A (300-002-GSV)	15 Aug 24	22 Aug 24
723706		1	Aqueous	2408150824A (300-002-GSV)	15 Aug 24	22 Aug 24
723805		1	Aqueous	2408151002C (BLM-25-455)	15 Aug 24	22 Aug 24
723806		1	Aqueous	2408151413C (BLM-21-400)	15 Aug 24	22 Aug 24
723807		1	Aqueous	2408160832A (400-001-GW)	16 Aug 24	23 Aug 24
723808		1	Aqueous	2408160841X (WB-5-280)	16 Aug 24	23 Aug 24
723809		1	Aqueous	2408161338A (ST-4-589)	16 Aug 24	23 Aug 24

Test: T607W Holding: 40 days from VTSR
Section: TDG **NDMA/DMN ANALYSIS BY GC/MS/SIM** Cnt: 9

System ID	Type	Cont	Matrix	Customer ID	VTSR	Method Date
723703		1	Aqueous	2408140832A (300-001-GSV)	16 Aug 24	25 Sep 24
723704		1	Aqueous	2408140921X (WB-5-345)	16 Aug 24	25 Sep 24
723705		1	Aqueous	2408150823A (300-002-GSV)	16 Aug 24	25 Sep 24
723706		1	Aqueous	2408150824A (300-002-GSV)	16 Aug 24	25 Sep 24
723805		1	Aqueous	2408151002C (BLM-25-455)	20 Aug 24	29 Sep 24
723806		1	Aqueous	2408151413C (BLM-21-400)	20 Aug 24	29 Sep 24
723807		1	Aqueous	2408160832A (400-001-GW)	20 Aug 24	29 Sep 24
723808		1	Aqueous	2408160841X (WB-5-280)	20 Aug 24	29 Sep 24
723809		1	Aqueous	2408161338A (ST-4-589)	20 Aug 24	29 Sep 24

WSTF CHAIN OF CUSTODY RECORD

Date 8-15-24

Laboratory: SwRI PO# 24EC009B

Address shipping questions to:
- [x] Lori Minnick, 575-524-5119
- [ ] Other _____, 575-524-_____

Send sample receipt confirmation and analytical reports to:
- [x] Stephanie Portillo, stephanie.portillo@nasa.gov
- [ ] Other
- [ ] Other

Analytical Requirements: Analytes NDMA/DMN/BROMACIL; Method 607

Special Instructi
Return coolers a
days as required
Return Address:
NASA WS
12600 NA
Las Cruces
Attn: Lori

Sample Number	Sample Location	# of Containers	Sample Matrix*	Charge Number (WSTF Use Only)
240814 0832A	300-001-GSV	1	A	XGMID
240814 0921X	WB-5-345	1	A	"
240815 0823A	300-002-GSV	1	A	"
240815 0824A	"	1	A	"

Relinquished By:	Date/Time:	Accepted By:
Lori Minnick	8-15-24 / 1100 HRS.	David Marin SwRI

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

Client: Navarro Research and Engine
SRR # 71578
Project # 26040.10.003
Case: 24EC009B
VTSR: 08/16/24
Sample(s) Received: Intact
Temperature: 1.3°C SN # 029926

WSTF 381B (06/2023)

NASA-WSTF SHIPPING DOCUMENT

1 Ocean Blue #0B2

SHIPPED FROM:		WSTF ORIGINATOR/MAIL CODE/TELEPHONE NO.			
NASA JSC WHITE SANDS TEST FACILITY		Deb Smith/Purchasing Dept. /(575) 524-5023		Stephanie Portillo 524-5267	
12600 NASA ROAD; BLDG. 120		ORDER OR CONTRACT NUMBER		SHIPMENT CONTROL NO	
LAS CRUCES, NEW MEXICO 88012		24EC009B			
SHIP TO: (ADDRESS, PHONE#, POINT OF CONTACT)		PROJECT or TASK NUMBER		SHIP VIA	
Southwest Research Institute		XGMD 505-005		Navarro Third Party Billing	
6220 Culebra Road		Contain Batteries NO	NO. PKG.	DATE SHIPPED 8-15-24	AirBill/ PRO #/Bol #
San Antonio, TX 78238					
Alice Yau		Battery Type-Part #	AUTHORIZED BY:	DEPT.	
210-522-5042					

ITEM NO.	EQUIPMENT CONTROL NO.	MODEL NO./ STOCK NO./ PART NO.	ITEM NAME - MANUFACTURER'S NAME AND SERIAL NO.	UNIT OF ISSUE	QTY.
1			Groudwater Sample NDMN, DMN & bromacil Modified EPA Method 607 21 Day TAT	EA	4
2			Groundwater Sample NDMN, DMN & bromacil Modified EPA Method 607 7 Day TAT	EA	

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

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

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

PACKED BY:	# CONTAINERS	TYPE CONTAINERS	DIMENSIONS	WEIGHT
Please check off the applicable labels!				
☐ FRAGILE				37.80
☐ GLASS				
☐ DELICATE			24X14X14	
☐ DO NOT XRAY				
☐ REFRIGERATE				
☐ OTHER				
☐ BUBBLEWRAP	TOTAL CONTAINERS			TOTAL WEIGHT
☐ FOAM				

RECEIVED BY: David Mower
REPRESENTING: SwRI

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

Client: Navarro Research and Engineering Inc.
SRR # 71578
Project # 26040.10.003
Case: 24EC009B
VTSR: 08/16/24
Sample(s) Received: Intact
Temperature: 1.3°C SN # 029926

WSTF 196 (1/06)

G

WSTF CHAIN OF CUSTODY RECORD

Date 8-19-24

Laboratory: SwRI PO# 24EC009B

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

Send sample receipt confirmation and analytical reports to:
- ☒ Stephanie Portillo, stephanie.portillo@nasa.gov
- ☐ Other
- ☐ Other

Analytical Requirements: Analytes NDMA/DMN/BROMACIL; Method 607

Sample Number	Sample Location	# of Containers	Sample Matrix*	Analytical Requirements	Charge Number (WSTF Use Only)
240815 1002C	Blm-25-455	1	A	X	XGMD
240815 1413C	Blm-21-400	1	A	X	"
240816 0841X	WB-5-280	1	A	X	"
240816 0832A	400-001-GW	1	A	X	"
240816 1338A	ST-4-589	1	A	X	"

Special Instructi
Return coolers a
days as required
Return Address:
NASA WS
12600 NA
Las Cruces
Attn: Lori

Relinquished By:	Date/Time:	Accepted By:
Lori W Minnick	8-19-24 1100 HRS.	David Marcus SwRI
"		

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

Client:
SRR #
Project
Case:
VTSR:
Sample
Temper

WSTF 381B (06/2023)

1 Blue XB14

NASA-WSTF SHIPPING DOCUMENT

SHIPPED FROM:	WSTF ORIGINATOR/MAIL CODE/TELEPHONE NO.			
NASA JSC WHITE SANDS TEST FACILITY	Deb Smith/Purchasing	Dept. /(575) 524-5023	Stephanie Portillo 524-5267	
12600 NASA ROAD; BLDG. 120	ORDER OR CONTRACT NUMBER		SHIPMENT CONTROL NO	
LAS CRUCES, NEW MEXICO 88012	24EC009B			
SHIP TO: (ADDRESS, PHONE#, POINT OF CONTACT)	PROJECT or TASK NUMBER		SHIP VIA	
Southwest Research Institute	XGMD 505-005		Navarro Third Party Billing	
6220 Culebra Road	Contain Batteries NO	NO. PKG.	DATE SHIPPED 8-19-24	AirBill/ PRO #/Bol #
San Antonio, TX 78238				
Alice Yau 210-522-5042	Battery Type-Part #	AUTHORIZED BY:	DEPT.	

ITEM NO.	EQUIPMENT CONTROL NO.	MODEL NO./ STOCK NO./ PART NO.	ITEM NAME - MANUFACTURER'S NAME AND SERIAL NO.	UNIT OF ISSUE	QTY.
1			Groudwater Sample NDMN, DMN & bromacil Modified EPA Method 607 21 Day TAT	EA	5
2			Groundwater Sample NDMN, DMN & bromacil Modified EPA Method 607 7 Day TAT	EA	

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

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

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

PACKED BY:	# CONTAINERS	TYPE CONTAINERS	DIMENSIONS	WEIGHT
Please check off the applicable labels!				
☐ FRAGILE				
☐ GLASS				
☐ DELICATE				
☐ DO NOT XRAY				
☐ REFRIGERATE				
☐ OTHER				
☐ BUBBLEWRAP	TOTAL CONTAINERS			TOTAL WEIGHT
☐ FOAM				

RECEIVED BY: Paul Hansen
REPRESENTING: SWRI

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

Client: Navarro Research and Engineering Inc.
SRR # 71593
Project # 26040.10.003
Case: 24EC009B
VTSR: 08/20/24
Sample(s) Received: Intact
Temperature: 2.7°C SN # 029926

WSTF 196 (1/06)

G

Southwest Research Institute

Laboratory Task Order

TO #: 240822-1 Revision: 3

Project(s): 26040.10.003
Manager(s): Yau, Alice
To Client: 09/13/24

SDG: M607-952

SRR #'s: 71612, 71619
Client(s): Navarro Research and Engineering Inc.

Instructions

Email results to Stephanie Portillo (Stephanie.Portillo@nasa.gov) and Troy Wiebe (donavon.t.wiebe@nasa.gov).
Rev 1: Samples from SRR 71619 added to this task order.
Rev 2&3: Update SDG to M607-952.

Documents Related to this task order: 402806[COC for SRR 71619], 402808[PW for SRR 71619], 402818[COC for SRR 71612], 402819[PW for SRR 71612]

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

Test: E607W
Section: EXTLAB

Holding: 7 days from CED

EXTRACTION BY METHOD 607

Cnt: 12

System ID	Type	Cont	Matrix	Customer ID	CED	Method Date
723994		1	Aqueous	2408190948A (NASA 3)	19 Aug 20	26 Aug 20
723995		1	Aqueous	2408190951X (WB-5-250)	19 Aug 20	26 Aug 20
723996		1	Aqueous	2408200941X (WB-14-520)	20 Aug 24	27 Aug 24
723997		1	Aqueous	2408201000A (PL-12-570)	20 Aug 24	27 Aug 24
723998		1	Aqueous	2408201401X (WB-14-520)	20 Aug 24	27 Aug 24
723999		1	Aqueous	2408201405A (PL-12-800)	20 Aug 24	27 Aug 24
724037		1	Aqueous	2408211001X (200-H-331)	21 Aug 24	28 Aug 24
724038		1	Aqueous	2408211316X (200-H-433)	21 Aug 24	28 Aug 24
724039		1	Aqueous	2408211327Y (400-D-355)	21 Aug 24	28 Aug 24
724040		1	Aqueous	2408211405B (WW-5-459)	21 Aug 24	28 Aug 24
724041		1	Aqueous	2408211425B (WW-5-579)	21 Aug 24	28 Aug 24
724042		1	Aqueous	2408211426X (200-H-433)	21 Aug 24	28 Aug 24

Test: T607W
Section: TDG

Holding: 40 days from VTSR

NDMA/DMN ANALYSIS BY GC/MS/SIM

Cnt: 12

System ID	Type	Cont	Matrix	Customer ID	VTSR	Method Date
723994		1	Aqueous	2408190948A (NASA 3)	22 Aug 24	01 Oct 24
723995		1	Aqueous	2408190951X (WB-5-250)	22 Aug 24	01 Oct 24
723996		1	Aqueous	2408200941X (WB-14-520)	22 Aug 24	01 Oct 24
723997		1	Aqueous	2408201000A (PL-12-570)	22 Aug 24	01 Oct 24
723998		1	Aqueous	2408201401X (WB-14-520)	22 Aug 24	01 Oct 24
723999		1	Aqueous	2408201405A (PL-12-800)	22 Aug 24	01 Oct 24
724037		1	Aqueous	2408211001X (200-H-331)	23 Aug 24	02 Oct 24
724038		1	Aqueous	2408211316X (200-H-433)	23 Aug 24	02 Oct 24
724039		1	Aqueous	2408211327Y (400-D-355)	23 Aug 24	02 Oct 24
724040		1	Aqueous	2408211405B (WW-5-459)	23 Aug 24	02 Oct 24
724041		1	Aqueous	2408211425B (WW-5-579)	23 Aug 24	02 Oct 24
724042		1	Aqueous	2408211426X (200-H-433)	23 Aug 24	02 Oct 24

WSTF CHAIN OF CUSTODY RECORD

Date 8-21-24

Laboratory: SwRI PO# 24EC009B

Analytical Requirements

Address shipping questions to:

☐ Lori Minnick, 575-524-5119

☐ Other _____, 575-524-_____

Send sample receipt confirmation and analytical reports to:

☒ Stephanie Portillo, stephanie.portillo@nasa.gov

☐ Other

☐ Other

Analytes: NDMA / SOM01 / SOP MACIL

Method: 607

Special Instructi

Return coolers a
days as required

Return Address:
NASA WS
12600 NAS
Las Cruces
Attn: Lori

Sample Number	Sample Location	# of Containers	Sample Matrix*	Charge Number (WSTF Use Only)
24081909481A	NASA 3	1	A	XGMD
24081909511X	WB-5-250	1	A	"
24082009411X	WB-14-520	1	A	"
24082014011X	"	1	A	"
24082010001A	PL-12-570	1	A	"
24082014051A	PL-12-800	1	A	"

Client: Navarro Res
SRR # 71612
Project # 26040.10.
Case: 24EC009B
VTSR: 08/22/24
Sample(s) Received
Temperature: NOTE

Relinquished By:	Date/Time:	Accepted By:
Jose W Jimenez	8-21-24 / 1100HRS.	David Marcus SwRI

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

WSTF 381B (06/2023)

NASA-WSTF S PPING DOCUMENT

2 Ocean Blue OBS OBL6

SHIPPED FROM:	WSTF ORIGINATOR/MAIL CODE/TELEPHONE NO.		
NASA JSC WHITE SANDS TEST FACILITY	Deb Smith/Purchasing Dept. /(575) 524-5023		Stephanie Portillo 524-5267
12600 NASA ROAD; BLDG. 120	ORDER OR CONTRACT NUMBER	SHIPMENT CONTROL NO	
LAS CRUCES, NEW MEXICO 88012	24EC009B		
SHIP TO: (ADDRESS, PHONE#, POINT OF CONTACT)	PROJECT or TASK NUMBER	SHIP VIA	
Southwest Research Institute	XGMD 505-005	Navarro Third Party Billing	
6220 Culebra Road	Contain Batteries / NO. PKG.	DATE SHIPPED	AirBill/ PRO #/Bol #
San Antonio, TX 78238	NO	8-21-24	
Alice Yau	Battery Type-Part # / AUTHORIZED BY:	DEPT.	
210-522-5042			

ITEM NO.	EQUIPMENT CONTROL NO.	MODEL NO./ STOCK NO./ PART NO.	ITEM NAME - MANUFACTURER'S NAME AND SERIAL NO.	UNIT OF ISSUE	QTY.
1			Groudwater Sample NDMN, DMN & bromacil Modified EPA Method 607 21 Day TAT	EA	6
2			Groundwater Sample NDMN, DMN & bromacil Modified EPA Method 607 7 Day TAT	EA	

JUSTIFICATION FOR SHIPMENT: (MDR #, Return Authorization #'s, Warranty Replacement, Repair, Overage/Shortage, Damage, Recycling)

Groundwater samples for analysis per SOW

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

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

PACKED BY:	# CONTAINERS	TYPE CONTAINERS	DIMENSIONS	WEIGHT
Please check off the applicable labels!				
☐ FRAGILE				
☐ GLASS				
☐ DELICATE				
☐ DO NOT XRAY				
☐ REFRIGERATE				
☐ OTHER				
	TOTAL			TOTAL
☐ BUBBLEWRAP	CONTAINERS			WEIGHT
☐ FOAM				

RECEIVED BY: David Marcus

REPRESENTING: SwRI

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

Client: Navarro Research and Engineering Inc.
SRR # 71612
Project # 26040.10.003
Case: 24EC009B
VTSR: 08/22/24
Sample(s) Received: Intact
Temperature: NOTES SN # 029926

Date 8-22-24

WSTF CHAIN OF CUSTODY RECORD

Laboratory: SwRI PO# 24EC009B

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

Send sample receipt confirmation and analytical reports to:
- ☒ Stephanie Portillo, stephanie.portillo@nasa.gov
- ☐ Other
- ☐ Other

Analytical Requirements: Method 607 / Analytes NDMA / DMN / BROMACIL

Special Instructi
Return coolers a
days as required
Return Address:
NASA WS
12600 NAS
Las Cruces
Attn: Lori

Sample Number	Sample Location	# of Containers	Sample Matrix*	Analytical Requirements	Charge Number (WSTF Use Only)
240821100 1X	200-H-331	1	A	X	XGMD
240821132 7Y	400-D-355	1	A	X	"
240821131 6X	200-H-433	1	A	X	"
240821142 6X	"	1	A	X	"
240821140 5B	WW-5-459	1	A	X	"
240821142 5B	WW-5-579	1	A	X	"

Relinquished By:	Date/Time:	Accepted By:
Lori Minnick	8-22-24 1100 HRS.	David Mann SwRI

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

WSTF 381B (06/2023)

NASA-WSTF SHIPPING DOCUMENT

1 Ocean Blue #0B14

SHIPPED FROM:				WSTF ORIGINATOR/MAIL CODE/TELEPHONE NO.					
NASA JSC WHITE SANDS TEST FACILITY				Deb Smith/Purchasing Dept. /(575) 524-5023				Stephanie Portillo 524-5267	
12600 NASA ROAD; BLDG. 120				ORDER OR CONTRACT NUMBER			SHIPMENT CONTROL NO		
LAS CRUCES, NEW MEXICO 88012				24EC009B			W7 24 235 B		
SHIP TO: (ADDRESS, PHONE#, POINT OF CONTACT)				PROJECT or TASK NUMBER			SHIP VIA		
Southwest Research Institute				XGMD	505-005		Navarro Third Party Billing		
6220 Culebra Road				Contain Batteries		NO. PKG.	DATE SHIPPED	AirBill/ PRO #/Bol #	
San Antonio, TX 78238					NO		8-22-24		
Alice Yau				Battery Type-Part #		AUTHORIZED BY:		DEPT.	
210-522-5042									

ITEM NO.	EQUIPMENT CONTROL NO.	MODEL NO./ STOCK NO./ PART NO.	ITEM NAME - MANUFACTURER'S NAME AND SERIAL NO.	UNIT OF ISSUE	QTY.
1			Groudwater Sample NDMN, DMN & bromacil Modified EPA Method 607 21 Day TAT	EA	6
2			Groundwater Sample NDMN, DMN & bromacil Modified EPA Method 607 7 Day TAT	EA	

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

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

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

PACKED BY:	# CONTAINERS	TYPE CONTAINERS	DIMENSIONS	WEIGHT
Please check off the applicable labels!				
☐ FRAGILE				
☐ GLASS				
☐ DELICATE				
☐ DO NOT XRAY				
☐ REFRIGERATE				
☐ OTHER				
	TOTAL			TOTAL
☐ BUBBLEWRAP	CONTAINERS			WEIGHT
☐ FOAM		L		

RECEIVED BY: David Moreno

REPRESENTING: SwRI

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

Client: Navarro Research and Engineering Inc.
SRR # 71619
Project # 26040.10.003
Case: 24EC009B
VTSR: 08/23/24
Sample(s) Received: Intact

WSTF 196 (1/06)

G

CLIENT:	**Navarro Research and Engineering Inc.**
SwRI PROJECT #:	**26040.10.003**
TASK ORDERS:	**240816-1 and 240822-1**
NAVARRO PO #:	**24EC009B**

ANALYTICAL DATA REPORT SHEETS

(M607-952)

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID: 2408190948A (NASA 3)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1050 mL

Project: 26040.10.003
Date Received: 8/22/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/30/2024
Date Reported: 9/6/2024

Lab Sample ID: 723994
Lab File Name: A08302420.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

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

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408190951X (WB-5-250)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1030 mL

Project: 26040.10.003
Date Received: 8/22/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/30/2024
Date Reported: 9/6/2024

Lab Sample ID: 723995
Lab File Name: A08302421.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

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

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408200941X (WB-14-520)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1040 mL

Project: 26040.10.003
Date Received: 8/22/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/31/2024
Date Reported: 9/6/2024

Lab Sample ID: 723996
Lab File Name: A08302422.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

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

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408201000A (PL-12-570)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1020 mL

Project: 26040.10.003
Date Received: 8/22/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/31/2024
Date Reported: 9/6/2024

Lab Sample ID: 723997
Lab File Name: A08302423.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

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

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408201401X (WB-14-520)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1020 mL

Project: 26040.10.003
Date Received: 8/22/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/31/2024
Date Reported: 9/6/2024

Lab Sample ID: 723998
Lab File Name: A08302424.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	0.21	
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	0.67	

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

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

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408201405A (PL-12-800)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1040 mL

Project: 26040.10.003
Date Received: 8/22/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/31/2024
Date Reported: 9/6/2024

Lab Sample ID: 723999
Lab File Name: A08302425.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

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

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408211001X (200-H-331)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1040 mL

Project: 26040.10.003
Date Received: 8/23/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/31/2024
Date Reported: 9/6/2024

Lab Sample ID: 724037
Lab File Name: A08302426.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

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

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408211316X (200-H-433)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1060 mL

Project: 26040.10.003
Date Received: 8/23/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/31/2024
Date Reported: 9/6/2024

Lab Sample ID: 724038
Lab File Name: A08302427.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

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

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408211327Y (400-D-355)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1050 mL

Project: 26040.10.003
Date Received: 8/23/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/31/2024
Date Reported: 9/6/2024

Lab Sample ID: 724039
Lab File Name: A08302428.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

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

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID: 2408211405B (WW-5-459)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1040 mL

Project: 26040.10.003
Date Received: 8/23/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/31/2024
Date Reported: 9/6/2024

Lab Sample ID: 724040
Lab File Name: A08302429.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

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

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID: 2408211425B (WW-5-579)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1020 mL

Project: 26040.10.003
Date Received: 8/23/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/31/2024
Date Reported: 9/6/2024

Lab Sample ID: 724041
Lab File Name: A08302430.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

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

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408211426X (200-H-433)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240822-1
Matrix: Aqueous
Sample Wt/Vol: 1040 mL

Project: 26040.10.003
Date Received: 8/23/2024
Date Extracted: 8/26/2024
Date Analyzed: 8/31/2024
Date Reported: 9/6/2024

Lab Sample ID: 724042
Lab File Name: A08302431.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

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

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408140832A (300-001-GSV)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240816-1
Matrix: Aqueous
Sample Wt/Vol: 1020 mL

Project: 26040.10.003
Date Received: 8/16/2024
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: 723703
Lab File Name: A09032417.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	16.58	E
4164-28-7	N-Nitrodimethylamine	64.97	E
314-40-9	Bromacil	1.27	

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

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

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408140832A (300-001-GSV) DL

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240816-1
Matrix: Aqueous
Sample Wt/Vol: 1020 mL

Project: 26040.10.003
Date Received: 8/16/2024
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: 723703 DL
Lab File Name: A09032415.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 100
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	19.51	D
4164-28-7	N-Nitrodimethylamine	93.14	D
314-40-9	Bromacil	0.98	D

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

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

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408140921X (WB-5-345)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240816-1
Matrix: Aqueous
Sample Wt/Vol: 1030 mL

Project: 26040.10.003
Date Received: 8/16/2024
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: 723704
Lab File Name: A09032413.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

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

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID: 2408150823A (300-002-GSV)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240816-1
Matrix: Aqueous
Sample Wt/Vol: 1020 mL

Project: 26040.10.003
Date Received: 8/16/2024
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: 723705
Lab File Name: A09032405.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	0.18	
4164-28-7	N-Nitrodimethylamine	0.70	
314-40-9	Bromacil	0.77	

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

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

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408150824A (300-002-GSV)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240816-1
Matrix: Aqueous
Sample Wt/Vol: 1010 mL

Project: 26040.10.003
Date Received: 8/16/2024
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: 723706
Lab File Name: A09032406.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	0.18	
4164-28-7	N-Nitrodimethylamine	0.71	
314-40-9	Bromacil	0.75	

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

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

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408151002C (BLM-25-455)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240816-1
Matrix: Aqueous
Sample Wt/Vol: 1060 mL

Project: 26040.10.003
Date Received: 8/20/2024
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: 723805
Lab File Name: A09032407.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

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

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408151413C (BLM-21-400)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240816-1
Matrix: Aqueous
Sample Wt/Vol: 1060 mL

Project: 26040.10.003
Date Received: 8/20/2024
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: 723806
Lab File Name: A09032408.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	0.40	
4164-28-7	N-Nitrodimethylamine	0.42	
314-40-9	Bromacil	0.45	

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

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

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408160832A (400-001-GW)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240816-1
Matrix: Aqueous
Sample Wt/Vol: 1060 mL

Project: 26040.10.003
Date Received: 8/20/2024
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: 723807
Lab File Name: A09032409.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	1.29	
4164-28-7	N-Nitrodimethylamine	1.68	
314-40-9	Bromacil	0.76	

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

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

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408160841X (WB-5-280)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240816-1
Matrix: Aqueous
Sample Wt/Vol: 1020 mL

Project: 26040.10.003
Date Received: 8/20/2024
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: 723808
Lab File Name: A09032410.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

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

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID

2408161338A (ST-4-589)

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: 240816-1
Matrix: Aqueous
Sample Wt/Vol: 1060 mL

Project: 26040.10.003
Date Received: 8/20/2024
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: 723809
Lab File Name: A09032411.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

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

CLIENT:	**Navarro Research and Engineering Inc.**
SwRI PROJECT #:	**26040.10.003**
TASK ORDERS:	**240816-1 and 240822-1**
NAVARRO PO #:	**24EC009B**

QA DATA SHEETS

(BLANK, MATRIX SPIKE, SURROGATE, CALIBRATION)

(M607-952)

Southwest Research Institute

Method 607 Surrogate Recovery Summary

Client: Navarro Research and Engineering Inc.

Matrix: Aqueous SDG: M607-952

Project: 26040.10.003

	Client Sample ID	Lab Sample ID	N-Nitroso-di-n-propylamine-d14	
			% Recovery	Recovery Limits
1	PB24H26CM1	PB24H26CM1	103	40-160
2	LCS24H26CM1	LCS24H26CM1	109	40-160
3	2408190948A (NASA 3)	723994	105	40-160
4	2408190951X (WB-5-250)	723995	94	40-160
5	2408200941X (WB-14-520)	723996	103	40-160
6	2408201000A (PL-12-570)	723997	103	40-160
7	2408201401X (WB-14-520)	723998	117	40-160
8	2408201405A (PL-12-800)	723999	107	40-160
9	2408211001X (200-H-331)	724037	85	40-160
10	2408211316X (200-H-433)	724038	96	40-160
11	2408211327Y (400-D-355)	724039	97	40-160
12	2408211405B (WW-5-459)	724040	109	40-160
13	2408211425B (WW-5-579)	724041	111	40-160
14	2408211426X (200-H-433)	724042	85	40-160
15	PB24H21CM1	PB24H21CM1	106	40-160
16	LCS24H21CM1	LCS24H21CM1	101	40-160
17	2408150823A (300-002-GSV)	723705	96	40-160
18	2408150824A (300-002-GSV)	723706	96	40-160
19	2408151002C (BLM-25-455)	723805	107	40-160
20	2408151413C (BLM-21-400)	723806	106	40-160
21	2408160832A (400-001-GW)	723807	89	40-160
22	2408160841X (WB-5-280)	723808	80	40-160
23	2408161338A (ST-4-589)	723809	105	40-160
24	2408140921X (WB-5-345)	723704	78	40-160
25	2408140832A (300-001-GSV)	723703	88	40-160

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Method 607 Blank Spike Recovery Report

		Sample ID
		LCS24H21CM1
Client: Navarro Research and Engineering Inc.	Project: 26040.10.003	Lab Sample ID: LCS24H21CM1
Batch: M607-952	Date Received: N/A	Blank ID: PB24H21CM1
Task Order: N/A	Date Extracted: 8/21/2024	
Matrix: Aqueous	Date Analyzed: 9/3/2024	
Sample Wt/Vol: 1000 mL	Date Reported: 9/6/2024	

ANALYTE	Spike Added µg/L	Blank Conc µg/L	LCS Conc µg/L	% Recovery	QC % Recovery Limits
N-Nitrosodimethylamine	0.500	0	0.238	48	13 - 110
N-Nitrodimethylamine	0.500	0	0.370	74	30 - 150
Bromacil	0.500	0	0.547	109	40 - 190

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Method 607 Blank Spike Recovery Report

Sample ID: LCS24H26CM1

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: N/A
Matrix: Aqueous
Sample Wt/Vol: 1000 mL

Project: 26040.10.003
Date Received: N/A
Date Extracted: 8/26/2024
Date Analyzed: 8/30/2024
Date Reported: 9/6/2024

Lab Sample ID: LCS24H26CM1
Blank ID: PB24H26CM1

ANALYTE	Spike Added µg/L	Blank Conc µg/L	LCS Conc µg/L	% Recovery	QC % Recovery Limits
N-Nitrosodimethylamine	0.500	0	0.266	53	13 - 110
N-Nitrodimethylamine	0.500	0	0.392	78	30 - 150
Bromacil	0.500	0	0.642	128	40 - 190

Southwest Research Institute

Method 607 Blank Summary

Blank ID: PB24H21CM1
Project: 26040.10.003
Client: Navarro Research and Engineering Inc.
SDG: M607-952
Matrix: Aqueous

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

Client Sample ID	Lab Sample ID	Date Acquired	Time Acquired
LCS24H21CM1	LCS24H21CM1	9/3/2024	12:26:00
2408150823A (300-002-GSV)	723705	9/3/2024	13:20:00
2408150824A (300-002-GSV)	723706	9/3/2024	13:47:00
2408151002C (BLM-25-455)	723805	9/3/2024	14:13:00
2408151413C (BLM-21-400)	723806	9/3/2024	14:40:00
2408160832A (400-001-GW)	723807	9/3/2024	15:06:00
2408160841X (WB-5-280)	723808	9/3/2024	15:33:00
2408161338A (ST-4-589)	723809	9/3/2024	15:59:00
2408140921X (WB-5-345)	723704	9/3/2024	16:53:00
2408140832A (300-001-GSV) DL	723703 DL	9/3/2024	17:45:00
2408140832A (300-001-GSV)	723703	9/3/2024	18:35:00

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Method 607 Blank Summary

Blank ID: PB24H26CM1
Project: 26040.10.003
Client: Navarro Research and Engineering Inc.
SDG: M607-952
Matrix: Aqueous

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

Client Sample ID	Lab Sample ID	Date Acquired	Time Acquired
LCS24H26CM1	LCS24H26CM1	8/30/2024	18:24:00
2408190948A (NASA 3)	723994	8/30/2024	23:18:00
2408190951X (WB-5-250)	723995	8/30/2024	23:45:00
2408200941X (WB-14-520)	723996	8/31/2024	00:12:00
2408201000A (PL-12-570)	723997	8/31/2024	00:38:00
2408201401X (WB-14-520)	723998	8/31/2024	01:05:00
2408201405A (PL-12-800)	723999	8/31/2024	01:32:00
2408211001X (200-H-331)	724037	8/31/2024	01:59:00
2408211316X (200-H-433)	724038	8/31/2024	02:25:00
2408211327Y (400-D-355)	724039	8/31/2024	02:52:00
2408211405B (WW-5-459)	724040	8/31/2024	03:19:00
2408211425B (WW-5-579)	724041	8/31/2024	03:45:00
2408211426X (200-H-433)	724042	8/31/2024	04:12:00

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Continuing Calibration Check Sheet

SwRI Project #:	26040.10.003	Calibration Date:	08/30/2024
Sponsor:	Navarro Research and Engineering Inc.	Analytical Method:	TAP 01-0408-031
SwRI Standard ID:	257251	Std Concentration:	0.2 µg/mL
File ID #:	A083024S1	Initial Calibration Date:	04/23/2024

ANALYTE	Mean RRF	CC RRF	% Dev
N-Nitrosodimethylamine	0.370	0.390	-5.4
N-Nitrodimethylamine	0.136	0.151	-11.3
N-Nitroso-di-n-propylamine-d14	0.119	0.091	23.6
Bromacil	2.063	1.674	18.8

Southwest Research Institute

Continuing Calibration Check Sheet

SwRI Project #:	26040.10.003	Calibration Date:	09/03/2024
Sponsor:	Navarro Research and Engineering Inc.	Analytical Method:	TAP 01-0408-031
SwRI Standard ID:	257251	Std Concentration:	0.2 µg/mL
File ID #:	A090324S1	Initial Calibration Date:	04/23/2024

ANALYTE	Mean RRF	CC RRF	% Dev
N-Nitrosodimethylamine	0.370	0.423	-14.2
N-Nitrodimethylamine	0.136	0.154	-13.4
N-Nitroso-di-n-propylamine-d14	0.119	0.094	20.7
Bromacil	2.063	1.770	14.2

Southwest Research Institute

Initial Calibration Data Sheet

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

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

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Method 607 Internal Standard Summary

Filename: A083024S1.txt
Standard ID: 257251
Project: 26040.10.003

Date Analyzed: 08/30/2024
Time Analyzed: 14:25:00
Client: Navarro Research and Engineering Inc.

		IS1		IS2	
		Area	RT	Area	RT
Mid Point Standard		566528	8.62	131022	15.2
Upper Limit		1133056	8.95	262044	15.53
Lower Limit		283264	8.29	65511	14.87
Client Sample ID	**Lab Sample ID**				
PB24H26CM1	PB24H26CM1	493228	8.61	97796	15.20
LCS24H26CM1	LCS24H26CM1	475545	8.62	91797	15.20
2408190948A (NASA 3)	723994	369324	8.62	81814	15.20
2408190951X (WB-5-250)	723995	387640	8.61	72770	15.20
2408200941X (WB-14-520)	723996	353159	8.61	81956	15.21
2408201000A (PL-12-570)	723997	343711	8.61	77215	15.20
2408201401X (WB-14-520)	723998	353811	8.61	75140	15.20
2408201405A (PL-12-800)	723999	331349	8.61	74445	15.20
2408211001X (200-H-331)	724037	346397	8.61	72464	15.20
2408211316X (200-H-433)	724038	331104	8.61	68072	15.20
2408211327Y (400-D-355)	724039	337053	8.61	73449	15.20
2408211405B (WW-5-459)	724040	343381	8.61	65333 *	15.20
2408211425B (WW-5-579)	724041	362018	8.61	70167	15.20
2408211426X (200-H-433)	724042	348922	8.61	71934	15.20

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

* Flag indicating value is outside QC limits

Southwest Research Institute

Method 607 Internal Standard Summary

Filename: A090324S1.txt
Standard ID: 257251
Project: 26040.10.003

Date Analyzed: 09/03/2024
Time Analyzed: 11:08:00
Client: Navarro Research and Engineering Inc.

		IS1		IS2	
		Area	RT	Area	RT
Mid Point Standard		595596	8.61	140319	15.2
Upper Limit		1191192	8.94	280638	15.53
Lower Limit		297798	8.28	70159.5	14.87
Client Sample ID	**Lab Sample ID**				
PB24H21CM1	PB24H21CM1	589573	8.61	131631	15.20
LCS24H21CM1	LCS24H21CM1	560897	8.61	111818	15.20
2408150823A (300-002-GSV)	723705	585066	8.61	125218	15.20
2408150824A (300-002-GSV)	723706	598224	8.61	132597	15.20
2408151002C (BLM-25-455)	723805	529211	8.61	128172	15.20
2408151413C (BLM-21-400)	723806	539127	8.61	116702	15.20
2408160832A (400-001-GW)	723807	557802	8.61	112075	15.20
2408160841X (WB-5-280)	723808	536078	8.61	104241	15.20
2408161338A (ST-4-589)	723809	504679	8.61	110025	15.20
2408140921X (WB-5-345)	723704	518165	8.61	94963	15.20
2408140832A (300-001-GSV) DL	723703 DL	439941	8.61	95116	15.20
2408140832A (300-001-GSV)	723703	514277	8.62	98021	15.20

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

* Flag indicating value is outside QC limits

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID: PB24H21CM1

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: N/A
Matrix: Aqueous
Sample Wt/Vol: 1000 mL

Project: 26040.10.003
Date Received: N/A
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: PB24H21CM1
Lab File Name: A09032401.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

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

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID: LCS24H21CM1

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: N/A
Matrix: Aqueous
Sample Wt/Vol: 1000 mL

Project: 26040.10.003
Date Received: N/A
Date Extracted: 8/21/2024
Date Analyzed: 9/3/2024
Date Reported: 9/6/2024

Lab Sample ID: LCS24H21CM1
Lab File Name: A09032403.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	0.24	
4164-28-7	N-Nitrodimethylamine	0.37	
314-40-9	Bromacil	0.55	

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

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

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID: PB24H26CM1

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: N/A
Matrix: Aqueous
Sample Wt/Vol: 1000 mL

Project: 26040.10.003
Date Received: N/A
Date Extracted: 8/26/2024
Date Analyzed: 8/30/2024
Date Reported: 9/6/2024

Lab Sample ID: PB24H26CM1
Lab File Name: A08302406.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	<0.01	U
4164-28-7	N-Nitrodimethylamine	<0.01	U
314-40-9	Bromacil	<0.01	U

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

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

Southwest Research Institute

Method 607 Analysis Data Sheet

Sample ID: LCS24H26CM1

Client: Navarro Research and Engineering Inc.
Batch: M607-952
Task Order: N/A
Matrix: Aqueous
Sample Wt/Vol: 1000 mL

Project: 26040.10.003
Date Received: N/A
Date Extracted: 8/26/2024
Date Analyzed: 8/30/2024
Date Reported: 9/6/2024

Lab Sample ID: LCS24H26CM1
Lab File Name: A08302409.txt
Final Extraction Vol: 1000 uL
Dilution Factor: 1
Reporting Unit: µg/L
Method: TAP 01-0408-031

CAS No.	ANALYTE	RESULT	Q
62-75-9	N-Nitrosodimethylamine	0.27	
4164-28-7	N-Nitrodimethylamine	0.39	
314-40-9	Bromacil	0.64	

E - Concentration detected above calibration curve

D - Results from dilution analysis

U - Undetected, indicates not found above the detection limit

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

CLIENT:	**Navarro Research and Engineering Inc.**
SwRI PROJECT #:	**26040.10.003**
TASK ORDERS:	**240816-1 and 240822-1**
NAVARRO PO #:	**24EC009B**

EXTRACTION AND INJECTION LOG

(M607-952)

Preparation Log

Semi-volatiles

A39221

Southwest Research Institute
San Antonio, Texas 78238

Batch: 20240821-P001 (Ver. 1)
Status: APPROVED

Client(s): Navarro Research and Engineering Inc.
Task Order(s): 240816-1
SDG(s): M607-952
Case(s): 24EC009B
Project(s): 26040.10.003
Method(s): Water Extraction By Sep-Funnel 3510C (TAP: TAP 01-0402-015)
Matrix(s): Aqueous
Reagent(s): DCM Distilled Lot#DUD062024, Organic Free Water CIMS#267665, Sodium Sulfate CIMS#267666
Wiretrol(s): 50-100uL 218870
pH Paper: 250770(6.0-8.0)
Notes: Emulsion:C=Centrigfuge, W=Wired, T=Tilted
Reference Book(s): 23-0406-018 P168
Surrogate Standard --> Name: M607 surrogate-254622 ChemInv#: 062422 Source: Absolute Standards, Inc. Amt: 0.100 mL Exp: 06/24/2027

Location: Box I, B4-C2 FREEZER 75

Sample Identification	Client Identification	pH	Sample Vol (mL)	FV DCM (uL)	Emulsion
PB24H21CM1 ①	NA	6.4	1000	1000	NO
LCS24H21CM1 ②	NA	6.4	1000	1000	NO
723703 ①	2408140832A (300-001-GSV)	6.4	1020	1000	NO
723704 ①	2408140921X (WB-5-345)	6.4	1030	1000	NO
723705 ①	2408150823A (300-002-GSV)	6.4	1020	1000	NO
723706 ①	2408150824A (300-002-GSV)	6.4	1010	1000	YES
723805 ①	2408151002C (BLM-25-455)	6.4	1060	1000	YES
723806 ①	2408151413C (BLM-21-400)	6.4	1060	1000	NO
723807 ①	2408160832A (400-001-GW)	6.4	1060	1000	NO
723808 ①	2408160841X (WB-5-280)	6.4	1020	1000	YES
723809 ①	2408161338A (ST-4-589)	6.4	1060	1000	NO

① spiked 0.100 mL of CI# 254622 M607 surrogate (Lot# 062422, Source: Absolute Standards, Inc., Exp: 06/24/2027) SURR
② spiked 0.05 mL of CI# 226098 607 MS/LCS solution (Lot# 224743, 070722, 041922, SDGI-021, Source: Fisher Scientific, Absolute Standards, Inc., Cambridge Isotope Laboratories, Exp: 01/09/2025) and
0.100 mL of CI# 254622 M607 surrogate (Lot# 062422, Source: Absolute Standards, Inc., Exp: 06/24/2027) SURR

Comments: NA

CGL - 08/30/2024

Prepared by: MENN, CHRISTINA Date: 08/21/2024

Reviewed by: YAU, ALICE Date: 08/30/2024

Disposal Int/Date/Loc:

Preparation Log

Semi-volatiles

A39270

Southwest Research Institute
San Antonio, Texas 78238

Batch: 20240826-P006 (Ver. 1)
Status: APPROVED

Client(s): Navarro Research and Engineering Inc.
Task Order(s): 240822-1
SDG(s): M607-952
Case(s): 24EC009B
Project(s): 26040.10.003
Method(s): Water Extraction By Sep-Funnel 3510C (TAP: TAP 01-0402-015)
Matrix(s): Aqueous
Reagent(s): DCM Distilled Lot#DUD062024, Organic Free Water CIMS#267665, Sodium Sulfate CIMS#268802
Wiretrol(s): 50-100uL 218870
pH Paper: 250770(6.0-8.0)
Notes: Emulsion:C=Centrigfuge, W=Wired, T=Tilted
Reference Book(s): 23-0406-018 P172
Surrogate Standard --> Name: M607 surrogate-254622 ChemInv#: 062422 Source: Absolute Standards, Inc. Amt: 0.100 mL Exp: 06/24/2027

Location: Box I, A1-B2 FREEZER 75

Sample Identification	Client Identification	pH	Sample Vol (mL)	FV DCM (uL)	Emulsion
PB24H26CM1 ①	NA	6.4	1000	1000	NO
LCS24H26CM1 ②	NA	6.4	1000	1000	NO
723994 ①	2408190948A (NASA 3)	6.4	1050	1000	NO
723995 ①	2408190951X (WB-5-250)	6.8	1030	1000	TW
723996 ①	2408200941X (WB-14-520)	6.0	1040	1000	NO
723997 ①	2408201000A (PL-12-570)	6.4	1020	1000	NO
723998 ①	2408201401X (WB-14-520)	6.0	1020	1000	NO
723999 ①	2408201405A (PL-12-800)	6.4	1040	1000	NO
724037 ①	2408211001X (200-H-331)	6.4	1040	1000	NO
724038 ①	2408211316X (200-H-433)	6.4	1060	1000	NO
724039 ①	2408211327Y (400-D-355)	6.4	1050	1000	NO
724040 ①	2408211405B (WW-5-459)	6.4	1040	1000	NO
724041 ①	2408211425B (WW-5-579)	6.4	1020	1000	NO
724042 ①	2408211426X (200-H-433)	6.4	1040	1000	NO

① spiked 0.100 mL of CI# 254622 M607 surrogate (Lot# 062422, Source: Absolute Standards, Inc., Exp: 06/24/2027) SURR
② spiked 0.05 mL of CI# 226098 607 MS/LCS solution (Lot# 224743, 070722, 041922, SDGI-021, Source: Fisher Scientific, Absolute Standards, Inc., Cambridge Isotope Laboratories, Exp: 01/09/2025) and
0.100 mL of CI# 254622 M607 surrogate (Lot# 062422, Source: Absolute Standards, Inc., Exp: 06/24/2027) SURR

Comments:
Jennifer Zarate :Set-Up, Spike,Extract, Qualitative Transfer
Marina Lebron:Set-Up, Extract, Concentrate, Qualitative Transfer
Christina Menn:Set-Up, Spike,Extract, Blow Down, Qualitative Transfer, Final Volume

CGL - 08/30/2024

Prepared by: MENN, CHRISTINA Date: 08/26/2024

Reviewed by: YAU, ALICE Date: 08/30/2024

Disposal Int/Date/Loc: _____

Preparation Log

Semi-volatiles

A39270

Southwest Research Institute
San Antonio, Texas 78238

Batch: 20240826-P006 (Ver. 1)
Status: APPROVED

Client(s): Navarro Research and Engineering Inc.
Task Order(s): 240822-1
SDG(s): M607-952
Case(s): 24EC009B
Project(s): 26040.10.003
Method(s): Water Extraction By Sep-Funnel 3510C (TAP: TAP 01-0402-015)
Matrix(s): Aqueous
Reagent(s): DCM Distilled Lot#DUD062024, Organic Free Water CIMS#267665, Sodium Sulfate CIMS#268802
Wiretrol(s): 50-100uL 218870
pH Paper: 250770(6.0-8.0)
Notes: Emulsion:C=Centrigfuge, W=Wired, T=Tilted
Reference Book(s): 23-0406-018 P172
Surrogate Standard --> Name: M607 surrogate-254622 ChemInv#: 062422 Source: Absolute Standards, Inc. Amt: 0.100 mL Exp: 06/24/2027

Location: Box I, A1-B2 FREEZER 75

XmL —> ext 3x w/DCM ——> concentrated ——> FV 1000uL DCM for analysis

Prepared by: MENN, CHRISTINA Date: 08/26/2024

Reviewed by: YAU, ALICE Date: 08/30/2024

Disposal Int/Date/Loc:

Southwest Research Institute GC/MS Injection Log

OPERATOR: AYY SEQUENCE DATE: 8/30/2024, 8/31/2024 INSTRUMENT: Amidala
COLUMN: Agilent DB-1701 (30 m;0.25 mm;0.25 µm film)
DETECTOR TYPE: MS INJECTION TYPE: Pulsed splitless
CARRIER GAS: Helium SOLVENT: DCM
METHOD FILE: MET_607C.M
CLIENT NAME: Navarro Research and Engineering Inc. PROJECT NUMBER: 26040.10.003
SDG: M607-951, M607-952 and M607-953 METHOD: MET_607C.M MATRIX: Aqueous
DATA PATH: C:\MassHunter\GCMS\1\data\2024\083024.sequence

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

FILENAME	VIAL	DATE/TIME	METHOD	SAMPLE DESCRIPTION
A083024S1	100	8/30/2024 14:25	MET_607C	M607 CC Std4 0.2 ug/mL CIMS: 257251
A08302401	1	8/30/2024 14:52	MET_607C	2408051412B (BLM-32-632) IS=0.2NG/UL 723494
A08302402	2	8/30/2024 15:18	MET_607C	2408071434A (BLM-23-431) IS=0.2NG/UL 723497
A08302403	3	8/30/2024 15:45	MET_607C	2408071435A (BLM-23-431) IS=0.2NG/UL 723498
A08302404	4	8/30/2024 16:11	MET_607C	2408080931X (ST-5-1175) IS=0.2NG/UL 723582
A08302405	5	8/30/2024 16:37	MET_607C	PB24H21CM1 IS=0.2NG/UL (DNU)
A08302406	16	8/30/2024 17:04	MET_607C	PB24H26CM1 IS=0.2NG/UL
A08302407	80	8/30/2024 17:31	MET_607C	PB24H29CM1 IS=0.2NG/UL (DNU)
A08302408	6	8/30/2024 17:57	MET_607C	LCS24H21CM1 IS=0.2NG/UL
A08302409	17	8/30/2024 18:24	MET_607C	LCS24H26CM1 IS=0.2NG/UL (DNU)
A08302410	81	8/30/2024 18:51	MET_607C	LCS24H29CM1 IS=0.2NG/UL
A08302411	7	8/30/2024 19:18	MET_607C	2408140832A (300-001-GSV) IS=0.2NG/UL 723703 (DNU)
A08302412	8	8/30/2024 19:44	MET_607C	2408140921X (WB-5-345) IS=0.2NG/UL 723704 (DNU)
A08302413	9	8/30/2024 20:11	MET_607C	2408150823A (300-002-GSV) IS=0.2NG/UL 723705 (DNU)
A08302414	10	8/30/2024 20:38	MET_607C	2408150824A (300-002-GSV) IS=0.2NG/UL 723706 (DNU)
A08302415	11	8/30/2024 21:05	MET_607C	2408151002C (BLM-25-455) IS=0.2NG/UL 723805 (DNU)
A08302416	12	8/30/2024 21:31	MET_607C	2408151413C (BLM-21-400) IS=0.2NG/UL 723806 (DNU)
A08302417	13	8/30/2024 21:58	MET_607C	2408160832A (400-001-GW) IS=0.2NG/UL 723807 (DNU)
A08302418	14	8/30/2024 22:25	MET_607C	2408160841X (WB-5-280) IS=0.2NG/UL 723808 (DNU)
A08302419	15	8/30/2024 22:52	MET_607C	2408161338A (ST-4-589) IS=0.2NG/UL 723809 (DNU)
A08302420	18	8/30/2024 23:18	MET_607C	2408190948A (NASA 3) IS=0.2NG/UL 723994
A08302421	19	8/30/2024 23:45	MET_607C	2408190951X (WB-5-250) IS=0.2NG/UL 723995
A08302422	20	8/31/2024 00:12	MET_607C	2408200941X (WB-14-520) IS=0.2NG/UL 723996
A08302423	21	8/31/2024 00:38	MET_607C	2408201000A (PL-12-570) IS=0.2NG/UL 723997
A08302424	22	8/31/2024 01:05	MET_607C	2408201401X (WB-14-520) IS=0.2NG/UL 723998
A08302425	23	8/31/2024 01:32	MET_607C	2408201405A (PL-12-800) IS=0.2NG/UL 723999
A08302426	24	8/31/2024 01:59	MET_607C	2408211001X (200-H-331) IS=0.2NG/UL 724037
A08302427	25	8/31/2024 02:25	MET_607C	2408211316X (200-H-433) IS=0.2NG/UL 724038
A08302428	76	8/31/2024 02:52	MET_607C	2408211327Y (400-D-355) IS=0.2NG/UL 724039
A08302429	77	8/31/2024 03:19	MET_607C	2408211405B (WW-5-459) IS=0.2NG/UL 724040
A08302430	78	8/31/2024 03:45	MET_607C	2408211425B (WW-5-579) IS=0.2NG/UL 724041
A08302431	79	8/31/2024 04:12	MET_607C	2408211426X (200-H-433) IS=0.2NG/UL 724042
A08302432	82	8/31/2024 04:39	MET_607C	2408221017X (200-H-225) IS=0.2NG/UL 724069 (DNU)
A08302433	83	8/31/2024 05:05	MET_607C	2408221310Y (400-D-275) IS=0.2NG/UL 724070
A08302434	84	8/31/2024 05:32	MET_607C	2408221355B (WW-5-809) IS=0.2NG/UL 724071
A08302435	85	8/31/2024 05:59	MET_607C	2408221420B (WW-5-909) IS=0.2NG/UL 724072
A08302436	86	8/31/2024 06:25	MET_607C	2408260853C (400-GV-125) IS=0.2NG/UL 724131
A08302437	87	8/31/2024 06:52	MET_607C	2408260854C (400-GV-125) IS=0.2NG/UL 724132
A08302438	88	8/31/2024 07:19	MET_607C	2408260917A (400-HV-147) IS=0.2NG/UL 724133
A08302439	89	8/31/2024 07:45	MET_607C	2408260918A (400-HV-147) IS=0.2NG/UL 724134

A08302440 90 8/31/2024 08:12 MET_607C 2408260953C (400-JV-150) IS=0.2NG/UL 724135
A08302441 91 8/31/2024 08:39 MET_607C 2408261032A (400-EV-131) IS=0.2NG/UL 724136
A08302442 92 8/31/2024 09:05 MET_607C 2408261357A (400-IV-123) IS=0.2NG/UL 724137
A08302443 93 8/31/2024 09:32 MET_607C 2408261418C (400-FV-131) IS=0.2NG/UL 724138
A08302444 94 8/31/2024 09:58 MET_607C 2408261419C (400-FV-131) IS=0.2NG/UL 724139
A08302445 95 8/31/2024 10:25 MET_607C 2408271331Y (400-D-195) IS=0.2NG/UL 724140

DNU: Do not use file; internal standards accidentally omitted.
END OF SEQUENCE

Southwest Research Institute GC/MS Injection Log

OPERATOR: AYY SEQUENCE DATE: 9/3/2024 INSTRUMENT: Amidala
COLUMN: Agilent DB-1701 (30 m;0.25 mm;0.25 µm film)
DETECTOR TYPE: MS INJECTION TYPE: Pulsed splitless
CARRIER GAS: Helium SOLVENT: DCM
METHOD FILE: MET_607C.M
CLIENT NAME: Navarro Research and Engineering Inc. PROJECT NUMBER: 26040.10.003
SDG: M607-952 and M607-953 METHOD: MET_607C.M MATRIX: Aqueous
DATA PATH: C:\MassHunter\GCMS\1\data\2024\090324.sequence

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

FILENAME	VIAL	DATE/TIME	METHOD	SAMPLE DESCRIPTION
A090324S1	100	9/3/2024 11:08	MET_607C	M607 CC Std4 0.2 ug/mL CIMS: 257251
A09032401	1	9/3/2024 11:34	MET_607C	PB24H21CM1 IS=0.2NG/UL
A09032402	2	9/3/2024 12:01	MET_607C	PB24H29CM1 IS=0.2NG/UL
A09032403	3	9/3/2024 12:26	MET_607C	LCS24H21CM1 IS=0.2NG/UL
A09032404	4	9/3/2024 12:53	MET_607C	LCS24H29CM1 IS=0.2NG/UL
A09032405	5	9/3/2024 13:20	MET_607C	2408150823A (300-002-GSV) IS=0.2NG/UL 723705
A09032406	6	9/3/2024 13:47	MET_607C	2408150824A (300-002-GSV) IS=0.2NG/UL 723706
A09032407	7	9/3/2024 14:13	MET_607C	2408151002C (BLM-25-455) IS=0.2NG/UL 723805
A09032408	8	9/3/2024 14:40	MET_607C	2408151413C (BLM-21-400) IS=0.2NG/UL 723806
A09032409	9	9/3/2024 15:06	MET_607C	2408160832A (400-001-GW) IS=0.2NG/UL 723807
A09032410	10	9/3/2024 15:33	MET_607C	2408160841X (WB-5-280) IS=0.2NG/UL 723808
A09032411	11	9/3/2024 15:59	MET_607C	2408161338A (ST-4-589) IS=0.2NG/UL 723809
A09032412	12	9/3/2024 16:26	MET_607C	2408221017X (200-H-225) IS=0.2NG/UL 724069
A09032413	13	9/3/2024 16:53	MET_607C	2408140921X (WB-5-345) IS=0.2NG/UL 723704
A09032414	14	9/3/2024 17:19	MET_607C	2408261032A (400-EV-131) IS=0.2NG/UL DL10 724136
A09032415	15	9/3/2024 17:45	MET_607C	2408140832A (300-001-GSV) IS=0.2NG/UL DL100 723703
A09032416	16	9/3/2024 18:09	MET_607C	2408260917A (400-HV-147) IS=0.2NG/UL DL100 724133
A09032417	17	9/3/2024 18:35	MET_607C	2408140832A (300-001-GSV) IS=0.2NG/UL 723703

END OF SEQUENCE
Page 1 of 1

August 28, 2024 Service Request No:R2407791

Stephanie Portillo
NASA/WSTF/Navarro
P.O. Box 20
Las Cruces, NM 88004

Laboratory Results for: White Sands Test Facility

Dear Stephanie,

Enclosed are the results of the sample(s) submitted to our laboratory August 16, 2024
For your reference, these analyses have been assigned our service request number **R2407791.**

All testing was performed according to our laboratory's quality assurance program and met the requirements of the TNI standards except as noted in the case narrative report. Any testing not included in the lab's accreditation is identified on a Non-Certified Analytes report. All results are intended to be considered in their entirety. ALS Environmental is not responsible for use of less than the complete report. Results apply only to the individual samples submitted to the lab for analysis, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s), and represented by Laboratory Control Sample control limits. Any events, such as QC failures or Holding Time exceedances, which may add to the uncertainty are explained in the report narrative or are flagged with qualifiers. The flags are explained in the Report Qualifiers and Definitions page of this report.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental



Janice Jaeger
Project Manager

CC: Laurel Gardenhire

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dba ALS Environmental

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Narrative Documents

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility
Sample Matrix: Water

Service Request: R2407791
Date Received: 08/16/2024

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier level IV requested by the client.
Manual Integrations may have been used in the quantitation of the results in this report. Manual Integrations are readily identified in the raw data on the Quantitation Reports (Organics) by the automatic placement of an “m” next to the sample result. For Ion Chromatography, the manual integrations are identified by the automatic placement of “manipulated” or "manually integrated" in the upper left corner of the chromatogram (Hexavalent Chromium) or “M” by the result in the “Type” column (anions). The reason for the manual integration is noted on the “after” chromatogram, which is found with the original chromatogram and quantitation report. All integrations follow the lab SOP ADM-INT “Manual Integration.”

Sample Receipt:

Nine water samples were received for analysis at ALS Environmental on 08/16/2024. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Volatiles by GC/MS:

Method 8260D, 08/22/2024: The upper control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). The field samples analyzed in this sequence did not contain the analyte(s) in question above the Method Reporting Limit (MRL). Since the exceedance equates to a potential high bias, the data quality was not significantly affected and no further corrective action was taken.

Method 8260D, 08/22/2024: The lower control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). Since there were no detections of the analyte(s) above the MRL in the associated field samples, the quantitation is not affected. The data quality was not significantly affected and no further corrective action was taken.

Approved by _____ Date 08/28/2024

Sample Receipt Information

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: NASA/WSTF/Navarro **Service Request:**R2407791
Project: White Sands Test Facility/24EC008B

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R2407791-001	2408121410X WB-5-345	8/12/2024	
R2407791-002	2408140730X WB-5-345	8/14/2024	
R2407791-003	2408140920X WB-5-345	8/14/2024	
R2407791-004	2408140830A 300-001-GSV	8/14/2024	
R2407791-005	2408140931A 300-001-GSV	8/14/2024	
R2407791-006	2408141345X WB-5-280	8/14/2024	
R2407791-007	2408150820A 300-002-GSV	8/15/2024	
R2407791-008	2408150821A 300-002-GSV	8/15/2024	
R2407791-009	2408150822A 300-002-GSV	8/15/2024	

Date 8-15-24

WSTF CHAIN OF CUSTODY RECORD

Laboratory: ALS PO# 24EC008B

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

Send sample receipt confirmation and analytical reports to:
☒ Stephanie Portillo, stephanie.portillo@nasa.gov
☐ Other
☐ Other

Analytical Requirements: Method 8260 VOA

Special Instructions

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

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

Sample Number	Sample Location	# of Containers	Sample Matrix*	Analytical Requirements	Charge Number (WSTF Use Only)	Comments
2408121410X	WB-5-345	3	A	X	XGMD	★sig. bubbles 3 vials.
2408140730X	"	3	A	X	"	★sig. bubbles 1 vial
2408140920X	"	3	A	X	"	★sig. bubbles 3 vials.
2408140830A	300-001-GSV	3	A	X	"	★sig bubbles 1 vial
2408140831A	"	3	A	X	"	
2408141345X	WB-5-280	3	A	X	"	
2408150820A	300-002-GSV	3	A	X	"	
2408150821A	"	3	A	X	"	★sig. bubbles 2 vials
2408150822A	"	3	A	X	"	

Relinquished By:	Date/Time:	Accepted By:	Date/Time:
[signature]	8-15-24 1100HRS	[signature]	8/16/24 745

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

R2407791 5
NASA/WSTF/Navarro
White Sands Test Facility

R2407791 5
NASA/WSTF/Navarro
White Sands Test Facility

Cooler Receipt and Preservation Check Form

Project/Client NASA Folder Number

Cooler received on 8/16/24 by: SES

COURIER: ALS UPS (FEDEX) VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	(Y) N	5a	Did **VOA** vials have sig* **bubbles?**	(Y) N NA		
2	**Custody papers** properly completed (ink, signed)?	(Y) N	5b	Sig* bubbles: **Alk?**	Y (N) NA	**Sulfide?**	Y N (NA)
3	Did all bottles arrive in good **condition** (unbroken)?	(Y) N	6	Where did the bottles originate?	(ALS) ROC CLIENT		
4	Circle: (**Wet Ice**) **Dry Ice Gel packs** present?	(Y) N	7	Soil VOA received as:	Bulk Encore 5035set (NA)		

8. Temperature Readings Date: 8/16/24 Time: 817 ID: IR#12 (IR#11) From: Temp Blank (Sample Bottle)

Temp (°C)	3.6						
Within 0-6°C?	(Y) N	Y N	Y N	Y N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed (described below) Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: SMO by SES on 8/16/24 at 818

5035 samples placed in storage location: _____ by _____ on _____ at _____ within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check**: Date: 8/16/24 Time: 1355 by: SES

9. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (YES) NO
10. Did all bottle labels and tags agree with custody papers? (YES) NO
11. Were correct containers used for the tests indicated? (YES) NO
12. Were 5035 vials acceptable (no extra labels, not leaking)? YES NO (N/A)
13. Were dissolved metals filtered in the field? YES NO (N/A)
14. Air Samples: Cassettes / Tubes Intact Y / N with MS Y / N Canisters Pressurized Tedlar® Bags Inflated (N/A)

pH	Lot of test paper	Reagent	Preserved? Yes	Preserved? No	Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
≥12		NaOH								
≤2		HNO_3								
≤2		H_2SO_4								
<4		$NaHSO_4$								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol, 625, 608pest, 522			If +, contact PM to add $Na_2S_2O_3$ (625, 608, CN), ascorbic (phenol).					
		$Na_2S_2O_3$								
		ZnAcetate	-	-						
		HCl	**	**	Client →					

**VOAs and 1664 Not to be tested before analysis. Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).

Bottle lot numbers: Client Vials

Explain all Discrepancies/ Other Comments:

5a) see COC

HPROD	BULK
HTR	FLDT
SUB	HGFB
ALS	LL3541

Labels secondary reviewed by: SES *significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

Miscellaneous Forms

ALS Environmental—Rochester Laboratory
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REPORT QUALIFIERS AND DEFINITIONS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
E	Organics- Concentration has exceeded the calibration range for that specific analysis.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.
H	Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.
#	Spike was diluted out.
+	Correlation coefficient for MSA is <0.995.
N	Inorganics- Matrix spike recovery was outside laboratory limits.
N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
S	Concentration has been determined using Method of Standard Additions (MSA).
W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
P	Concentration >40% difference between the two GC columns.
C	Confirmed by GC/MS
Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).
X	See Case Narrative for discussion.
MRL LOQ	Method Reporting Limit. Also known as: Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
MDL	Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
LOD	Limit of Detection. A value at or above the MDL which has been verified to be detectable.
ND	Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

Rochester Lab ID # for State Accreditations[1]

NELAP States
Florida ID # E87674
New Hampshire ID # 2941
New York ID # 10145
Pennsylvania ID# 68-786
Virginia #460167

Non-NELAP States
Connecticut ID #PH0556
Delaware Approved
Maine ID #NY01587
North Carolina #36701
North Carolina #676
Rhode Island LAO00333

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory. To verify NH accredited analytes, go to https://www4.des.state.nh.us/CertifiedLabs/Certified-Method.aspx.

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: NASA/WSTF/Navarro **Service Request:** R2407791
Project: White Sands Test Facility/24EC008B

Non-Certified Analytes

Certifying Agency: New York Department of Health

Method	Matrix	Analyte
8260D	Water	2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)
8260D	Water	2-Propanol
8260D	Water	Allyl Chloride, Acetonitrile Coelution
8260D	Water	Dichlorofluoromethane (CFC 21)

Client: NASA/WSTF/Navarro **Service Request:** R2407791
Project: White Sands Test Facility/24EC008B

Sample Name: 2408121410X WB-5-345 **Date Collected:** 08/12/24
Lab Code: R2407791-001 **Date Received:** 08/16/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260D		FNAEGLER

Sample Name: 2408140730X WB-5-345 **Date Collected:** 08/14/24
Lab Code: R2407791-002 **Date Received:** 08/16/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260D		FNAEGLER

Sample Name: 2408140920X WB-5-345 **Date Collected:** 08/14/24
Lab Code: R2407791-003 **Date Received:** 08/16/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260D		FNAEGLER

Sample Name: 2408140830A 300-001-GSV **Date Collected:** 08/14/24
Lab Code: R2407791-004 **Date Received:** 08/16/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260D		FNAEGLER

Sample Name: 2408140931A 300-001-GSV **Date Collected:** 08/14/24
Lab Code: R2407791-005 **Date Received:** 08/16/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260D		FNAEGLER

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B		

Sample Name:	2408141345X WB-5-280	**Date Collected:**	08/14/24
Lab Code:	R2407791-006	**Date Received:**	08/16/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260D		FNAEGLER

Sample Name:	2408150820A 300-002-GSV	**Date Collected:**	08/15/24
Lab Code:	R2407791-007	**Date Received:**	08/16/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260D		FNAEGLER

Sample Name:	2408150821A 300-002-GSV	**Date Collected:**	08/15/24
Lab Code:	R2407791-008	**Date Received:**	08/16/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260D		FNAEGLER

Sample Name:	2408150822A 300-002-GSV	**Date Collected:**	08/15/24
Lab Code:	R2407791-009	**Date Received:**	08/16/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260D		FNAEGLER

PREPARATION METHODS

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

INORGANIC

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C or 6010D	3005A/3010A
6020A or 6020B	ILM05.3
9034 Sulfide Acid Soluble	9030B
SM 4500-CN-N-2016 Amenable and Residual Cyanide	SM 4500-CN-G and SM 4500-CN-B,C-2016
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C or 6010D	3050B
6020A or 6020B	3050B
6010C or 6010D TCLP (1311) extract	3005A/3010A
6010C or 6010D SPLP (1312) extract	3005A/3010A
7199	3060A
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction
For analytical methods not listed, the preparation method is the same as the analytical method reference.	

ORGANIC

Preparation Methods for Organic methods are listed in the header of the Results pages.

Regarding "Bulk/5035A":
For soil/solid samples submitted in soil jars for Volatiles analysis, the prep method is listed as "Bulk/5035A". The lab follows the closed-system EPA 5035A protocols once the sample is transferred to a sealed vial, but collection in bulk in soil jars does not follow the collection protocols listed in EPA 5035A. In accordance with the NYSDOH technical notice of October 2012, all results or reporting limits <200 ug/kg are to be considered estimated due to potential low bias.

Sample Results

ALS Environmental—Rochester Laboratory
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Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
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Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/12/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408121410X WB-5-345	**Units:**	ug/L
Lab Code:	R2407791-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Allyl Chloride, Acetonitrile Coelution	ND U	25	5.2	1	08/21/24 23:28	
1,1,1,2-Tetrachloroethane	ND U	1.0	0.20	1	08/21/24 23:28	
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.20	1	08/21/24 23:28	
1,1,2,2-Tetrachloroethane	ND U	1.0	0.20	1	08/21/24 23:28	
1,1,2-Trichloroethane	ND U	1.0	0.20	1	08/21/24 23:28	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND U	1.0	0.20	1	08/21/24 23:28	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	0.20	1	08/21/24 23:28	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	0.20	1	08/21/24 23:28	
1,2,3-Trichloropropane	ND U	1.0	0.26	1	08/21/24 23:28	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	2.0	0.45	1	08/21/24 23:28	
1,2-Dibromoethane	ND U	1.0	0.20	1	08/21/24 23:28	
1,2-Dichloroethane	ND U	1.0	0.20	1	08/21/24 23:28	
1,2-Dichloropropane	ND U	1.0	0.20	1	08/21/24 23:28	
1,4-Dioxane	ND U	100	13	1	08/21/24 23:28	
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND U	1.0	0.20	1	08/21/24 23:28	
2-Butanone (MEK)	ND U	5.0	0.78	1	08/21/24 23:28	
2-Chloro-1,3-butadiene	ND U	1.0	0.20	1	08/21/24 23:28	
2-Hexanone	ND U	5.0	0.20	1	08/21/24 23:28	
Isobutyl Alcohol	ND U	100	33	1	08/21/24 23:28	
2-Propanol	ND U	50	22	1	08/21/24 23:28	
4-Methyl-2-pentanone	ND U	5.0	0.20	1	08/21/24 23:28	
Acetone	ND U	10	5.0	1	08/21/24 23:28	
Acrolein	ND U	10	0.90	1	08/21/24 23:28	
Acrylonitrile	ND U	5.0	0.90	1	08/21/24 23:28	
Benzene	ND U	1.0	0.20	1	08/21/24 23:28	
Bromodichloromethane	ND U	1.0	0.20	1	08/21/24 23:28	
Bromoform	ND U	1.0	0.25	1	08/21/24 23:28	
Bromomethane	ND U	2.0	0.70	1	08/21/24 23:28	
Carbon Disulfide	ND U	1.0	0.42	1	08/21/24 23:28	
Carbon Tetrachloride	ND U	1.0	0.34	1	08/21/24 23:28	
Chlorobenzene	ND U	1.0	0.20	1	08/21/24 23:28	
Chloroethane	ND U	2.0	0.23	1	08/21/24 23:28	
Chloroform	ND U	1.0	0.51	1	08/21/24 23:28	
Chloromethane	ND U	2.0	0.80	1	08/21/24 23:28	
Cyclohexane	ND U	10	0.60	1	08/21/24 23:28	
Dibromochloromethane	ND U	1.0	0.20	1	08/21/24 23:28	
Dibromomethane	ND U	1.0	0.20	1	08/21/24 23:28	
Dichlorodifluoromethane (CFC 12)	ND U	1.0	0.21	1	08/21/24 23:28	
Dichlorofluoromethane (CFC 21)	ND U	1.0	0.20	1	08/21/24 23:28	
Dichloromethane	ND U	1.0	0.65	1	08/21/24 23:28	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/12/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408121410X WB-5-345	**Units:**	ug/L
Lab Code:	R2407791-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Ethyl Methacrylate	ND U	2.0	0.20	1	08/21/24 23:28	
Ethylbenzene	ND U	1.0	0.20	1	08/21/24 23:28	
Iodomethane	ND U	5.0	4.3	1	08/21/24 23:28	
Methacrylonitrile	ND U	5.0	0.52	1	08/21/24 23:28	
Methyl Methacrylate	ND U	2.0	0.51	1	08/21/24 23:28	
Methyl tert-Butyl Ether	ND U	10	0.20	1	08/21/24 23:28	
Methylcyclohexane	ND U	10	0.20	1	08/21/24 23:28	
Propionitrile	ND U	5.0	3.0	1	08/21/24 23:28	
Styrene	ND U	1.0	0.20	1	08/21/24 23:28	
Tetrachloroethene (PCE)	ND U	1.0	0.21	1	08/21/24 23:28	
Tetrahydrofuran (THF)	ND U	5.0	1.7	1	08/21/24 23:28	
Toluene	ND U	1.0	0.20	1	08/21/24 23:28	
Trichloroethene (TCE)	ND U	1.0	0.20	1	08/21/24 23:28	
Trichlorofluoromethane (CFC 11)	ND U	1.0	0.24	1	08/21/24 23:28	
Vinyl Acetate	ND U	5.0	1.1	1	08/21/24 23:28	
Vinyl Chloride	ND U	1.0	0.20	1	08/21/24 23:28	
cis-1,2-Dichloroethene	ND U	1.0	0.23	1	08/21/24 23:28	
cis-1,3-Dichloropropene	ND U	1.0	0.20	1	08/21/24 23:28	
m,p-Xylenes	ND U	2.0	0.53	1	08/21/24 23:28	
o-Xylene	ND U	1.0	0.20	1	08/21/24 23:28	
trans-1,2-Dichloroethene	ND U	1.0	0.20	1	08/21/24 23:28	
trans-1,3-Dichloropropene	ND U	1.0	0.23	1	08/21/24 23:28	
trans-1,4-Dichloro-2-butene	ND U	1.0	0.78	1	08/21/24 23:28	
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	ND U	1.0	0.20	1	08/21/24 23:28	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	08/21/24 23:28	
Dibromofluoromethane	103	80 - 116	08/21/24 23:28	
Toluene-d8	105	87 - 121	08/21/24 23:28	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140730X WB-5-345	**Units:**	ug/L
Lab Code:	R2407791-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Allyl Chloride, Acetonitrile Coelution	ND U	25	5.2	1	08/21/24 23:51	
1,1,1,2-Tetrachloroethane	ND U	1.0	0.20	1	08/21/24 23:51	
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.20	1	08/21/24 23:51	
1,1,2,2-Tetrachloroethane	ND U	1.0	0.20	1	08/21/24 23:51	
1,1,2-Trichloroethane	ND U	1.0	0.20	1	08/21/24 23:51	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND U	1.0	0.20	1	08/21/24 23:51	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	0.20	1	08/21/24 23:51	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	0.20	1	08/21/24 23:51	
1,2,3-Trichloropropane	ND U	1.0	0.26	1	08/21/24 23:51	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	2.0	0.45	1	08/21/24 23:51	
1,2-Dibromoethane	ND U	1.0	0.20	1	08/21/24 23:51	
1,2-Dichloroethane	ND U	1.0	0.20	1	08/21/24 23:51	
1,2-Dichloropropane	ND U	1.0	0.20	1	08/21/24 23:51	
1,4-Dioxane	ND U	100	13	1	08/21/24 23:51	
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND U	1.0	0.20	1	08/21/24 23:51	
2-Butanone (MEK)	ND U	5.0	0.78	1	08/21/24 23:51	
2-Chloro-1,3-butadiene	ND U	1.0	0.20	1	08/21/24 23:51	
2-Hexanone	ND U	5.0	0.20	1	08/21/24 23:51	
Isobutyl Alcohol	ND U	100	33	1	08/21/24 23:51	
2-Propanol	ND U	50	22	1	08/21/24 23:51	
4-Methyl-2-pentanone	ND U	5.0	0.20	1	08/21/24 23:51	
Acetone	ND U	10	5.0	1	08/21/24 23:51	
Acrolein	ND U	10	0.90	1	08/21/24 23:51	
Acrylonitrile	ND U	5.0	0.90	1	08/21/24 23:51	
Benzene	ND U	1.0	0.20	1	08/21/24 23:51	
Bromodichloromethane	ND U	1.0	0.20	1	08/21/24 23:51	
Bromoform	ND U	1.0	0.25	1	08/21/24 23:51	
Bromomethane	ND U	2.0	0.70	1	08/21/24 23:51	
Carbon Disulfide	ND U	1.0	0.42	1	08/21/24 23:51	
Carbon Tetrachloride	ND U	1.0	0.34	1	08/21/24 23:51	
Chlorobenzene	ND U	1.0	0.20	1	08/21/24 23:51	
Chloroethane	ND U	2.0	0.23	1	08/21/24 23:51	
Chloroform	ND U	1.0	0.51	1	08/21/24 23:51	
Chloromethane	ND U	2.0	0.80	1	08/21/24 23:51	
Cyclohexane	ND U	10	0.60	1	08/21/24 23:51	
Dibromochloromethane	ND U	1.0	0.20	1	08/21/24 23:51	
Dibromomethane	ND U	1.0	0.20	1	08/21/24 23:51	
Dichlorodifluoromethane (CFC 12)	ND U	1.0	0.21	1	08/21/24 23:51	
Dichlorofluoromethane (CFC 21)	ND U	1.0	0.20	1	08/21/24 23:51	
Dichloromethane	ND U	1.0	0.65	1	08/21/24 23:51	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140730X WB-5-345	**Units:**	ug/L
Lab Code:	R2407791-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Ethyl Methacrylate	ND U	2.0	0.20	1	08/21/24 23:51	
Ethylbenzene	ND U	1.0	0.20	1	08/21/24 23:51	
Iodomethane	ND U	5.0	4.3	1	08/21/24 23:51	
Methacrylonitrile	ND U	5.0	0.52	1	08/21/24 23:51	
Methyl Methacrylate	ND U	2.0	0.51	1	08/21/24 23:51	
Methyl tert-Butyl Ether	ND U	10	0.20	1	08/21/24 23:51	
Methylcyclohexane	ND U	10	0.20	1	08/21/24 23:51	
Propionitrile	ND U	5.0	3.0	1	08/21/24 23:51	
Styrene	ND U	1.0	0.20	1	08/21/24 23:51	
Tetrachloroethene (PCE)	ND U	1.0	0.21	1	08/21/24 23:51	
Tetrahydrofuran (THF)	ND U	5.0	1.7	1	08/21/24 23:51	
Toluene	ND U	1.0	0.20	1	08/21/24 23:51	
Trichloroethene (TCE)	ND U	1.0	0.20	1	08/21/24 23:51	
Trichlorofluoromethane (CFC 11)	ND U	1.0	0.24	1	08/21/24 23:51	
Vinyl Acetate	ND U	5.0	1.1	1	08/21/24 23:51	
Vinyl Chloride	ND U	1.0	0.20	1	08/21/24 23:51	
cis-1,2-Dichloroethene	ND U	1.0	0.23	1	08/21/24 23:51	
cis-1,3-Dichloropropene	ND U	1.0	0.20	1	08/21/24 23:51	
m,p-Xylenes	ND U	2.0	0.53	1	08/21/24 23:51	
o-Xylene	ND U	1.0	0.20	1	08/21/24 23:51	
trans-1,2-Dichloroethene	ND U	1.0	0.20	1	08/21/24 23:51	
trans-1,3-Dichloropropene	ND U	1.0	0.23	1	08/21/24 23:51	
trans-1,4-Dichloro-2-butene	ND U	1.0	0.78	1	08/21/24 23:51	
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	ND U	1.0	0.20	1	08/21/24 23:51	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	85 - 122	08/21/24 23:51	
Dibromofluoromethane	105	80 - 116	08/21/24 23:51	
Toluene-d8	108	87 - 121	08/21/24 23:51	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140920X WB-5-345	**Units:**	ug/L
Lab Code:	R2407791-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Allyl Chloride, Acetonitrile Coelution	ND U	25	5.2	1	08/22/24 00:13	
1,1,1,2-Tetrachloroethane	ND U	1.0	0.20	1	08/22/24 00:13	
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.20	1	08/22/24 00:13	
1,1,2,2-Tetrachloroethane	ND U	1.0	0.20	1	08/22/24 00:13	
1,1,2-Trichloroethane	ND U	1.0	0.20	1	08/22/24 00:13	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND U	1.0	0.20	1	08/22/24 00:13	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	0.20	1	08/22/24 00:13	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	0.20	1	08/22/24 00:13	
1,2,3-Trichloropropane	ND U	1.0	0.26	1	08/22/24 00:13	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	2.0	0.45	1	08/22/24 00:13	
1,2-Dibromoethane	ND U	1.0	0.20	1	08/22/24 00:13	
1,2-Dichloroethane	ND U	1.0	0.20	1	08/22/24 00:13	
1,2-Dichloropropane	ND U	1.0	0.20	1	08/22/24 00:13	
1,4-Dioxane	ND U	100	13	1	08/22/24 00:13	
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND U	1.0	0.20	1	08/22/24 00:13	
2-Butanone (MEK)	ND U	5.0	0.78	1	08/22/24 00:13	
2-Chloro-1,3-butadiene	ND U	1.0	0.20	1	08/22/24 00:13	
2-Hexanone	ND U	5.0	0.20	1	08/22/24 00:13	
Isobutyl Alcohol	ND U	100	33	1	08/22/24 00:13	
2-Propanol	ND U	50	22	1	08/22/24 00:13	
4-Methyl-2-pentanone	ND U	5.0	0.20	1	08/22/24 00:13	
Acetone	ND U	10	5.0	1	08/22/24 00:13	
Acrolein	ND U	10	0.90	1	08/22/24 00:13	
Acrylonitrile	ND U	5.0	0.90	1	08/22/24 00:13	
Benzene	ND U	1.0	0.20	1	08/22/24 00:13	
Bromodichloromethane	ND U	1.0	0.20	1	08/22/24 00:13	
Bromoform	ND U	1.0	0.25	1	08/22/24 00:13	
Bromomethane	ND U	2.0	0.70	1	08/22/24 00:13	
Carbon Disulfide	**3.3**	1.0	0.42	1	08/22/24 00:13	
Carbon Tetrachloride	ND U	1.0	0.34	1	08/22/24 00:13	
Chlorobenzene	ND U	1.0	0.20	1	08/22/24 00:13	
Chloroethane	ND U	2.0	0.23	1	08/22/24 00:13	
Chloroform	ND U	1.0	0.51	1	08/22/24 00:13	
Chloromethane	ND U	2.0	0.80	1	08/22/24 00:13	
Cyclohexane	ND U	10	0.60	1	08/22/24 00:13	
Dibromochloromethane	ND U	1.0	0.20	1	08/22/24 00:13	
Dibromomethane	ND U	1.0	0.20	1	08/22/24 00:13	
Dichlorodifluoromethane (CFC 12)	ND U	1.0	0.21	1	08/22/24 00:13	
Dichlorofluoromethane (CFC 21)	ND U	1.0	0.20	1	08/22/24 00:13	
Dichloromethane	ND U	1.0	0.65	1	08/22/24 00:13	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140920X WB-5-345	**Units:**	ug/L
Lab Code:	R2407791-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Ethyl Methacrylate	ND	U	2.0	0.20	1	08/22/24 00:13	
Ethylbenzene	**0.25**	**J**	1.0	0.20	1	08/22/24 00:13	
Iodomethane	ND	U	5.0	4.3	1	08/22/24 00:13	
Methacrylonitrile	ND	U	5.0	0.52	1	08/22/24 00:13	
Methyl Methacrylate	ND	U	2.0	0.51	1	08/22/24 00:13	
Methyl tert-Butyl Ether	ND	U	10	0.20	1	08/22/24 00:13	
Methylcyclohexane	ND	U	10	0.20	1	08/22/24 00:13	
Propionitrile	ND	U	5.0	3.0	1	08/22/24 00:13	
Styrene	ND	U	1.0	0.20	1	08/22/24 00:13	
Tetrachloroethene (PCE)	ND	U	1.0	0.21	1	08/22/24 00:13	
Tetrahydrofuran (THF)	ND	U	5.0	1.7	1	08/22/24 00:13	
Toluene	ND	U	1.0	0.20	1	08/22/24 00:13	
Trichloroethene (TCE)	ND	U	1.0	0.20	1	08/22/24 00:13	
Trichlorofluoromethane (CFC 11)	ND	U	1.0	0.24	1	08/22/24 00:13	
Vinyl Acetate	ND	U	5.0	1.1	1	08/22/24 00:13	
Vinyl Chloride	ND	U	1.0	0.20	1	08/22/24 00:13	
cis-1,2-Dichloroethene	ND	U	1.0	0.23	1	08/22/24 00:13	
cis-1,3-Dichloropropene	ND	U	1.0	0.20	1	08/22/24 00:13	
m,p-Xylenes	ND	U	2.0	0.53	1	08/22/24 00:13	
o-Xylene	ND	U	1.0	0.20	1	08/22/24 00:13	
trans-1,2-Dichloroethene	ND	U	1.0	0.20	1	08/22/24 00:13	
trans-1,3-Dichloropropene	ND	U	1.0	0.23	1	08/22/24 00:13	
trans-1,4-Dichloro-2-butene	ND	U	1.0	0.78	1	08/22/24 00:13	
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	ND	U	1.0	0.20	1	08/22/24 00:13	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	08/22/24 00:13	
Dibromofluoromethane	98	80 - 116	08/22/24 00:13	
Toluene-d8	101	87 - 121	08/22/24 00:13	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
007446-09-5	Sulfur dioxide	1.52	20	JN

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140830A 300-001-GSV	**Units:**	ug/L
Lab Code:	R2407791-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Allyl Chloride, Acetonitrile Coelution	ND U	25	5.2	1	08/22/24 01:44	
1,1,1,2-Tetrachloroethane	ND U	1.0	0.20	1	08/22/24 01:44	
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.20	1	08/22/24 01:44	
1,1,2,2-Tetrachloroethane	ND U	1.0	0.20	1	08/22/24 01:44	
1,1,2-Trichloroethane	ND U	1.0	0.20	1	08/22/24 01:44	
1,1,2-Trichloro-1,2,2-trifluoroethane	**18**	1.0	0.20	1	08/22/24 01:44	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	0.20	1	08/22/24 01:44	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	0.20	1	08/22/24 01:44	
1,2,3-Trichloropropane	ND U	1.0	0.26	1	08/22/24 01:44	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	2.0	0.45	1	08/22/24 01:44	
1,2-Dibromoethane	ND U	1.0	0.20	1	08/22/24 01:44	
1,2-Dichloroethane	ND U	1.0	0.20	1	08/22/24 01:44	
1,2-Dichloropropane	ND U	1.0	0.20	1	08/22/24 01:44	
1,4-Dioxane	ND U	100	13	1	08/22/24 01:44	
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND U	1.0	0.20	1	08/22/24 01:44	
2-Butanone (MEK)	ND U	5.0	0.78	1	08/22/24 01:44	
2-Chloro-1,3-butadiene	ND U	1.0	0.20	1	08/22/24 01:44	
2-Hexanone	ND U	5.0	0.20	1	08/22/24 01:44	
Isobutyl Alcohol	ND U	100	33	1	08/22/24 01:44	
2-Propanol	ND U	50	22	1	08/22/24 01:44	
4-Methyl-2-pentanone	ND U	5.0	0.20	1	08/22/24 01:44	
Acetone	ND U	10	5.0	1	08/22/24 01:44	
Acrolein	ND U	10	0.90	1	08/22/24 01:44	
Acrylonitrile	ND U	5.0	0.90	1	08/22/24 01:44	
Benzene	ND U	1.0	0.20	1	08/22/24 01:44	
Bromodichloromethane	ND U	1.0	0.20	1	08/22/24 01:44	
Bromoform	ND U	1.0	0.25	1	08/22/24 01:44	
Bromomethane	ND U	2.0	0.70	1	08/22/24 01:44	
Carbon Disulfide	ND U	1.0	0.42	1	08/22/24 01:44	
Carbon Tetrachloride	ND U	1.0	0.34	1	08/22/24 01:44	
Chlorobenzene	ND U	1.0	0.20	1	08/22/24 01:44	
Chloroethane	ND U	2.0	0.23	1	08/22/24 01:44	
Chloroform	ND U	1.0	0.51	1	08/22/24 01:44	
Chloromethane	ND U	2.0	0.80	1	08/22/24 01:44	
Cyclohexane	ND U	10	0.60	1	08/22/24 01:44	
Dibromochloromethane	ND U	1.0	0.20	1	08/22/24 01:44	
Dibromomethane	ND U	1.0	0.20	1	08/22/24 01:44	
Dichlorodifluoromethane (CFC 12)	ND U	1.0	0.21	1	08/22/24 01:44	
Dichlorofluoromethane (CFC 21)	**0.79 J**	1.0	0.20	1	08/22/24 01:44	
Dichloromethane	ND U	1.0	0.65	1	08/22/24 01:44	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140830A 300-001-GSV	**Units:**	ug/L
Lab Code:	R2407791-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Ethyl Methacrylate	ND	U	2.0	0.20	1	08/22/24 01:44	
Ethylbenzene	ND	U	1.0	0.20	1	08/22/24 01:44	
Iodomethane	ND	U	5.0	4.3	1	08/22/24 01:44	
Methacrylonitrile	ND	U	5.0	0.52	1	08/22/24 01:44	
Methyl Methacrylate	ND	U	2.0	0.51	1	08/22/24 01:44	
Methyl tert-Butyl Ether	ND	U	10	0.20	1	08/22/24 01:44	
Methylcyclohexane	ND	U	10	0.20	1	08/22/24 01:44	
Propionitrile	ND	U	5.0	3.0	1	08/22/24 01:44	
Styrene	ND	U	1.0	0.20	1	08/22/24 01:44	
Tetrachloroethene (PCE)	ND	U	1.0	0.21	1	08/22/24 01:44	
Tetrahydrofuran (THF)	ND	U	5.0	1.7	1	08/22/24 01:44	
Toluene	ND	U	1.0	0.20	1	08/22/24 01:44	
Trichloroethene (TCE)	**0.30**	**J**	1.0	0.20	1	08/22/24 01:44	
Trichlorofluoromethane (CFC 11)	**77**		1.0	0.24	1	08/22/24 01:44	
Vinyl Acetate	ND	U	5.0	1.1	1	08/22/24 01:44	
Vinyl Chloride	ND	U	1.0	0.20	1	08/22/24 01:44	
cis-1,2-Dichloroethene	ND	U	1.0	0.23	1	08/22/24 01:44	
cis-1,3-Dichloropropene	ND	U	1.0	0.20	1	08/22/24 01:44	
m,p-Xylenes	ND	U	2.0	0.53	1	08/22/24 01:44	
o-Xylene	ND	U	1.0	0.20	1	08/22/24 01:44	
trans-1,2-Dichloroethene	ND	U	1.0	0.20	1	08/22/24 01:44	
trans-1,3-Dichloropropene	ND	U	1.0	0.23	1	08/22/24 01:44	
trans-1,4-Dichloro-2-butene	ND	U	1.0	0.78	1	08/22/24 01:44	
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	ND	U	1.0	0.20	1	08/22/24 01:44	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	08/22/24 01:44	
Dibromofluoromethane	98	80 - 116	08/22/24 01:44	
Toluene-d8	102	87 - 121	08/22/24 01:44	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140931A 300-001-GSV	**Units:**	ug/L
Lab Code:	R2407791-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Allyl Chloride, Acetonitrile Coelution	ND U	25	5.2	1	08/22/24 00:58	
1,1,1,2-Tetrachloroethane	ND U	1.0	0.20	1	08/22/24 00:58	
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.20	1	08/22/24 00:58	
1,1,2,2-Tetrachloroethane	ND U	1.0	0.20	1	08/22/24 00:58	
1,1,2-Trichloroethane	ND U	1.0	0.20	1	08/22/24 00:58	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND U	1.0	0.20	1	08/22/24 00:58	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	0.20	1	08/22/24 00:58	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	0.20	1	08/22/24 00:58	
1,2,3-Trichloropropane	ND U	1.0	0.26	1	08/22/24 00:58	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	2.0	0.45	1	08/22/24 00:58	
1,2-Dibromoethane	ND U	1.0	0.20	1	08/22/24 00:58	
1,2-Dichloroethane	ND U	1.0	0.20	1	08/22/24 00:58	
1,2-Dichloropropane	ND U	1.0	0.20	1	08/22/24 00:58	
1,4-Dioxane	ND U	100	13	1	08/22/24 00:58	
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND U	1.0	0.20	1	08/22/24 00:58	
2-Butanone (MEK)	ND U	5.0	0.78	1	08/22/24 00:58	
2-Chloro-1,3-butadiene	ND U	1.0	0.20	1	08/22/24 00:58	
2-Hexanone	ND U	5.0	0.20	1	08/22/24 00:58	
Isobutyl Alcohol	ND U	100	33	1	08/22/24 00:58	
2-Propanol	ND U	50	22	1	08/22/24 00:58	
4-Methyl-2-pentanone	ND U	5.0	0.20	1	08/22/24 00:58	
Acetone	ND U	10	5.0	1	08/22/24 00:58	
Acrolein	ND U	10	0.90	1	08/22/24 00:58	
Acrylonitrile	ND U	5.0	0.90	1	08/22/24 00:58	
Benzene	ND U	1.0	0.20	1	08/22/24 00:58	
Bromodichloromethane	ND U	1.0	0.20	1	08/22/24 00:58	
Bromoform	ND U	1.0	0.25	1	08/22/24 00:58	
Bromomethane	ND U	2.0	0.70	1	08/22/24 00:58	
Carbon Disulfide	ND U	1.0	0.42	1	08/22/24 00:58	
Carbon Tetrachloride	ND U	1.0	0.34	1	08/22/24 00:58	
Chlorobenzene	ND U	1.0	0.20	1	08/22/24 00:58	
Chloroethane	ND U	2.0	0.23	1	08/22/24 00:58	
Chloroform	ND U	1.0	0.51	1	08/22/24 00:58	
Chloromethane	ND U	2.0	0.80	1	08/22/24 00:58	
Cyclohexane	ND U	10	0.60	1	08/22/24 00:58	
Dibromochloromethane	ND U	1.0	0.20	1	08/22/24 00:58	
Dibromomethane	ND U	1.0	0.20	1	08/22/24 00:58	
Dichlorodifluoromethane (CFC 12)	ND U	1.0	0.21	1	08/22/24 00:58	
Dichlorofluoromethane (CFC 21)	ND U	1.0	0.20	1	08/22/24 00:58	
Dichloromethane	ND U	1.0	0.65	1	08/22/24 00:58	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140931A 300-001-GSV	**Units:**	ug/L
Lab Code:	R2407791-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Ethyl Methacrylate	ND U	2.0	0.20	1	08/22/24 00:58	
Ethylbenzene	ND U	1.0	0.20	1	08/22/24 00:58	
Iodomethane	ND U	5.0	4.3	1	08/22/24 00:58	
Methacrylonitrile	ND U	5.0	0.52	1	08/22/24 00:58	
Methyl Methacrylate	ND U	2.0	0.51	1	08/22/24 00:58	
Methyl tert-Butyl Ether	ND U	10	0.20	1	08/22/24 00:58	
Methylcyclohexane	ND U	10	0.20	1	08/22/24 00:58	
Propionitrile	ND U	5.0	3.0	1	08/22/24 00:58	
Styrene	ND U	1.0	0.20	1	08/22/24 00:58	
Tetrachloroethene (PCE)	ND U	1.0	0.21	1	08/22/24 00:58	
Tetrahydrofuran (THF)	ND U	5.0	1.7	1	08/22/24 00:58	
Toluene	ND U	1.0	0.20	1	08/22/24 00:58	
Trichloroethene (TCE)	ND U	1.0	0.20	1	08/22/24 00:58	
Trichlorofluoromethane (CFC 11)	ND U	1.0	0.24	1	08/22/24 00:58	
Vinyl Acetate	ND U	5.0	1.1	1	08/22/24 00:58	
Vinyl Chloride	ND U	1.0	0.20	1	08/22/24 00:58	
cis-1,2-Dichloroethene	ND U	1.0	0.23	1	08/22/24 00:58	
cis-1,3-Dichloropropene	ND U	1.0	0.20	1	08/22/24 00:58	
m,p-Xylenes	ND U	2.0	0.53	1	08/22/24 00:58	
o-Xylene	ND U	1.0	0.20	1	08/22/24 00:58	
trans-1,2-Dichloroethene	ND U	1.0	0.20	1	08/22/24 00:58	
trans-1,3-Dichloropropene	ND U	1.0	0.23	1	08/22/24 00:58	
trans-1,4-Dichloro-2-butene	ND U	1.0	0.78	1	08/22/24 00:58	
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	ND U	1.0	0.20	1	08/22/24 00:58	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	08/22/24 00:58	
Dibromofluoromethane	103	80 - 116	08/22/24 00:58	
Toluene-d8	106	87 - 121	08/22/24 00:58	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
007446-09-5	Sulfur dioxide	1.20	5.1	JN

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408141345X WB-5-280	**Units:**	ug/L
Lab Code:	R2407791-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Allyl Chloride, Acetonitrile Coelution	ND U	25	5.2	1	08/22/24 00:36	
1,1,1,2-Tetrachloroethane	ND U	1.0	0.20	1	08/22/24 00:36	
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.20	1	08/22/24 00:36	
1,1,2,2-Tetrachloroethane	ND U	1.0	0.20	1	08/22/24 00:36	
1,1,2-Trichloroethane	ND U	1.0	0.20	1	08/22/24 00:36	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND U	1.0	0.20	1	08/22/24 00:36	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	0.20	1	08/22/24 00:36	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	0.20	1	08/22/24 00:36	
1,2,3-Trichloropropane	ND U	1.0	0.26	1	08/22/24 00:36	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	2.0	0.45	1	08/22/24 00:36	
1,2-Dibromoethane	ND U	1.0	0.20	1	08/22/24 00:36	
1,2-Dichloroethane	ND U	1.0	0.20	1	08/22/24 00:36	
1,2-Dichloropropane	ND U	1.0	0.20	1	08/22/24 00:36	
1,4-Dioxane	ND U	100	13	1	08/22/24 00:36	
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND U	1.0	0.20	1	08/22/24 00:36	
2-Butanone (MEK)	ND U	5.0	0.78	1	08/22/24 00:36	
2-Chloro-1,3-butadiene	ND U	1.0	0.20	1	08/22/24 00:36	
2-Hexanone	ND U	5.0	0.20	1	08/22/24 00:36	
Isobutyl Alcohol	ND U	100	33	1	08/22/24 00:36	
2-Propanol	ND U	50	22	1	08/22/24 00:36	
4-Methyl-2-pentanone	ND U	5.0	0.20	1	08/22/24 00:36	
Acetone	ND U	10	5.0	1	08/22/24 00:36	
Acrolein	ND U	10	0.90	1	08/22/24 00:36	
Acrylonitrile	ND U	5.0	0.90	1	08/22/24 00:36	
Benzene	ND U	1.0	0.20	1	08/22/24 00:36	
Bromodichloromethane	ND U	1.0	0.20	1	08/22/24 00:36	
Bromoform	ND U	1.0	0.25	1	08/22/24 00:36	
Bromomethane	ND U	2.0	0.70	1	08/22/24 00:36	
Carbon Disulfide	ND U	1.0	0.42	1	08/22/24 00:36	
Carbon Tetrachloride	ND U	1.0	0.34	1	08/22/24 00:36	
Chlorobenzene	ND U	1.0	0.20	1	08/22/24 00:36	
Chloroethane	ND U	2.0	0.23	1	08/22/24 00:36	
Chloroform	ND U	1.0	0.51	1	08/22/24 00:36	
Chloromethane	ND U	2.0	0.80	1	08/22/24 00:36	
Cyclohexane	ND U	10	0.60	1	08/22/24 00:36	
Dibromochloromethane	ND U	1.0	0.20	1	08/22/24 00:36	
Dibromomethane	ND U	1.0	0.20	1	08/22/24 00:36	
Dichlorodifluoromethane (CFC 12)	ND U	1.0	0.21	1	08/22/24 00:36	
Dichlorofluoromethane (CFC 21)	ND U	1.0	0.20	1	08/22/24 00:36	
Dichloromethane	ND U	1.0	0.65	1	08/22/24 00:36	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408141345X WB-5-280	**Units:**	ug/L
Lab Code:	R2407791-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Ethyl Methacrylate	ND U	2.0	0.20	1	08/22/24 00:36	
Ethylbenzene	ND U	1.0	0.20	1	08/22/24 00:36	
Iodomethane	ND U	5.0	4.3	1	08/22/24 00:36	
Methacrylonitrile	ND U	5.0	0.52	1	08/22/24 00:36	
Methyl Methacrylate	ND U	2.0	0.51	1	08/22/24 00:36	
Methyl tert-Butyl Ether	ND U	10	0.20	1	08/22/24 00:36	
Methylcyclohexane	ND U	10	0.20	1	08/22/24 00:36	
Propionitrile	ND U	5.0	3.0	1	08/22/24 00:36	
Styrene	ND U	1.0	0.20	1	08/22/24 00:36	
Tetrachloroethene (PCE)	ND U	1.0	0.21	1	08/22/24 00:36	
Tetrahydrofuran (THF)	ND U	5.0	1.7	1	08/22/24 00:36	
Toluene	ND U	1.0	0.20	1	08/22/24 00:36	
Trichloroethene (TCE)	ND U	1.0	0.20	1	08/22/24 00:36	
Trichlorofluoromethane (CFC 11)	ND U	1.0	0.24	1	08/22/24 00:36	
Vinyl Acetate	ND U	5.0	1.1	1	08/22/24 00:36	
Vinyl Chloride	ND U	1.0	0.20	1	08/22/24 00:36	
cis-1,2-Dichloroethene	ND U	1.0	0.23	1	08/22/24 00:36	
cis-1,3-Dichloropropene	ND U	1.0	0.20	1	08/22/24 00:36	
m,p-Xylenes	ND U	2.0	0.53	1	08/22/24 00:36	
o-Xylene	ND U	1.0	0.20	1	08/22/24 00:36	
trans-1,2-Dichloroethene	ND U	1.0	0.20	1	08/22/24 00:36	
trans-1,3-Dichloropropene	ND U	1.0	0.23	1	08/22/24 00:36	
trans-1,4-Dichloro-2-butene	ND U	1.0	0.78	1	08/22/24 00:36	
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	ND U	1.0	0.20	1	08/22/24 00:36	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	85 - 122	08/22/24 00:36	
Dibromofluoromethane	104	80 - 116	08/22/24 00:36	
Toluene-d8	107	87 - 121	08/22/24 00:36	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	unknown	1.20	7.1	J
000128-37-0	Butylated Hydroxytoluene	13.22	8.4	JN

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150820A 300-002-GSV	**Units:**	ug/L
Lab Code:	R2407791-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Allyl Chloride, Acetonitrile Coelution	ND U	25	5.2	1	08/22/24 02:06	
1,1,1,2-Tetrachloroethane	ND U	1.0	0.20	1	08/22/24 02:06	
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.20	1	08/22/24 02:06	
1,1,2,2-Tetrachloroethane	ND U	1.0	0.20	1	08/22/24 02:06	
1,1,2-Trichloroethane	ND U	1.0	0.20	1	08/22/24 02:06	
1,1,2-Trichloro-1,2,2-trifluoroethane	**6.0**	1.0	0.20	1	08/22/24 02:06	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	0.20	1	08/22/24 02:06	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	0.20	1	08/22/24 02:06	
1,2,3-Trichloropropane	ND U	1.0	0.26	1	08/22/24 02:06	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	2.0	0.45	1	08/22/24 02:06	
1,2-Dibromoethane	ND U	1.0	0.20	1	08/22/24 02:06	
1,2-Dichloroethane	ND U	1.0	0.20	1	08/22/24 02:06	
1,2-Dichloropropane	ND U	1.0	0.20	1	08/22/24 02:06	
1,4-Dioxane	ND U	100	13	1	08/22/24 02:06	
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND U	1.0	0.20	1	08/22/24 02:06	
2-Butanone (MEK)	ND U	5.0	0.78	1	08/22/24 02:06	
2-Chloro-1,3-butadiene	ND U	1.0	0.20	1	08/22/24 02:06	
2-Hexanone	ND U	5.0	0.20	1	08/22/24 02:06	
Isobutyl Alcohol	ND U	100	33	1	08/22/24 02:06	
2-Propanol	ND U	50	22	1	08/22/24 02:06	
4-Methyl-2-pentanone	ND U	5.0	0.20	1	08/22/24 02:06	
Acetone	ND U	10	5.0	1	08/22/24 02:06	
Acrolein	ND U	10	0.90	1	08/22/24 02:06	
Acrylonitrile	ND U	5.0	0.90	1	08/22/24 02:06	
Benzene	ND U	1.0	0.20	1	08/22/24 02:06	
Bromodichloromethane	ND U	1.0	0.20	1	08/22/24 02:06	
Bromoform	ND U	1.0	0.25	1	08/22/24 02:06	
Bromomethane	ND U	2.0	0.70	1	08/22/24 02:06	
Carbon Disulfide	ND U	1.0	0.42	1	08/22/24 02:06	
Carbon Tetrachloride	ND U	1.0	0.34	1	08/22/24 02:06	
Chlorobenzene	ND U	1.0	0.20	1	08/22/24 02:06	
Chloroethane	ND U	2.0	0.23	1	08/22/24 02:06	
Chloroform	ND U	1.0	0.51	1	08/22/24 02:06	
Chloromethane	ND U	2.0	0.80	1	08/22/24 02:06	
Cyclohexane	ND U	10	0.60	1	08/22/24 02:06	
Dibromochloromethane	ND U	1.0	0.20	1	08/22/24 02:06	
Dibromomethane	ND U	1.0	0.20	1	08/22/24 02:06	
Dichlorodifluoromethane (CFC 12)	ND U	1.0	0.21	1	08/22/24 02:06	
Dichlorofluoromethane (CFC 21)	**3.7**	1.0	0.20	1	08/22/24 02:06	
Dichloromethane	ND U	1.0	0.65	1	08/22/24 02:06	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150820A 300-002-GSV	**Units:**	ug/L
Lab Code:	R2407791-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Ethyl Methacrylate	ND	U	2.0	0.20	1	08/22/24 02:06	
Ethylbenzene	ND	U	1.0	0.20	1	08/22/24 02:06	
Iodomethane	ND	U	5.0	4.3	1	08/22/24 02:06	
Methacrylonitrile	ND	U	5.0	0.52	1	08/22/24 02:06	
Methyl Methacrylate	ND	U	2.0	0.51	1	08/22/24 02:06	
Methyl tert-Butyl Ether	ND	U	10	0.20	1	08/22/24 02:06	
Methylcyclohexane	ND	U	10	0.20	1	08/22/24 02:06	
Propionitrile	ND	U	5.0	3.0	1	08/22/24 02:06	
Styrene	ND	U	1.0	0.20	1	08/22/24 02:06	
Tetrachloroethene (PCE)	ND	U	1.0	0.21	1	08/22/24 02:06	
Tetrahydrofuran (THF)	ND	U	5.0	1.7	1	08/22/24 02:06	
Toluene	**2.7**		1.0	0.20	1	08/22/24 02:06	
Trichloroethene (TCE)	**0.39**	**J**	1.0	0.20	1	08/22/24 02:06	
Trichlorofluoromethane (CFC 11)	**41**		1.0	0.24	1	08/22/24 02:06	
Vinyl Acetate	ND	U	5.0	1.1	1	08/22/24 02:06	
Vinyl Chloride	ND	U	1.0	0.20	1	08/22/24 02:06	
cis-1,2-Dichloroethene	ND	U	1.0	0.23	1	08/22/24 02:06	
cis-1,3-Dichloropropene	ND	U	1.0	0.20	1	08/22/24 02:06	
m,p-Xylenes	ND	U	2.0	0.53	1	08/22/24 02:06	
o-Xylene	ND	U	1.0	0.20	1	08/22/24 02:06	
trans-1,2-Dichloroethene	ND	U	1.0	0.20	1	08/22/24 02:06	
trans-1,3-Dichloropropene	ND	U	1.0	0.23	1	08/22/24 02:06	
trans-1,4-Dichloro-2-butene	ND	U	1.0	0.78	1	08/22/24 02:06	
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	ND	U	1.0	0.20	1	08/22/24 02:06	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 122	08/22/24 02:06	
Dibromofluoromethane	94	80 - 116	08/22/24 02:06	
Toluene-d8	98	87 - 121	08/22/24 02:06	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150821A 300-002-GSV	**Units:**	ug/L
Lab Code:	R2407791-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Allyl Chloride, Acetonitrile Coelution	ND U	25	5.2	1	08/22/24 02:29	
1,1,1,2-Tetrachloroethane	ND U	1.0	0.20	1	08/22/24 02:29	
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.20	1	08/22/24 02:29	
1,1,2,2-Tetrachloroethane	ND U	1.0	0.20	1	08/22/24 02:29	
1,1,2-Trichloroethane	ND U	1.0	0.20	1	08/22/24 02:29	
1,1,2-Trichloro-1,2,2-trifluoroethane	**7.6**	1.0	0.20	1	08/22/24 02:29	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	0.20	1	08/22/24 02:29	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	0.20	1	08/22/24 02:29	
1,2,3-Trichloropropane	ND U	1.0	0.26	1	08/22/24 02:29	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	2.0	0.45	1	08/22/24 02:29	
1,2-Dibromoethane	ND U	1.0	0.20	1	08/22/24 02:29	
1,2-Dichloroethane	ND U	1.0	0.20	1	08/22/24 02:29	
1,2-Dichloropropane	ND U	1.0	0.20	1	08/22/24 02:29	
1,4-Dioxane	ND U	100	13	1	08/22/24 02:29	
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND U	1.0	0.20	1	08/22/24 02:29	
2-Butanone (MEK)	ND U	5.0	0.78	1	08/22/24 02:29	
2-Chloro-1,3-butadiene	ND U	1.0	0.20	1	08/22/24 02:29	
2-Hexanone	ND U	5.0	0.20	1	08/22/24 02:29	
Isobutyl Alcohol	ND U	100	33	1	08/22/24 02:29	
2-Propanol	ND U	50	22	1	08/22/24 02:29	
4-Methyl-2-pentanone	ND U	5.0	0.20	1	08/22/24 02:29	
Acetone	ND U	10	5.0	1	08/22/24 02:29	
Acrolein	ND U	10	0.90	1	08/22/24 02:29	
Acrylonitrile	ND U	5.0	0.90	1	08/22/24 02:29	
Benzene	ND U	1.0	0.20	1	08/22/24 02:29	
Bromodichloromethane	ND U	1.0	0.20	1	08/22/24 02:29	
Bromoform	ND U	1.0	0.25	1	08/22/24 02:29	
Bromomethane	ND U	2.0	0.70	1	08/22/24 02:29	
Carbon Disulfide	ND U	1.0	0.42	1	08/22/24 02:29	
Carbon Tetrachloride	ND U	1.0	0.34	1	08/22/24 02:29	
Chlorobenzene	ND U	1.0	0.20	1	08/22/24 02:29	
Chloroethane	ND U	2.0	0.23	1	08/22/24 02:29	
Chloroform	ND U	1.0	0.51	1	08/22/24 02:29	
Chloromethane	ND U	2.0	0.80	1	08/22/24 02:29	
Cyclohexane	ND U	10	0.60	1	08/22/24 02:29	
Dibromochloromethane	ND U	1.0	0.20	1	08/22/24 02:29	
Dibromomethane	ND U	1.0	0.20	1	08/22/24 02:29	
Dichlorodifluoromethane (CFC 12)	ND U	1.0	0.21	1	08/22/24 02:29	
Dichlorofluoromethane (CFC 21)	**4.9**	1.0	0.20	1	08/22/24 02:29	
Dichloromethane	ND U	1.0	0.65	1	08/22/24 02:29	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150821A 300-002-GSV	**Units:**	ug/L
Lab Code:	R2407791-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Ethyl Methacrylate	ND	U	2.0	0.20	1	08/22/24 02:29	
Ethylbenzene	ND	U	1.0	0.20	1	08/22/24 02:29	
Iodomethane	ND	U	5.0	4.3	1	08/22/24 02:29	
Methacrylonitrile	ND	U	5.0	0.52	1	08/22/24 02:29	
Methyl Methacrylate	ND	U	2.0	0.51	1	08/22/24 02:29	
Methyl tert-Butyl Ether	ND	U	10	0.20	1	08/22/24 02:29	
Methylcyclohexane	ND	U	10	0.20	1	08/22/24 02:29	
Propionitrile	ND	U	5.0	3.0	1	08/22/24 02:29	
Styrene	ND	U	1.0	0.20	1	08/22/24 02:29	
Tetrachloroethene (PCE)	ND	U	1.0	0.21	1	08/22/24 02:29	
Tetrahydrofuran (THF)	ND	U	5.0	1.7	1	08/22/24 02:29	
Toluene	**2.9**		1.0	0.20	1	08/22/24 02:29	
Trichloroethene (TCE)	**0.47**	**J**	1.0	0.20	1	08/22/24 02:29	
Trichlorofluoromethane (CFC 11)	**50**		1.0	0.24	1	08/22/24 02:29	
Vinyl Acetate	ND	U	5.0	1.1	1	08/22/24 02:29	
Vinyl Chloride	ND	U	1.0	0.20	1	08/22/24 02:29	
cis-1,2-Dichloroethene	ND	U	1.0	0.23	1	08/22/24 02:29	
cis-1,3-Dichloropropene	ND	U	1.0	0.20	1	08/22/24 02:29	
m,p-Xylenes	ND	U	2.0	0.53	1	08/22/24 02:29	
o-Xylene	ND	U	1.0	0.20	1	08/22/24 02:29	
trans-1,2-Dichloroethene	ND	U	1.0	0.20	1	08/22/24 02:29	
trans-1,3-Dichloropropene	ND	U	1.0	0.23	1	08/22/24 02:29	
trans-1,4-Dichloro-2-butene	ND	U	1.0	0.78	1	08/22/24 02:29	
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	**0.21**	**J**	1.0	0.20	1	08/22/24 02:29	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	85 - 122	08/22/24 02:29	
Dibromofluoromethane	101	80 - 116	08/22/24 02:29	
Toluene-d8	105	87 - 121	08/22/24 02:29	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150822A 300-002-GSV	**Units:**	ug/L
Lab Code:	R2407791-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Allyl Chloride, Acetonitrile Coelution	ND U	25	5.2	1	08/22/24 01:21	
1,1,1,2-Tetrachloroethane	ND U	1.0	0.20	1	08/22/24 01:21	
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.20	1	08/22/24 01:21	
1,1,2,2-Tetrachloroethane	ND U	1.0	0.20	1	08/22/24 01:21	
1,1,2-Trichloroethane	ND U	1.0	0.20	1	08/22/24 01:21	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND U	1.0	0.20	1	08/22/24 01:21	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	0.20	1	08/22/24 01:21	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	0.20	1	08/22/24 01:21	
1,2,3-Trichloropropane	ND U	1.0	0.26	1	08/22/24 01:21	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	2.0	0.45	1	08/22/24 01:21	
1,2-Dibromoethane	ND U	1.0	0.20	1	08/22/24 01:21	
1,2-Dichloroethane	ND U	1.0	0.20	1	08/22/24 01:21	
1,2-Dichloropropane	ND U	1.0	0.20	1	08/22/24 01:21	
1,4-Dioxane	ND U	100	13	1	08/22/24 01:21	
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND U	1.0	0.20	1	08/22/24 01:21	
2-Butanone (MEK)	ND U	5.0	0.78	1	08/22/24 01:21	
2-Chloro-1,3-butadiene	ND U	1.0	0.20	1	08/22/24 01:21	
2-Hexanone	ND U	5.0	0.20	1	08/22/24 01:21	
Isobutyl Alcohol	ND U	100	33	1	08/22/24 01:21	
2-Propanol	ND U	50	22	1	08/22/24 01:21	
4-Methyl-2-pentanone	ND U	5.0	0.20	1	08/22/24 01:21	
Acetone	ND U	10	5.0	1	08/22/24 01:21	
Acrolein	ND U	10	0.90	1	08/22/24 01:21	
Acrylonitrile	ND U	5.0	0.90	1	08/22/24 01:21	
Benzene	ND U	1.0	0.20	1	08/22/24 01:21	
Bromodichloromethane	ND U	1.0	0.20	1	08/22/24 01:21	
Bromoform	ND U	1.0	0.25	1	08/22/24 01:21	
Bromomethane	ND U	2.0	0.70	1	08/22/24 01:21	
Carbon Disulfide	ND U	1.0	0.42	1	08/22/24 01:21	
Carbon Tetrachloride	ND U	1.0	0.34	1	08/22/24 01:21	
Chlorobenzene	ND U	1.0	0.20	1	08/22/24 01:21	
Chloroethane	ND U	2.0	0.23	1	08/22/24 01:21	
Chloroform	ND U	1.0	0.51	1	08/22/24 01:21	
Chloromethane	ND U	2.0	0.80	1	08/22/24 01:21	
Cyclohexane	ND U	10	0.60	1	08/22/24 01:21	
Dibromochloromethane	ND U	1.0	0.20	1	08/22/24 01:21	
Dibromomethane	ND U	1.0	0.20	1	08/22/24 01:21	
Dichlorodifluoromethane (CFC 12)	ND U	1.0	0.21	1	08/22/24 01:21	
Dichlorofluoromethane (CFC 21)	ND U	1.0	0.20	1	08/22/24 01:21	
Dichloromethane	ND U	1.0	0.65	1	08/22/24 01:21	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150822A 300-002-GSV	**Units:**	ug/L
Lab Code:	R2407791-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Ethyl Methacrylate	ND U	2.0	0.20	1	08/22/24 01:21	
Ethylbenzene	ND U	1.0	0.20	1	08/22/24 01:21	
Iodomethane	ND U	5.0	4.3	1	08/22/24 01:21	
Methacrylonitrile	ND U	5.0	0.52	1	08/22/24 01:21	
Methyl Methacrylate	ND U	2.0	0.51	1	08/22/24 01:21	
Methyl tert-Butyl Ether	ND U	10	0.20	1	08/22/24 01:21	
Methylcyclohexane	ND U	10	0.20	1	08/22/24 01:21	
Propionitrile	ND U	5.0	3.0	1	08/22/24 01:21	
Styrene	ND U	1.0	0.20	1	08/22/24 01:21	
Tetrachloroethene (PCE)	ND U	1.0	0.21	1	08/22/24 01:21	
Tetrahydrofuran (THF)	ND U	5.0	1.7	1	08/22/24 01:21	
Toluene	ND U	1.0	0.20	1	08/22/24 01:21	
Trichloroethene (TCE)	ND U	1.0	0.20	1	08/22/24 01:21	
Trichlorofluoromethane (CFC 11)	ND U	1.0	0.24	1	08/22/24 01:21	
Vinyl Acetate	ND U	5.0	1.1	1	08/22/24 01:21	
Vinyl Chloride	ND U	1.0	0.20	1	08/22/24 01:21	
cis-1,2-Dichloroethene	ND U	1.0	0.23	1	08/22/24 01:21	
cis-1,3-Dichloropropene	ND U	1.0	0.20	1	08/22/24 01:21	
m,p-Xylenes	ND U	2.0	0.53	1	08/22/24 01:21	
o-Xylene	ND U	1.0	0.20	1	08/22/24 01:21	
trans-1,2-Dichloroethene	ND U	1.0	0.20	1	08/22/24 01:21	
trans-1,3-Dichloropropene	ND U	1.0	0.23	1	08/22/24 01:21	
trans-1,4-Dichloro-2-butene	ND U	1.0	0.78	1	08/22/24 01:21	
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	ND U	1.0	0.20	1	08/22/24 01:21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85 - 122	08/22/24 01:21	
Dibromofluoromethane	92	80 - 116	08/22/24 01:21	
Toluene-d8	96	87 - 121	08/22/24 01:21	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

QC Summary Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: NASA/WSTF/Navarro **Service Request:** R2407791
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Extraction Method: EPA 5030C

Sample Name	Lab Code	4-Bromofluorobenzene 85 - 122	Dibromofluoromethane 80 - 116	Toluene-d8 87 - 121
2408121410X WB-5-345	R2407791-001	100	103	105
2408140730X WB-5-345	R2407791-002	103	105	108
2408140920X WB-5-345	R2407791-003	96	98	101
2408140830A 300-001-GSV	R2407791-004	98	98	102
2408140931A 300-001-GSV	R2407791-005	100	103	106
2408141345X WB-5-280	R2407791-006	103	104	107
2408150820A 300-002-GSV	R2407791-007	94	94	98
2408150821A 300-002-GSV	R2407791-008	101	101	105
2408150822A 300-002-GSV	R2407791-009	92	92	96
Lab Control Sample	RQ2410254-03	104	106	105
Method Blank	RQ2410254-04	98	101	104

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/21/24 23:06
Sample Matrix:	Water	**Date Extracted:**	

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Instrument ID:**	R-MS-14
Lab Code:	RQ2410254-04	**File ID:**	I:\ACQUDATA\MSVOA14\Data\082124\N2867.D\
Analysis Method:	8260D	**Analysis Lot:**	851340
Prep Method:	EPA 5030C		

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ2410254-03	I:\ACQUDATA\MSVOA14\Data\082124 \N2864.D\	08/21/24 21:58
2408121410X WB-5-345	R2407791-001	I:\ACQUDATA\MSVOA14\Data\082124 \N2868.D\	08/21/24 23:28
2408140730X WB-5-345	R2407791-002	I:\ACQUDATA\MSVOA14\Data\082124 \N2869.D\	08/21/24 23:51
2408140920X WB-5-345	R2407791-003	I:\ACQUDATA\MSVOA14\Data\082124 \N2870.D\	08/22/24 00:13
2408141345X WB-5-280	R2407791-006	I:\ACQUDATA\MSVOA14\Data\082124 \N2871.D\	08/22/24 00:36
2408140931A 300-001-GSV	R2407791-005	I:\ACQUDATA\MSVOA14\Data\082124 \N2872.D\	08/22/24 00:58
2408150822A 300-002-GSV	R2407791-009	I:\ACQUDATA\MSVOA14\Data\082124 \N2873.D\	08/22/24 01:21
2408140830A 300-001-GSV	R2407791-004	I:\ACQUDATA\MSVOA14\Data\082124 \N2874.D\	08/22/24 01:44
2408150820A 300-002-GSV	R2407791-007	I:\ACQUDATA\MSVOA14\Data\082124 \N2875.D\	08/22/24 02:06
2408150821A 300-002-GSV	R2407791-008	I:\ACQUDATA\MSVOA14\Data\082124 \N2876.D\	08/22/24 02:29

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2410254-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Allyl Chloride, Acetonitrile Coelution	ND U	25	5.2	1	08/21/24 23:06	
1,1,1,2-Tetrachloroethane	ND U	1.0	0.20	1	08/21/24 23:06	
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.20	1	08/21/24 23:06	
1,1,2,2-Tetrachloroethane	ND U	1.0	0.20	1	08/21/24 23:06	
1,1,2-Trichloroethane	ND U	1.0	0.20	1	08/21/24 23:06	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND U	1.0	0.20	1	08/21/24 23:06	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	0.20	1	08/21/24 23:06	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	0.20	1	08/21/24 23:06	
1,2,3-Trichloropropane	ND U	1.0	0.26	1	08/21/24 23:06	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	2.0	0.45	1	08/21/24 23:06	
1,2-Dibromoethane	ND U	1.0	0.20	1	08/21/24 23:06	
1,2-Dichloroethane	ND U	1.0	0.20	1	08/21/24 23:06	
1,2-Dichloropropane	ND U	1.0	0.20	1	08/21/24 23:06	
1,4-Dioxane	ND U	100	13	1	08/21/24 23:06	
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND U	1.0	0.20	1	08/21/24 23:06	
2-Butanone (MEK)	ND U	5.0	0.78	1	08/21/24 23:06	
2-Chloro-1,3-butadiene	ND U	1.0	0.20	1	08/21/24 23:06	
2-Hexanone	ND U	5.0	0.20	1	08/21/24 23:06	
Isobutyl Alcohol	ND U	100	33	1	08/21/24 23:06	
2-Propanol	ND U	50	22	1	08/21/24 23:06	
4-Methyl-2-pentanone	ND U	5.0	0.20	1	08/21/24 23:06	
Acetone	ND U	10	5.0	1	08/21/24 23:06	
Acrolein	ND U	10	0.90	1	08/21/24 23:06	
Acrylonitrile	ND U	5.0	0.90	1	08/21/24 23:06	
Benzene	ND U	1.0	0.20	1	08/21/24 23:06	
Bromodichloromethane	ND U	1.0	0.20	1	08/21/24 23:06	
Bromoform	ND U	1.0	0.25	1	08/21/24 23:06	
Bromomethane	ND U	2.0	0.70	1	08/21/24 23:06	
Carbon Disulfide	ND U	1.0	0.42	1	08/21/24 23:06	
Carbon Tetrachloride	ND U	1.0	0.34	1	08/21/24 23:06	
Chlorobenzene	ND U	1.0	0.20	1	08/21/24 23:06	
Chloroethane	ND U	2.0	0.23	1	08/21/24 23:06	
Chloroform	ND U	1.0	0.51	1	08/21/24 23:06	
Chloromethane	ND U	2.0	0.80	1	08/21/24 23:06	
Cyclohexane	ND U	10	0.60	1	08/21/24 23:06	
Dibromochloromethane	ND U	1.0	0.20	1	08/21/24 23:06	
Dibromomethane	ND U	1.0	0.20	1	08/21/24 23:06	
Dichlorodifluoromethane (CFC 12)	ND U	1.0	0.21	1	08/21/24 23:06	
Dichlorofluoromethane (CFC 21)	ND U	1.0	0.20	1	08/21/24 23:06	
Dichloromethane	ND U	1.0	0.65	1	08/21/24 23:06	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2410254-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Ethyl Methacrylate	ND U	2.0	0.20	1	08/21/24 23:06	
Ethylbenzene	ND U	1.0	0.20	1	08/21/24 23:06	
Iodomethane	ND U	5.0	4.3	1	08/21/24 23:06	
Methacrylonitrile	ND U	5.0	0.52	1	08/21/24 23:06	
Methyl Methacrylate	ND U	2.0	0.51	1	08/21/24 23:06	
Methyl tert-Butyl Ether	ND U	10	0.20	1	08/21/24 23:06	
Methylcyclohexane	ND U	10	0.20	1	08/21/24 23:06	
Propionitrile	ND U	5.0	3.0	1	08/21/24 23:06	
Styrene	ND U	1.0	0.20	1	08/21/24 23:06	
Tetrachloroethene (PCE)	ND U	1.0	0.21	1	08/21/24 23:06	
Tetrahydrofuran (THF)	ND U	5.0	1.7	1	08/21/24 23:06	
Toluene	ND U	1.0	0.20	1	08/21/24 23:06	
Trichloroethene (TCE)	ND U	1.0	0.20	1	08/21/24 23:06	
Trichlorofluoromethane (CFC 11)	ND U	1.0	0.24	1	08/21/24 23:06	
Vinyl Acetate	ND U	5.0	1.1	1	08/21/24 23:06	
Vinyl Chloride	ND U	1.0	0.20	1	08/21/24 23:06	
cis-1,2-Dichloroethene	ND U	1.0	0.23	1	08/21/24 23:06	
cis-1,3-Dichloropropene	ND U	1.0	0.20	1	08/21/24 23:06	
m,p-Xylenes	ND U	2.0	0.53	1	08/21/24 23:06	
o-Xylene	ND U	1.0	0.20	1	08/21/24 23:06	
trans-1,2-Dichloroethene	ND U	1.0	0.20	1	08/21/24 23:06	
trans-1,3-Dichloropropene	ND U	1.0	0.23	1	08/21/24 23:06	
trans-1,4-Dichloro-2-butene	ND U	1.0	0.78	1	08/21/24 23:06	
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	ND U	1.0	0.20	1	08/21/24 23:06	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	08/21/24 23:06	
Dibromofluoromethane	101	80 - 116	08/21/24 23:06	
Toluene-d8	104	87 - 121	08/21/24 23:06	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/21/24 21:58
Sample Matrix:	Water	**Date Extracted:**	

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Sample Name: Lab Control Sample
Lab Code: RQ2410254-03
Instrument ID: R-MS-14
File ID: I:\ACQUDATA\MSVOA14\Data\082124\N2864.D\

Analysis Method: 8260D
Prep Method: EPA 5030C
Analysis Lot: 851340

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	RQ2410254-04	I:\ACQUDATA\MSVOA14\Data\082124 \N2867.D\	08/21/24 23:06
2408121410X WB-5-345	R2407791-001	I:\ACQUDATA\MSVOA14\Data\082124 \N2868.D\	08/21/24 23:28
2408140730X WB-5-345	R2407791-002	I:\ACQUDATA\MSVOA14\Data\082124 \N2869.D\	08/21/24 23:51
2408140920X WB-5-345	R2407791-003	I:\ACQUDATA\MSVOA14\Data\082124 \N2870.D\	08/22/24 00:13
2408141345X WB-5-280	R2407791-006	I:\ACQUDATA\MSVOA14\Data\082124 \N2871.D\	08/22/24 00:36
2408140931A 300-001-GSV	R2407791-005	I:\ACQUDATA\MSVOA14\Data\082124 \N2872.D\	08/22/24 00:58
2408150822A 300-002-GSV	R2407791-009	I:\ACQUDATA\MSVOA14\Data\082124 \N2873.D\	08/22/24 01:21
2408140830A 300-001-GSV	R2407791-004	I:\ACQUDATA\MSVOA14\Data\082124 \N2874.D\	08/22/24 01:44
2408150820A 300-002-GSV	R2407791-007	I:\ACQUDATA\MSVOA14\Data\082124 \N2875.D\	08/22/24 02:06
2408150821A 300-002-GSV	R2407791-008	I:\ACQUDATA\MSVOA14\Data\082124 \N2876.D\	08/22/24 02:29

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407791
Date Analyzed: 08/21/24

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2410254-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	8260D	22.1	20.0	110	76-129
1,1,1-Trichloroethane (TCA)	8260D	21.0	20.0	105	70-130
1,1,2,2-Tetrachloroethane	8260D	20.2	20.0	101	78-126
1,1,2-Trichloroethane	8260D	21.0	20.0	105	82-121
1,1,2-Trichloro-1,2,2-trifluoroethane	8260D	19.6	20.0	98	70-130
1,1-Dichloroethane (1,1-DCA)	8260D	21.3	20.0	107	80-124
1,1-Dichloroethene (1,1-DCE)	8260D	20.5	20.0	103	70-130
1,2,3-Trichloropropane	8260D	20.2	20.0	101	75-118
1,2-Dibromo-3-chloropropane (DBCP)	8260D	20.8	20.0	104	55-136
1,2-Dibromoethane	8260D	21.1	20.0	106	82-127
1,2-Dichloroethane	8260D	20.8	20.0	104	71-127
1,2-Dichloropropane	8260D	19.1	20.0	95	80-119
1,4-Dioxane	8260D	408	400	102	44-154
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	8260D	24.6	20.0	123	70-130
2-Butanone (MEK)	8260D	19.1	20.0	95	61-137
2-Chloro-1,3-butadiene	8260D	19.7	20.0	99	68-139
2-Hexanone	8260D	19.5	20.0	98	63-124
Isobutyl Alcohol	8260D	372	400	93	51-143
2-Propanol	8260D	391	400	98	52-136
4-Methyl-2-pentanone	8260D	20.7	20.0	103	66-124
Acetone	8260D	18.2	20.0	91	40-161
Acrolein	8260D	37.8	40.0	94	13-165
Acrylonitrile	8260D	102	100	102	71-130
Benzene	8260D	21.4	20.0	107	79-119
Bromodichloromethane	8260D	20.8	20.0	104	81-123
Bromoform	8260D	21.6	20.0	108	65-146
Bromomethane	8260D	24.8	20.0	124	42-166
Carbon Disulfide	8260D	22.6	20.0	113	66-128
Carbon Tetrachloride	8260D	21.2	20.0	106	70-127
Chlorobenzene	8260D	20.4	20.0	102	81-120
Chloroethane	8260D	13.8	20.0	69	62-131
Chloroform	8260D	21.4	20.0	107	70-130
Chloromethane	8260D	22.2	20.0	111	61-143

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407791
Date Analyzed: 08/21/24

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2410254-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Cyclohexane	8260D	19.9	20.0	99	69-120
Dibromochloromethane	8260D	21.4	20.0	107	72-128
Dibromomethane	8260D	20.6	20.0	103	80-118
Dichlorodifluoromethane (CFC 12)	8260D	21.6	20.0	108	59-155
Dichlorofluoromethane (CFC 21)	8260D	18.4	20.0	92	70-130
Dichloromethane	8260D	21.9	20.0	109	73-122
Ethyl Methacrylate	8260D	20.7	20.0	103	68-132
Ethylbenzene	8260D	20.4	20.0	102	76-120
Iodomethane	8260D	17.3	20.0	87	18-160
Methacrylonitrile	8260D	19.9	20.0	99	68-123
Methyl Methacrylate	8260D	20.9	20.0	105	68-129
Methyl tert-Butyl Ether	8260D	20.7	20.0	103	75-118
Methylcyclohexane	8260D	19.0	20.0	95	51-129
Propionitrile	8260D	100	100	100	69-126
Styrene	8260D	21.5	20.0	107	80-124
Tetrachloroethene (PCE)	8260D	20.0	20.0	100	70-130
Tetrahydrofuran (THF)	8260D	19.2	20.0	96	48-141
Toluene	8260D	21.2	20.0	106	79-119
Trichloroethene (TCE)	8260D	20.6	20.0	103	70-130
Trichlorofluoromethane (CFC 11)	8260D	20.2	20.0	101	70-130
Vinyl Acetate	8260D	15.3	20.0	77	52-174
Vinyl Chloride	8260D	19.2	20.0	96	74-159
cis-1,2-Dichloroethene	8260D	21.2	20.0	106	80-121
cis-1,3-Dichloropropene	8260D	22.3	20.0	112	77-122
m,p-Xylenes	8260D	42.6	40.0	107	80-126
o-Xylene	8260D	20.9	20.0	105	79-123
trans-1,2-Dichloroethene	8260D	20.0	20.0	100	73-118
trans-1,3-Dichloropropene	8260D	22.7	20.0	114	71-133
trans-1,4-Dichloro-2-butene	8260D	16.3	20.0	81	39-137
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	8260D	19.9	20.0	100	70-130

Client: NASA/WSTF/Navarro **Service Request:**R2407791
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/21/24 21:35

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA14\Data\082124\N2863.D\ **Analytical Method:** 8260D
Instrument ID: R-MS-14 **Analysis Lot:** 851340

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ2410254-02	I:\ACQUDATA\MSVOA14\Data\082124\N2863.D\	08/21/24 21:35	
Lab Control Sample	RQ2410254-03	I:\ACQUDATA\MSVOA14\Data\082124\N2864.D\	08/21/24 21:58	
Method Blank	RQ2410254-04	I:\ACQUDATA\MSVOA14\Data\082124\N2867.D\	08/21/24 23:06	
2408121410X WB-5-345	R2407791-001	I:\ACQUDATA\MSVOA14\Data\082124\N2868.D\	08/21/24 23:28	
2408140730X WB-5-345	R2407791-002	I:\ACQUDATA\MSVOA14\Data\082124\N2869.D\	08/21/24 23:51	
2408140920X WB-5-345	R2407791-003	I:\ACQUDATA\MSVOA14\Data\082124\N2870.D\	08/22/24 00:13	
2408141345X WB-5-280	R2407791-006	I:\ACQUDATA\MSVOA14\Data\082124\N2871.D\	08/22/24 00:36	
2408140931A 300-001-GSV	R2407791-005	I:\ACQUDATA\MSVOA14\Data\082124\N2872.D\	08/22/24 00:58	
2408150822A 300-002-GSV	R2407791-009	I:\ACQUDATA\MSVOA14\Data\082124\N2873.D\	08/22/24 01:21	
2408140830A 300-001-GSV	R2407791-004	I:\ACQUDATA\MSVOA14\Data\082124\N2874.D\	08/22/24 01:44	
2408150820A 300-002-GSV	R2407791-007	I:\ACQUDATA\MSVOA14\Data\082124\N2875.D\	08/22/24 02:06	
2408150821A 300-002-GSV	R2407791-008	I:\ACQUDATA\MSVOA14\Data\082124\N2876.D\	08/22/24 02:29	

QA/QC Report

Client: NASA/WSTF/Navarro **Service Request:**R2407791
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/21/24 21:35

Internal Standard Area and RT SUMMARY
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA14\Data\082124\N2863.D\ **Lab Code:**RQ2410254-02
Instrument ID: R-MS-14 **Analysis Lot:**851340
Analysis Method: 8260D **Signal ID:**1

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	410,342	12.04	731,881	6.48	686,249	9.94
	Upper Limit ==>	820,684	12.21	1,463,762	6.65	1,372,498	10.11
	Lower Limit ==>	205,171	11.87	365,941	6.31	343,125	9.77
Associated Analyses							
Lab Control Sample	RQ2410254-03	386350	12.04	730634	6.48	677899	9.93
Method Blank	RQ2410254-04	337944	12.04	684406	6.48	621770	9.93
2408121410X WB-5-345	R2407791-001	322078	12.04	660875	6.48	593087	9.94
2408140730X WB-5-345	R2407791-002	325161	12.04	654674	6.48	599432	9.93
2408140920X WB-5-345	R2407791-003	342931	12.04	692060	6.48	629354	9.93
2408141345X WB-5-280	R2407791-006	325167	12.04	653176	6.48	594617	9.94
2408140931A 300-001-GSV	R2407791-005	323623	12.04	661367	6.48	601927	9.94
2408150822A 300-002-GSV	R2407791-009	356860	12.04	720355	6.48	656101	9.93
2408140830A 300-001-GSV	R2407791-004	337508	12.04	674266	6.48	618051	9.93
2408150820A 300-002-GSV	R2407791-007	350373	12.04	694249	6.48	635562	9.94
2408150821A 300-002-GSV	R2407791-008	324208	12.04	657134	6.48	601778	9.93

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: NASA/WSTF/Navarro **Service Request:**R2407791
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/21/24 21:35

Internal Standard Area and RT SUMMARY
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA14\Data\082124\N2863.D\ **Lab Code:**RQ2410254-02
Instrument ID: R-MS-14 **Analysis Lot:**851340
Analysis Method: 8260D **Signal ID:**1

		Pentafluorobenzene	
		Area	**RT**
	Result ==>	530,755	5.36
	Upper Limit ==>	1,061,510	5.53
	Lower Limit ==>	265,378	5.19
Associated Analyses			
Lab Control Sample	RQ2410254-03	531584	5.35
Method Blank	RQ2410254-04	500642	5.36
2408121410X WB-5-345	R2407791-001	487188	5.36
2408140730X WB-5-345	R2407791-002	473952	5.36
2408140920X WB-5-345	R2407791-003	501651	5.36
2408141345X WB-5-280	R2407791-006	471089	5.36
2408140931A 300-001-GSV	R2407791-005	482820	5.36
2408150822A 300-002-GSV	R2407791-009	520766	5.36
2408140830A 300-001-GSV	R2407791-004	487762	5.36
2408150820A 300-002-GSV	R2407791-007	503045	5.36
2408150821A 300-002-GSV	R2407791-008	473884	5.36

Raw Data

ALS Environmental—Rochester Laboratory
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Volatile Organic Compounds by GC/MS

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Client:	NASA/WSTF/Navarro	**Service Request:**	R2407791
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/21/24 21:35

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method:	8260D	**Calibration Date:**	8/20/2024
File ID:	I:\ACQUDATA\MSVOA14\Data\082124\N2863.D\	**Calibration ID:**	RC2400163
Signal ID:	1	**Analysis Lot:**	851340
		Units:	ug/L

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	50.0	59.7	0.2477	0.2959	19.5	NA	±20	Average RF
1,1,1-Trichloroethane (TCA)	50.0	55.1	0.4632	0.5101	10.1	NA	±20	Average RF
1,1,2,2-Tetrachloroethane	50.0	49.9	0.7942	0.7933	-0.1	NA	±20	Average RF
1,1,2-Trichloroethane	50.0	55.0	0.2655	0.2922	10.0	NA	±20	Average RF
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	50.2	0.2937	0.2949	0.4	NA	±20	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	53.0	0.5567	0.59	6.0	NA	±20	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	52.0	0.2997	0.3116	4.0	NA	±20	Average RF
1,2,3-Trichloropropane	50.0	51.5	0.2777	0.2861	3.0	NA	±20	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	55.2	0.193	0.2126	NA	10.4	±20	Quadratic
1,2-Dibromoethane	50.0	56.4	0.3014	0.3397	12.7	NA	±20	Average RF
1,2-Dichloroethane	50.0	53.8	0.3715	0.4	7.7	NA	±20	Average RF
1,2-Dichloropropane	50.0	54.1	0.2448	0.2647	8.1	NA	±20	Average RF
1,4-Dioxane	1000	1100	0.0061	0.0067	10.3	NA	±20	Average RF
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	50.0	50.7	0.4408	0.447	1.4	NA	±20	Average RF
2-Butanone (MEK)	50.0	46.8	0.266	0.2492	-6.3	NA	±20	Average RF
2-Chloro-1,3-butadiene	50.0	51.1	0.4824	0.493	2.2	NA	±20	Average RF
2-Hexanone	50.0	49.2	0.2893	0.2849	-1.5	NA	±20	Average RF
Isobutyl Alcohol	1000	1050	0.0175	0.0184	4.9	NA	±20	Average RF
2-Propanol	1000	989	0.033	0.0327	-1.1	NA	±20	Average RF
4-Methyl-2-pentanone	50.0	50.7	0.3458	0.3503	1.3	NA	±20	Average RF
Acetone	50.0	49.3	0.2062	0.2033	-1.4	NA	±20	Average RF
Acrolein	250	256	0.0851	0.0872	2.4	NA	±20	Average RF
Acrylonitrile	250	264	0.1857	0.1962	5.7	NA	±20	Average RF
Benzene	50.0	53.1	0.9284	0.9864	6.2	NA	±20	Average RF
Bromodichloromethane	50.0	57.1	0.2981	0.3405	14.2	NA	±20	Average RF
Bromoform	50.0	55.4	0.1955	0.2242	NA	10.9	±20	Quadratic
Bromomethane	50.0	62.1	0.273	0.2998	NA	24.1*	±20	Quadratic
Carbon Disulfide	50.0	51.2	0.6726	0.6486	NA	2.3	±20	Quadratic
Carbon Tetrachloride	50.0	54.7	0.2747	0.3003	9.3	NA	±20	Average RF
Chlorobenzene	50.0	52.3	0.8121	0.849	4.5	NA	±20	Average RF
Chloroethane	50.0	51.7	0.325	0.3363	3.5	NA	±20	Average RF
Chloroform	50.0	53.7	0.5873	0.6303	7.3	NA	±20	Average RF
Chloromethane	50.0	53.8	0.3507	0.3772	7.6	NA	±20	Average RF
Cyclohexane	50.0	50.6	0.2142	0.2168	1.2	NA	±20	Average RF
Dibromochloromethane	50.0	56.1	0.2733	0.3173	NA	12.2	±20	Quadratic
Dibromomethane	50.0	54.4	0.1813	0.1972	8.8	NA	±20	Average RF
Dichlorodifluoromethane (CFC 12)	50.0	51.8	0.4342	0.4496	3.6	NA	±20	Average RF
Dichlorofluoromethane (CFC 21)	50.0	50.7	0.6347	0.6433	1.3	NA	±20	Average RF

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B

Service Request: R2407791
Date Analyzed: 08/21/24 21:35

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
File ID: I:\ACQUDATA\MSVOA14\Data\082124\N2863.D\
Signal ID: 1

Calibration Date: 8/20/2024
Calibration ID: RC2400163
Analysis Lot: 851340
Units: ug/L

Dichloromethane	50.0	54.1	0.437	0.3585	NA	8.2	±20	Quadratic
Ethyl Methacrylate	50.0	57.8	0.377	0.4361	15.7	NA	±20	Average RF
Ethylbenzene	50.0	53.2	0.4129	0.4394	6.4	NA	±20	Average RF
Iodomethane	50.0	49.0	0.4673	0.458	-2.0	NA	±20	Average RF
Methacrylonitrile	50.0	52.6	0.2052	0.2157	5.1	NA	±20	Average RF
Methyl Methacrylate	50.0	55.5	0.2265	0.2513	10.9	NA	±20	Average RF
Methyl tert-Butyl Ether	50.0	53.2	1.0749	1.1442	6.5	NA	±20	Average RF
Methylcyclohexane	50.0	50.9	0.2845	0.2898	1.9	NA	±20	Average RF
Propionitrile	250	266	0.0805	0.0857	6.5	NA	±20	Average RF
Styrene	50.0	57.0	0.851	0.9694	13.9	NA	±20	Average RF
Tetrachloroethene (PCE)	50.0	50.6	0.2535	0.2563	1.1	NA	±20	Average RF
Tetrahydrofuran (THF)	50.0	48.8	0.1741	0.1698	-2.5	NA	±20	Average RF
Toluene	50.0	54.7	1.0659	1.1668	9.5	NA	±20	Average RF
Trichloroethene (TCE)	50.0	55.2	0.2774	0.3063	10.4	NA	±20	Average RF
Trichlorofluoromethane (CFC 11)	50.0	52.6	0.5121	0.5387	5.2	NA	±20	Average RF
Vinyl Acetate	50.0	37.7	0.0811	0.0611	-24.7*	NA	±20	Average RF
Vinyl Chloride	50.0	51.5	0.3972	0.409	3.0	NA	±20	Average RF
cis-1,2-Dichloroethene	50.0	53.6	0.378	0.4053	7.2	NA	±20	Average RF
cis-1,3-Dichloropropene	50.0	55.9	0.3315	0.3922	NA	11.8	±20	Quadratic
m,p-Xylenes	100	109	0.5075	0.5513	8.6	NA	±20	Average RF
o-Xylene	50.0	54.0	0.5088	0.5494	8.0	NA	±20	Average RF
trans-1,2-Dichloroethene	50.0	52.2	0.3322	0.3465	4.3	NA	±20	Average RF
trans-1,3-Dichloropropene	50.0	57.4	0.2878	0.3519	NA	14.8	±20	Quadratic
trans-1,4-Dichloro-2-butene	50.0	55.6	0.1183	0.1316	11.3	NA	±20	Average RF
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	50.0	49.4	0.3792	0.3749	-1.1	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromofluorobenzene	50.0	55.3	0.4039	0.4466	10.6	NA	±20	Average RF
Dibromofluoromethane	50.0	52.9	0.2676	0.2833	5.8	NA	±20	Average RF
Toluene-d8	50.0	52.9	1.0541	1.1151	5.8	NA	±20	Average RF

Client: NASA/WSTF/Navarro **Service Request:**R2407791
Project: White Sands Test Facility/24EC008B

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method: 8260D **Analysis Lot:**851340
Instrument ID:R-MS-14

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\MSVOA14\Data\082124\N2863.D\	Continuing Calibration Verification	RQ2410254-02	8/21/2024	21:35:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2864.D\	Lab Control Sample	RQ2410254-03	8/21/2024	21:58:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2867.D\	Method Blank	RQ2410254-04	8/21/2024	23:06:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2868.D\	2408121410X WB-5-345	R2407791-001	8/21/2024	23:28:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2869.D\	2408140730X WB-5-345	R2407791-002	8/21/2024	23:51:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2870.D\	2408140920X WB-5-345	R2407791-003	8/22/2024	00:13:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2871.D\	2408141345X WB-5-280	R2407791-006	8/22/2024	00:36:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2872.D\	2408140931A 300-001-GSV	R2407791-005	8/22/2024	00:58:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2873.D\	2408150822A 300-002-GSV	R2407791-009	8/22/2024	01:21:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2874.D\	2408140830A 300-001-GSV	R2407791-004	8/22/2024	01:44:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2875.D\	2408150820A 300-002-GSV	R2407791-007	8/22/2024	02:06:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2876.D\	2408150821A 300-002-GSV	R2407791-008	8/22/2024	02:29:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2878.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	03:14:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2879.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	03:36:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2880.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	03:59:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2881.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	04:21:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2882.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	04:44:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2883.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	05:07:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2884.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	05:29:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2885.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	05:52:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2887.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	06:37:00	
I:\ACQUDATA\MSVOA14\Data\082124\N2888.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	07:00:00	

Analysis: 8260 | Analyst: F. Nagler | pH strips: 234223 | Tune Method: WO82024.M

Date: 8/21/24 #2 | Balance ID: — | ResCl strips: — | Run Method: ↓

Instr. MS14 | 50 mL Class A used for dilution FV | Syringes: 210903 / 218579 | LIMS Run#: 851340

Data Path: j:\acqudata\msvoa(instID)\(Date)

Pos.	Sample	Diln.	Diln. Prep./	RL	Vial	HS	CI	pH	File#	OK?	Comments
33	BLK								W2862	Y	
34	CCV								63	YL	
35	LCS-FP								64	YD	
36	BLK								65	(N)	
37	MBLK-UNP								66	YB	
38	MBLK-FP								67	YB	
39	R2407791-021	1.0		26951	1	N	-	<2	68	Y	+TICs
40	-002	1.0			1	N	-	<2	69	Y	
41	-003	1.0			1	N	-	<2	70	Y	
42	-006	1.0			1	N	-	<2	71	Y	
43	-005	1.0			1	N	-	<2	72	Y	
44	-009	1.0			1	N	-	<2	73	Y	
45	-004	1.0			1	N	-	<2	74	Y	
46	-007	1.0			1	N	-	<2	75	Y	
47	-008	1.0			1	N	-	<2	76	Y	
48	BLK								77	—	
49	R2407592-021	1.0		26412	1	N	-	<2	78	Y	+TICs
50	-001	1.0			1	N	-	<2	79	Y	
51	-003	1.0			1	N	-	<2	80	Y	
52	-005	1.0			1	N	-	<2	81	Y	
53	-009	1.0			1	N	-	<2	82	Y	
54	-013	1.0			1	N	-	<2	83	Y	
55	-017	1.0			1	N	-	<2	84	Y	
56	-019	1.0			1	N	-	<2	85	Y	
57	-011	10.0	5/50mL		1	N	-	<2	86	(N)	Rpt 1/2.5
58	-007	2.5	20/50mL		1	N	-	<2	87	Y	
59	-015	2.0	25/50mL		1	N	-	<2	88	(Y)	Rpt 1/10
60	-011MS	10.0	5/50mL		1	N	-	<2	89	(N)	Rpt 1/2.5
61	-011MSD	10.0	↓		1	N	-	<2	90	(N)	↓
62	BLK								91	Y	
63									92	Y	
64									93	Y	

All samples = 5 mL + 5 uL combined IS/ 5 mL purged

Combined IS/Surr: —

T/G Primary 500: 236817

HSL Primary ↓: 236725

Fr Primary ↓: 236900

OCC Primary ↓: 235592

Primary:

Fr Secondary 200: 236901

T/G Secondary 500: 236820

HSL Secondary ↓: 236691

OCC Secondary ↓: 236103

Secondary:

Surrogate 50: 236870

Internal Std 50: 236871

Reagents: —

September 25, 2024 Service Request No:R2407792

Stephanie Portillo
NASA/WSTF/Navarro
P.O. Box 20
Las Cruces, NM 88004

Laboratory Results for: White Sands Test Facility

Dear Stephanie,

Enclosed are the results of the sample(s) submitted to our laboratory August 16, 2024
For your reference, these analyses have been assigned our service request number **R2407792.**

All testing was performed according to our laboratory's quality assurance program and met the requirements of the TNI standards except as noted in the case narrative report. Any testing not included in the lab's accreditation is identified on a Non-Certified Analytes report. All results are intended to be considered in their entirety. ALS Environmental is not responsible for use of less than the complete report. Results apply only to the individual samples submitted to the lab for analysis, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s), and represented by Laboratory Control Sample control limits. Any events, such as QC failures or Holding Time exceedances, which may add to the uncertainty are explained in the report narrative or are flagged with qualifiers. The flags are explained in the Report Qualifiers and Definitions page of this report.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental



Janice Jaeger
Project Manager

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Narrative Documents

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ALS Environmental

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility
Sample Matrix: Water

Service Request: R2407792
Date Received: 08/16/2024

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier level IV requested by the client.
Manual Integrations may have been used in the quantitation of the results in this report. Manual Integrations are readily identified in the raw data on the Quantitation Reports (Organics) by the automatic placement of an “m” next to the sample result. For Ion Chromatography, the manual integrations are identified by the automatic placement of “manipulated” or "manually integrated" in the upper left corner of the chromatogram (Hexavalent Chromium) or “M” by the result in the “Type” column (anions). The reason for the manual integration is noted on the “after” chromatogram, which is found with the original chromatogram and quantitation report. All integrations follow the lab SOP ADM-INT “Manual Integration.”

Sample Receipt:

Fifteen water samples were received for analysis at ALS Environmental on 08/16/2024. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Semivolatiles by GC/MS:

Method 8270E, 08/23/2024: The upper control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). The field samples analyzed in this sequence did not contain the analyte(s) in question above the Method Reporting Limit (MRL). Since the exceedance equates to a potential high bias, the data quality was not significantly affected and no further corrective action was taken.
Method 8270E, 08/23/2024: The lower control limit for the spike recovery of the Laboratory Control Sample (LCS) was exceeded for one or more analyte. There were no detections of the analyte(s) in the associated field samples. The Duplicate Laboratory Sample was within limits. The analytes affected are flagged in the LCS Summary.

Method 8270E, 08/22/2024: The upper control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). The field samples analyzed in this sequence did not contain the analyte(s) in question above the Method Reporting Limit (MRL). Since the exceedance equates to a potential high bias, the data quality was not significantly affected and no further corrective action was taken.

Method 8270E, 08/22/2024: The control limit was exceeded for one or more surrogates in the Continuing Calibration Verification (CCV). The surrogates were within acceptance limits for the associated field samples. The data quality was not significantly affected and no further corrective action was taken.

Method 8270E, 08/22/2024: The upper control criterion was exceeded for one or more analytes in the Laboratory Control Sample (LCS). There were no detections of the analyte(s) above the MRL in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was appropriate.

Method 8270E, 08/22/2024: The lower control limit for the spike recovery of the Duplicate Laboratory Control Sample (LCSD) was exceeded for one or more analyte. The Laboratory Control Sample (LCS) passed limits. There were no detections of the analyte(s) in the associated field samples. The analytes affected are flagged in the LCS Summary

Method 8270E, 08/22/2024: The lower control limit for the spike recovery of the Laboratory Control Sample (LCS) was exceeded for one or more analyte(s). The Duplicate Laboratory Control Sample (LCSD) passed limits. There were no detections of the analyte(s) in the associated field samples. The analytes affected are flagged in the LCS Summary.

Metals:

No significant anomalies were noted with this analysis.

Approved by _____ Date 09/25/2024

General Chemistry:

No significant anomalies were noted with this analysis.

Subcontracted Analytical Parameters:

No significant anomalies were noted with this analysis.

Approved by _____ Date 09/25/2024

Sample Receipt Information

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R2407792-001	2408140833A 300-001-GSV	8/14/2024	
R2407792-002	2408140833A 300-001-GSV	8/14/2024	
R2407792-003	2408140834A 300-001-GSV	8/14/2024	
R2407792-004	2408140835A 300-001-GSV	8/14/2024	
R2407792-005	2408140836A 300-001-GSV	8/14/2024	
R2407792-007	2408140838A 300-001-GSV	8/14/2024	
R2407792-008	2408140940X WB-5-345	8/14/2024	
R2407792-009	2408150825A 300-002-GSV	8/14/2024	
R2407792-010	2408150825A 300-002-GSV	8/15/2024	
R2407792-011	2408150826A 300-002-GSV	8/15/2024	
R2407792-012	2408150827A 300-002-GSV	8/15/2024	
R2407792-013	2408150828A 300-002-GSV	8/15/2024	
R2407792-015	2408150830A 300-002-GSV	8/15/2024	

WSTF CHAIN OF CUSTODY RECORD

Date 8-15-24

Laboratory: ALS PO# 24EC008B

Address shipping questions to:
- [x] Lori Minnick, 575-524-5119
- [ ] Other _____, 575-524-_____

Send sample receipt confirmation and analytical reports to:
- [x] Stephanie Portillo, stephanie.portillo@nasa.gov
- [ ] Other
- [ ] Other

Special Instructions

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

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

Sample Number	Sample Location	# of Containers	Sample Matrix*	Analytical Requirements: Method 8270 (Carbon TOC)	Term Nitrates	Anions / ALK	TDS SM2540C	Perchlorate 6860	NO_2 / NO_3 353.2	Charge Number (WSTF Use Only)	Comments
2408140833A	300-001-GSV	2	A	X						XGMD	
2408140834A	"	2	A		X					"	
2408140835A	"	2	A			X				"	
2408140836A	"	1	A				X			"	
2408140837A	"	1	A					X		"	
2408140838A	"	1	A						X	"	
2408140940X	WB-5-345	2	A		X					"	
2408150825A	300-002-GSV	2	A	X						"	
2408150826A	"	2	A		X					"	
2408150827A	"	2	A			X				"	
2408150828A	"	1	A				X			"	
2408150829A	"	1	A					X		"	

Relinquished By:	Date/Time:	Accepted By:	Date/Time:
[signature]	8-15-24 / 1100 HRS.	[signature]	8/16/24 0745

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

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NASA/WSTF/Navarro
White Sands Test Facility

WSTF CHAIN OF CUSTODY RECORD

Date 8-15-24

Laboratory: ALS PO# 24EC008B

Address shipping questions to:

- [x] ~~Lori~~ Minnick, 575-524-5119
- [ ] Other _____, 575-524-_____

Send sample receipt confirmation and analytical reports to:

- [x] Stephanie Portillo, stephanie.portillo@nasa.gov
- [ ] Other
- [ ] Other

Special Instructions

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

Return Address:

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

Sample Number	Sample Location	# of Containers	Sample Matrix*	Analytical Requirements: Method 353.2 Analyte NO2/NO3						Charge Number (WSTF Use Only)	Comments
240815083OA	300-002-GSV	1	A	X						XGMD	

Relinquished By:	Date/Time:	Accepted By:	Date/Time:
[signature]	8-15-24 1100 HRS	[signature]	8/16/24 745

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

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NASA/WSTF/Navarro
White Sands Test Facility

(6)

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NASA/WSTF/Navarro
White Sands Test Facility

Cooler Receipt and Preservation Check Form

Project/Client NASA Folder Number

Cooler received on 8/16/24 by: SES

COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	Y N	5a	Did **VOA** vials have sig* **bubbles?**			Y N NA	
2	**Custody papers** properly completed (ink, signed)?	Y N	5b	Sig* bubbles: **Alk?**	Y N NA	**Sulfide?**	Y N NA	
3	Did all bottles arrive in good **condition** (unbroken)?	Y N	6	Where did the bottles originate?		ALS/ROC	CLIENT	
4	Circle: **Wet Ice** **Dry Ice** **Gel packs** present?	Y N	7	Soil VOA received as:	Bulk	Encore	5035set	NA

8. Temperature Readings Date: 8/16/24 Time: 817 ID: IR#12 (R#1) From: Temp Blank Sample Bottle

Temp (°C)	3.6						
Within 0-6°C?	Y N	Y N	Y N	Y N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: Ice melted Poorly Packed (described below) Same Day Rule

&Client Approval to Run Samples: Standing Approval Client aware at drop-off Client notified by:

All samples held in storage location: SMO by SES on 8/16/24 at 818
5035 samples placed in storage location: by on at within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check**: Date: 8/16/24 Time: 1558 by: SES

9. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? YES NO
10. Did all bottle labels and tags agree with custody papers? YES NO
11. Were correct containers used for the tests indicated? YES NO
12. Were 5035 vials acceptable (no extra labels, not leaking)? YES NO N/A
13. Were dissolved metals filtered in the field? YES NO N/A
14. Air Samples: Cassettes / Tubes Intact Y / N with MS Y / N Canisters Pressurized Tedlar® Bags Inflated N/A

pH	Lot of test paper	Reagent	Preserved? Yes	Preserved? No	Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
≥12		NaOH								
≤2	221523	HNO_3	✓		client label →					
≤2	↓	H_2SO_4	✓		client label →					
<4		$NaHSO_4$								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol, 625, 608pest, 522			If +, contact PM to add $Na_2S_2O_3$ (625, 608, CN), ascorbic (phenol).					
		$Na_2S_2O_3$								
		ZnAcetate	-	-						
		HCl	**	**						

**VOAs and 1664 Not to be tested before analysis. Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).

Bottle lot numbers:
Explain all Discrepancies/ Other Comments:

5a) see COC

HPROD	BULK
HTR	FLDT
SUB	HGFB
ALS	LL3541

Labels secondary reviewed by: SES *significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

Miscellaneous Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

REPORT QUALIFIERS AND DEFINITIONS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
E	Organics- Concentration has exceeded the calibration range for that specific analysis.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.
H	Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.
#	Spike was diluted out.
+	Correlation coefficient for MSA is <0.995.
N	Inorganics- Matrix spike recovery was outside laboratory limits.
N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
S	Concentration has been determined using Method of Standard Additions (MSA).
W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
P	Concentration >40% difference between the two GC columns.
C	Confirmed by GC/MS
Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).
X	See Case Narrative for discussion.
MRL LOQ	Method Reporting Limit. Also known as: Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
MDL	Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
LOD	Limit of Detection. A value at or above the MDL which has been verified to be detectable.
ND	Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

Rochester Lab ID # for State Accreditations[1]

NELAP States
Florida ID # E87674
New Hampshire ID # 2941
New York ID # 10145
Pennsylvania ID# 68-786
Texas ID#T104704581
Virginia #460167

Non-NELAP States
Connecticut ID #PH0556
Delaware Approved
Maine ID #NY01587
North Carolina #36701
North Carolina #676
Rhode Island LAO00333

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory. To verify NH accredited analytes, go to https://www4.des.state.nh.us/CertifiedLabs/Certified-Method.aspx.

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility/24EC008B

Non-Certified Analytes

Certifying Agency: New York Department of Health

Method	Matrix	Analyte
8270E	Water	1-Methylnaphthalene
8270E	Water	2,3,4,6-Tetrachlorophenol
8270E	Water	3- and 4-Methylphenol Coelution
8270E	Water	Hexachlorophene
8270E	Water	Pentachloroethane
8270E	Water	Pyridine

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility/24EC008B

Sample Name: 2408140833A 300-001-GSV **Date Collected:** 08/14/24
Lab Code: R2407792-001 **Date Received:** 08/16/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8270E	JVANHEYNINGEN	AMOSES

Sample Name: 2408140833A 300-001-GSV **Date Collected:** 08/14/24
Lab Code: R2407792-002 **Date Received:** 08/16/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8270E	JVANHEYNINGEN	EDEGRAY

Sample Name: 2408140834A 300-001-GSV **Date Collected:** 08/14/24
Lab Code: R2407792-003 **Date Received:** 08/16/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
6010D	CDISTEFANO	NMANSEN
6020B	CDISTEFANO	NMANSEN
7470A	ECASTROVINCI	ECASTROVINCI

Sample Name: 2408140835A 300-001-GSV **Date Collected:** 08/14/24
Lab Code: R2407792-004 **Date Received:** 08/16/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KAWONG
SM 2320 B-1997(2011)		KAWONG

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility/24EC008B

Sample Name: 2408140836A 300-001-GSV **Date Collected:** 08/14/24
Lab Code: R2407792-005 **Date Received:** 08/16/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
SM 2540 C-2015		HCASTROVINCI

Sample Name: 2408140838A 300-001-GSV **Date Collected:** 08/14/24
Lab Code: R2407792-007 **Date Received:** 08/16/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
353.2		GNITAJOUPPI

Sample Name: 2408140940X WB-5-345 **Date Collected:** 08/14/24
Lab Code: R2407792-008 **Date Received:** 08/16/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
6010D	CDISTEFANO	NMANSEN
6020B	CDISTEFANO	NMANSEN
7470A	ECASTROVINCI	ECASTROVINCI

Sample Name: 2408150825A 300-002-GSV **Date Collected:** 08/14/24
Lab Code: R2407792-009 **Date Received:** 08/16/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8270E	JVANHEYNINGEN	AMOSES

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility/24EC008B

Sample Name: 2408150825A 300-002-GSV **Date Collected:** 08/15/24
Lab Code: R2407792-010 **Date Received:** 08/16/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8270E	JVANHEYNINGEN	EDEGRAY

Sample Name: 2408150826A 300-002-GSV **Date Collected:** 08/15/24
Lab Code: R2407792-011 **Date Received:** 08/16/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
6010D	CDISTEFANO	NMANSEN
6020B	CDISTEFANO	NMANSEN
7470A	ECASTROVINCI	ECASTROVINCI

Sample Name: 2408150827A 300-002-GSV **Date Collected:** 08/15/24
Lab Code: R2407792-012 **Date Received:** 08/16/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KAWONG
SM 2320 B-1997(2011)		KAWONG

Sample Name: 2408150828A 300-002-GSV **Date Collected:** 08/15/24
Lab Code: R2407792-013 **Date Received:** 08/16/24
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
SM 2540 C-2015		HCASTROVINCI

Analyst Summary report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B		

Sample Name:	2408150830A 300-002-GSV	**Date Collected:**	08/15/24
Lab Code:	R2407792-015	**Date Received:**	08/16/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
353.2		GNITAJOUPPI

PREPARATION METHODS

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

INORGANIC

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C or 6010D	3005A/3010A
6020A or 6020B	ILM05.3
9034 Sulfide Acid Soluble	9030B
SM 4500-CN-N-2016 Amenable and Residual Cyanide	SM 4500-CN-G and SM 4500-CN-B,C-2016
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C or 6010D	3050B
6020A or 6020B	3050B
6010C or 6010D TCLP (1311) extract	3005A/3010A
6010C or 6010D SPLP (1312) extract	3005A/3010A
7199	3060A
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction
For analytical methods not listed, the preparation method is the same as the analytical method reference.	

ORGANIC

Preparation Methods for Organic methods are listed in the header of the Results pages.

Regarding "Bulk/5035A":
For soil/solid samples submitted in soil jars for Volatiles analysis, the prep method is listed as "Bulk/5035A". The lab follows the closed-system EPA 5035A protocols once the sample is transferred to a sealed vial, but collection in bulk in soil jars does not follow the collection protocols listed in EPA 5035A. In accordance with the NYSDOH technical notice of October 2012, all results or reporting limits <200 ug/kg are to be considered estimated due to potential low bias.

Sample Results

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Semivolatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140833A 300-001-GSV	**Units:**	ug/L
Lab Code:	R2407792-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	ND U	10	1.2	1	08/22/24 17:45	8/19/24	
1,2,4-Trichlorobenzene	ND U	10	1.2	1	08/22/24 17:45	8/19/24	
1,2-Dichlorobenzene	ND U	10	1.2	1	08/22/24 17:45	8/19/24	
1,2-Diphenylhydrazine	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
1,3,5-Trinitrobenzene	ND U	10	4.4	1	08/22/24 17:45	8/19/24	
1,3-Dichlorobenzene	ND U	10	1.1	1	08/22/24 17:45	8/19/24	
1,3-Dinitrobenzene	ND U	10	1.8	1	08/22/24 17:45	8/19/24	
1,4-Dichlorobenzene	ND U	10	1.2	1	08/22/24 17:45	8/19/24	
1,4-Naphthoquinone	ND U	50	3.6	1	08/22/24 17:45	8/19/24	
1-Methylnaphthalene	ND U	10	1.5	1	08/22/24 17:45	8/19/24	
1-Naphthylamine	ND U	10	5.2	1	08/22/24 17:45	8/19/24	
2,3,4,6-Tetrachlorophenol	ND U	10	2.7	1	08/22/24 17:45	8/19/24	
2,4,5-Trichlorophenol	ND U	10	1.1	1	08/22/24 17:45	8/19/24	
2,4,6-Trichlorophenol	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
2,4-Dichlorophenol	ND U	10	1.3	1	08/22/24 17:45	8/19/24	
2,4-Dimethylphenol	ND U	10	4.3	1	08/22/24 17:45	8/19/24	
2,4-Dinitrophenol	ND U	50	20	1	08/22/24 17:45	8/19/24	
2,4-Dinitrotoluene	ND U	10	2.4	1	08/22/24 17:45	8/19/24	
2,6-Dichlorophenol	ND U	10	1.2	1	08/22/24 17:45	8/19/24	
2,6-Dinitrotoluene	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
2-Acetylaminofluorene	ND U	10	4.1	1	08/22/24 17:45	8/19/24	
2-Chloronaphthalene	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
2-Chlorophenol	ND U	10	1.1	1	08/22/24 17:45	8/19/24	
5-Nitro-o-toluidine	ND U	10	1.9	1	08/22/24 17:45	8/19/24	
2-Methylnaphthalene	ND U	10	1.3	1	08/22/24 17:45	8/19/24	
2-Methylphenol	ND U	10	1.0	1	08/22/24 17:45	8/19/24	
2-Naphthylamine	ND U	10	3.6	1	08/22/24 17:45	8/19/24	
2-Nitroaniline	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
2-Nitrophenol	ND U	10	1.5	1	08/22/24 17:45	8/19/24	
2-Picoline	ND U	50	13	1	08/22/24 17:45	8/19/24	
3,3'-Dichlorobenzidine	ND U	10	2.7	1	08/22/24 17:45	8/19/24	
3,3'-Dimethylbenzidine	ND U	50	18	1	08/22/24 17:45	8/19/24	
3- and 4-Methylphenol Coelution	ND U	10	1.2	1	08/22/24 17:45	8/19/24	
3-Methylcholanthrene	ND U	10	1.5	1	08/22/24 17:45	8/19/24	
3-Nitroaniline	ND U	10	2.8	1	08/22/24 17:45	8/19/24	
4,6-Dinitro-2-methylphenol	ND U	50	8.7	1	08/22/24 17:45	8/19/24	
4-Aminobiphenyl	ND U	10	2.7	1	08/22/24 17:45	8/19/24	
4-Bromophenyl Phenyl Ether	ND U	10	1.7	1	08/22/24 17:45	8/19/24	
4-Chloro-3-methylphenol	ND U	10	1.1	1	08/22/24 17:45	8/19/24	
4-Chloroaniline	ND U	10	2.6	1	08/22/24 17:45	8/19/24	
4-Chlorophenyl Phenyl Ether	ND U	10	1.5	1	08/22/24 17:45	8/19/24	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140833A 300-001-GSV	**Units:**	ug/L
Lab Code:	R2407792-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4-Nitroaniline	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
4-Nitrophenol	ND U	50	6.4	1	08/22/24 17:45	8/19/24	
4-Nitroquinoline N-Oxide	ND U	50	17	1	08/22/24 17:45	8/19/24	
7,12-Dimethylbenz(a)anthracene	ND U	50	16	1	08/22/24 17:45	8/19/24	
Acenaphthene	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
Acenaphthylene	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
Acetophenone	ND U	10	1.3	1	08/22/24 17:45	8/19/24	
Aniline	ND U	10	3.1	1	08/22/24 17:45	8/19/24	
Anthracene	ND U	10	1.3	1	08/22/24 17:45	8/19/24	
Aramite, Total	ND U	10	5.2	1	08/22/24 17:45	8/19/24	
Benzidine	ND U	100	100	1	08/22/24 17:45	8/19/24	
Benzo(g,h,i)perylene	ND U	10	2.1	1	08/22/24 17:45	8/19/24	
Benzyl Alcohol	ND U	10	1.6	1	08/22/24 17:45	8/19/24	
2,2'-Oxybis(1-chloropropane)	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
Bis(2-chloroethoxy)methane	ND U	10	1.9	1	08/22/24 17:45	8/19/24	
Bis(2-chloroethyl) Ether	ND U	10	1.3	1	08/22/24 17:45	8/19/24	
Bis(2-ethylhexyl) Phthalate	ND U	10	4.3	1	08/22/24 17:45	8/19/24	
Butyl Benzyl Phthalate	ND U	10	2.9	1	08/22/24 17:45	8/19/24	
Chlorobenzilate	ND U	10	3.4	1	08/22/24 17:45	8/19/24	
Di-n-butyl Phthalate	ND U	10	1.7	1	08/22/24 17:45	8/19/24	
Di-n-octyl Phthalate	ND U	10	3.3	1	08/22/24 17:45	8/19/24	
Diallate	ND U	10	2.0	1	08/22/24 17:45	8/19/24	
Dibenzofuran	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
Diethyl Phthalate	ND U	10	1.1	1	08/22/24 17:45	8/19/24	
Dimethoate	ND U	10	1.8	1	08/22/24 17:45	8/19/24	
Dimethyl Phthalate	ND U	10	1.3	1	08/22/24 17:45	8/19/24	
Disulfoton	ND U	10	3.0	1	08/22/24 17:45	8/19/24	
Ethyl Methanesulfonate	ND U	10	1.1	1	08/22/24 17:45	8/19/24	
Fluoranthene	ND U	10	1.5	1	08/22/24 17:45	8/19/24	
Fluorene	ND U	10	1.3	1	08/22/24 17:45	8/19/24	
Hexachlorobutadiene	ND U	10	2.2	1	08/22/24 17:45	8/19/24	
Hexachlorocyclopentadiene	ND U	10	2.2	1	08/22/24 17:45	8/19/24	
Hexachloroethane	ND U	10	1.1	1	08/22/24 17:45	8/19/24	
Hexachlorophene	ND U	500	-	1	08/22/24 17:45	8/19/24	
Hexachloropropene	ND U	10	1.0	1	08/22/24 17:45	8/19/24	
Isodrin	ND U	10	1.5	1	08/22/24 17:45	8/19/24	
Isophorone	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
Isosafrole	ND U	10	1.7	1	08/22/24 17:45	8/19/24	
Methapyrilene	ND U	50	44	1	08/22/24 17:45	8/19/24	
Methyl Methanesulfonate	ND U	10	2.4	1	08/22/24 17:45	8/19/24	
Methyl Parathion	ND U	10	3.5	1	08/22/24 17:45	8/19/24	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140833A 300-001-GSV	**Units:**	ug/L
Lab Code:	R2407792-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
N-Nitrosodi-n-propylamine	ND	U	10	1.2	1	08/22/24 17:45	8/19/24	
N-Nitrosodiethylamine	ND	U	10	1.4	1	08/22/24 17:45	8/19/24	
N-Nitrosodimethylamine	**29**		10	1.0	1	08/22/24 17:45	8/19/24	
N-Nitrosodiphenylamine	ND	U	10	6.3	1	08/22/24 17:45	8/19/24	
N-Nitrosomethylethylamine	ND	U	10	2.6	1	08/22/24 17:45	8/19/24	
N-Nitrosomorpholine	ND	U	10	1.4	1	08/22/24 17:45	8/19/24	
N-Nitrosopiperidine	ND	U	10	1.4	1	08/22/24 17:45	8/19/24	
N-Nitrosopyrrolidine	ND	U	10	1.0	1	08/22/24 17:45	8/19/24	
Naphthalene	ND	U	10	1.2	1	08/22/24 17:45	8/19/24	
Nitrobenzene	ND	U	10	1.5	1	08/22/24 17:45	8/19/24	
O,O,O-Triethyl Phosphorothioate	ND	U	10	1.4	1	08/22/24 17:45	8/19/24	
Ethyl Parathion	ND	U	10	3.5	1	08/22/24 17:45	8/19/24	
Pentachlorobenzene	ND	U	10	1.4	1	08/22/24 17:45	8/19/24	
Pentachloroethane	ND	U	10	1.2	1	08/22/24 17:45	8/19/24	
Pentachloronitrobenzene (PCNB)	ND	U	10	1.5	1	08/22/24 17:45	8/19/24	
Phenacetin	ND	U	10	1.5	1	08/22/24 17:45	8/19/24	
Phenanthrene	ND	U	10	1.4	1	08/22/24 17:45	8/19/24	
Phenol	ND	U	10	1.0	1	08/22/24 17:45	8/19/24	
Phorate	ND	U	10	1.4	1	08/22/24 17:45	8/19/24	
Pronamide	ND	U	10	1.8	1	08/22/24 17:45	8/19/24	
Pyrene	ND	U	10	1.5	1	08/22/24 17:45	8/19/24	
Pyridine	ND	U	10	1.0	1	08/22/24 17:45	8/19/24	
Safrole	ND	U	10	1.3	1	08/22/24 17:45	8/19/24	
Sulfotep	ND	U	10	1.3	1	08/22/24 17:45	8/19/24	
Thionazin	ND	U	10	1.6	1	08/22/24 17:45	8/19/24	
o-Toluidine	ND	U	10	3.0	1	08/22/24 17:45	8/19/24	
p-Dimethylaminoazobenzene	ND	U	10	3.2	1	08/22/24 17:45	8/19/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	100	31 - 133	08/22/24 17:45	
2-Fluorobiphenyl	73	25 - 99	08/22/24 17:45	
2-Fluorophenol	52	15 - 72	08/22/24 17:45	
Nitrobenzene-d5	73	22 - 104	08/22/24 17:45	
Phenol-d6	37	10 - 55	08/22/24 17:45	
p-Terphenyl-d14	71	10 - 143	08/22/24 17:45	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	unknown	2.25	4.6	J

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140833A 300-001-GSV	**Units:**	ug/L
Lab Code:	R2407792-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
006086-21-1	1-Methyl-1H-1,2,4-triazole	3.17	39	JN
	unknown	3.35	36	J
000079-34-5	Ethane, 1,1,2,2-tetrachloro-	3.85	17	JN
	unknown	4.99	4.4	J

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150825A 300-002-GSV	**Units:**	ug/L
Lab Code:	R2407792-009	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
1,2,4-Trichlorobenzene	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
1,2-Dichlorobenzene	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
1,2-Diphenylhydrazine	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
1,3,5-Trinitrobenzene	ND U	10	4.4	1	08/22/24 18:09	8/19/24	
1,3-Dichlorobenzene	ND U	10	1.1	1	08/22/24 18:09	8/19/24	
1,3-Dinitrobenzene	ND U	10	1.8	1	08/22/24 18:09	8/19/24	
1,4-Dichlorobenzene	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
1,4-Naphthoquinone	ND U	50	3.6	1	08/22/24 18:09	8/19/24	
1-Methylnaphthalene	ND U	10	1.5	1	08/22/24 18:09	8/19/24	
1-Naphthylamine	ND U	10	5.2	1	08/22/24 18:09	8/19/24	
2,3,4,6-Tetrachlorophenol	ND U	10	2.7	1	08/22/24 18:09	8/19/24	
2,4,5-Trichlorophenol	ND U	10	1.1	1	08/22/24 18:09	8/19/24	
2,4,6-Trichlorophenol	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
2,4-Dichlorophenol	ND U	10	1.3	1	08/22/24 18:09	8/19/24	
2,4-Dimethylphenol	ND U	10	4.3	1	08/22/24 18:09	8/19/24	
2,4-Dinitrophenol	ND U	50	20	1	08/22/24 18:09	8/19/24	
2,4-Dinitrotoluene	ND U	10	2.4	1	08/22/24 18:09	8/19/24	
2,6-Dichlorophenol	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
2,6-Dinitrotoluene	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
2-Acetylaminofluorene	ND U	10	4.1	1	08/22/24 18:09	8/19/24	
2-Chloronaphthalene	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
2-Chlorophenol	ND U	10	1.1	1	08/22/24 18:09	8/19/24	
5-Nitro-o-toluidine	ND U	10	1.9	1	08/22/24 18:09	8/19/24	
2-Methylnaphthalene	ND U	10	1.3	1	08/22/24 18:09	8/19/24	
2-Methylphenol	ND U	10	1.0	1	08/22/24 18:09	8/19/24	
2-Naphthylamine	ND U	10	3.6	1	08/22/24 18:09	8/19/24	
2-Nitroaniline	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
2-Nitrophenol	ND U	10	1.5	1	08/22/24 18:09	8/19/24	
2-Picoline	ND U	50	13	1	08/22/24 18:09	8/19/24	
3,3'-Dichlorobenzidine	ND U	10	2.7	1	08/22/24 18:09	8/19/24	
3,3'-Dimethylbenzidine	ND U	50	18	1	08/22/24 18:09	8/19/24	
3- and 4-Methylphenol Coelution	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
3-Methylcholanthrene	ND U	10	1.5	1	08/22/24 18:09	8/19/24	
3-Nitroaniline	ND U	10	2.8	1	08/22/24 18:09	8/19/24	
4,6-Dinitro-2-methylphenol	ND U	50	8.7	1	08/22/24 18:09	8/19/24	
4-Aminobiphenyl	ND U	10	2.7	1	08/22/24 18:09	8/19/24	
4-Bromophenyl Phenyl Ether	ND U	10	1.7	1	08/22/24 18:09	8/19/24	
4-Chloro-3-methylphenol	ND U	10	1.1	1	08/22/24 18:09	8/19/24	
4-Chloroaniline	ND U	10	2.6	1	08/22/24 18:09	8/19/24	
4-Chlorophenyl Phenyl Ether	ND U	10	1.5	1	08/22/24 18:09	8/19/24	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150825A 300-002-GSV	**Units:**	ug/L
Lab Code:	R2407792-009	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4-Nitroaniline	ND	U	10	1.4	1	08/22/24 18:09	8/19/24	
4-Nitrophenol	ND	U	50	6.4	1	08/22/24 18:09	8/19/24	
4-Nitroquinoline N-Oxide	ND	U	50	17	1	08/22/24 18:09	8/19/24	
7,12-Dimethylbenz(a)anthracene	ND	U	50	16	1	08/22/24 18:09	8/19/24	
Acenaphthene	ND	U	10	1.4	1	08/22/24 18:09	8/19/24	
Acenaphthylene	ND	U	10	1.4	1	08/22/24 18:09	8/19/24	
Acetophenone	ND	U	10	1.3	1	08/22/24 18:09	8/19/24	
Aniline	ND	U	10	3.1	1	08/22/24 18:09	8/19/24	
Anthracene	ND	U	10	1.3	1	08/22/24 18:09	8/19/24	
Aramite, Total	ND	U	10	5.2	1	08/22/24 18:09	8/19/24	
Benzidine	ND	U	100	100	1	08/22/24 18:09	8/19/24	
Benzo(g,h,i)perylene	ND	U	10	2.1	1	08/22/24 18:09	8/19/24	
Benzyl Alcohol	ND	U	10	1.6	1	08/22/24 18:09	8/19/24	
2,2'-Oxybis(1-chloropropane)	ND	U	10	1.4	1	08/22/24 18:09	8/19/24	
Bis(2-chloroethoxy)methane	ND	U	10	1.9	1	08/22/24 18:09	8/19/24	
Bis(2-chloroethyl) Ether	ND	U	10	1.3	1	08/22/24 18:09	8/19/24	
Bis(2-ethylhexyl) Phthalate	**22**		10	4.3	1	08/22/24 18:09	8/19/24	
Butyl Benzyl Phthalate	ND	U	10	2.9	1	08/22/24 18:09	8/19/24	
Chlorobenzilate	ND	U	10	3.4	1	08/22/24 18:09	8/19/24	
Di-n-butyl Phthalate	ND	U	10	1.7	1	08/22/24 18:09	8/19/24	
Di-n-octyl Phthalate	ND	U	10	3.3	1	08/22/24 18:09	8/19/24	
Diallate	ND	U	10	2.0	1	08/22/24 18:09	8/19/24	
Dibenzofuran	ND	U	10	1.4	1	08/22/24 18:09	8/19/24	
Diethyl Phthalate	ND	U	10	1.1	1	08/22/24 18:09	8/19/24	
Dimethoate	ND	U	10	1.8	1	08/22/24 18:09	8/19/24	
Dimethyl Phthalate	ND	U	10	1.3	1	08/22/24 18:09	8/19/24	
Disulfoton	ND	U	10	3.0	1	08/22/24 18:09	8/19/24	
Ethyl Methanesulfonate	ND	U	10	1.1	1	08/22/24 18:09	8/19/24	
Fluoranthene	ND	U	10	1.5	1	08/22/24 18:09	8/19/24	
Fluorene	ND	U	10	1.3	1	08/22/24 18:09	8/19/24	
Hexachlorobutadiene	ND	U	10	2.2	1	08/22/24 18:09	8/19/24	
Hexachlorocyclopentadiene	ND	U	10	2.2	1	08/22/24 18:09	8/19/24	
Hexachloroethane	ND	U	10	1.1	1	08/22/24 18:09	8/19/24	
Hexachlorophene	ND	U	500	-	1	08/22/24 18:09	8/19/24	
Hexachloropropene	ND	U	10	1.0	1	08/22/24 18:09	8/19/24	
Isodrin	ND	U	10	1.5	1	08/22/24 18:09	8/19/24	
Isophorone	ND	U	10	1.4	1	08/22/24 18:09	8/19/24	
Isosafrole	ND	U	10	1.7	1	08/22/24 18:09	8/19/24	
Methapyrilene	ND	U	50	44	1	08/22/24 18:09	8/19/24	
Methyl Methanesulfonate	ND	U	10	2.4	1	08/22/24 18:09	8/19/24	
Methyl Parathion	ND	U	10	3.5	1	08/22/24 18:09	8/19/24	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150825A 300-002-GSV	**Units:**	ug/L
Lab Code:	R2407792-009	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
N-Nitrosodi-n-propylamine	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
N-Nitrosodiethylamine	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
N-Nitrosodimethylamine	ND U	10	1.0	1	08/22/24 18:09	8/19/24	
N-Nitrosodiphenylamine	ND U	10	6.3	1	08/22/24 18:09	8/19/24	
N-Nitrosomethylethylamine	ND U	10	2.6	1	08/22/24 18:09	8/19/24	
N-Nitrosomorpholine	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
N-Nitrosopiperidine	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
N-Nitrosopyrrolidine	ND U	10	1.0	1	08/22/24 18:09	8/19/24	
Naphthalene	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
Nitrobenzene	ND U	10	1.5	1	08/22/24 18:09	8/19/24	
O,O,O-Triethyl Phosphorothioate	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
Ethyl Parathion	ND U	10	3.5	1	08/22/24 18:09	8/19/24	
Pentachlorobenzene	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
Pentachloroethane	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
Pentachloronitrobenzene (PCNB)	ND U	10	1.5	1	08/22/24 18:09	8/19/24	
Phenacetin	ND U	10	1.5	1	08/22/24 18:09	8/19/24	
Phenanthrene	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
Phenol	ND U	10	1.0	1	08/22/24 18:09	8/19/24	
Phorate	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
Pronamide	ND U	10	1.8	1	08/22/24 18:09	8/19/24	
Pyrene	ND U	10	1.5	1	08/22/24 18:09	8/19/24	
Pyridine	ND U	10	1.0	1	08/22/24 18:09	8/19/24	
Safrole	ND U	10	1.3	1	08/22/24 18:09	8/19/24	
Sulfotep	ND U	10	1.3	1	08/22/24 18:09	8/19/24	
Thionazin	ND U	10	1.6	1	08/22/24 18:09	8/19/24	
o-Toluidine	ND U	10	3.0	1	08/22/24 18:09	8/19/24	
p-Dimethylaminoazobenzene	ND U	10	3.2	1	08/22/24 18:09	8/19/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	104	31 - 133	08/22/24 18:09	
2-Fluorobiphenyl	75	25 - 99	08/22/24 18:09	
2-Fluorophenol	53	15 - 72	08/22/24 18:09	
Nitrobenzene-d5	72	22 - 104	08/22/24 18:09	
Phenol-d6	37	10 - 55	08/22/24 18:09	
p-Terphenyl-d14	69	10 - 143	08/22/24 18:09	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150825A 300-002-GSV	**Units:**	ug/L
Lab Code:	R2407792-009	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140833A 300-001-GSV	**Units:**	ug/L
Lab Code:	R2407792-002	**Basis:**	NA

Low Level Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Acenaphthylene	ND U	0.20	0.093	1	08/23/24 20:58	8/21/24	
Benz(a)anthracene	ND U	0.20	0.070	1	08/23/24 20:58	8/21/24	
Benzo(a)pyrene	ND U	0.20	0.073	1	08/23/24 20:58	8/21/24	
Benzo(b)fluoranthene	ND U	0.20	0.068	1	08/23/24 20:58	8/21/24	
Benzo(k)fluoranthene	ND U	0.20	0.069	1	08/23/24 20:58	8/21/24	
Chrysene	ND U	0.20	0.080	1	08/23/24 20:58	8/21/24	
Dibenz(a,h)anthracene	ND U	0.20	0.090	1	08/23/24 20:58	8/21/24	
Hexachlorobenzene	ND U	0.20	0.13	1	08/23/24 20:58	8/21/24	
Indeno(1,2,3-cd)pyrene	ND U	0.20	0.070	1	08/23/24 20:58	8/21/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	86	27 - 133	08/23/24 20:58	
Nitrobenzene-d5	81	31 - 167	08/23/24 20:58	
p-Terphenyl-d14	90	25 - 151	08/23/24 20:58	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150825A 300-002-GSV	**Units:**	ug/L
Lab Code:	R2407792-010	**Basis:**	NA

Low Level Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Acenaphthylene	ND U	0.20	0.093	1	08/23/24 21:26	8/21/24	
Benz(a)anthracene	ND U	0.20	0.070	1	08/23/24 21:26	8/21/24	
Benzo(a)pyrene	ND U	0.20	0.073	1	08/23/24 21:26	8/21/24	
Benzo(b)fluoranthene	ND U	0.20	0.068	1	08/23/24 21:26	8/21/24	
Benzo(k)fluoranthene	ND U	0.20	0.069	1	08/23/24 21:26	8/21/24	
Chrysene	ND U	0.20	0.080	1	08/23/24 21:26	8/21/24	
Dibenz(a,h)anthracene	ND U	0.20	0.090	1	08/23/24 21:26	8/21/24	
Hexachlorobenzene	ND U	0.20	0.13	1	08/23/24 21:26	8/21/24	
Indeno(1,2,3-cd)pyrene	ND U	0.20	0.070	1	08/23/24 21:26	8/21/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	79	27 - 133	08/23/24 21:26	
Nitrobenzene-d5	71	31 - 167	08/23/24 21:26	
p-Terphenyl-d14	84	25 - 151	08/23/24 21:26	

Metals

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Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	8/14/24
Sample Matrix:	Water	**Date Received:**	8/16/24
Sample Name:	2408140834A 300-001-GSV		
Lab Code:	R2407792-003	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Aluminum, Total	6010D	**0.11**		mg/L	0.10	0.03	1	8/20/24	8/21/24 22:49	
Antimony, Total	6020B	**0.0003**	J	mg/L	0.0010	0.0002	1	8/22/24	8/27/24 13:56	
Arsenic, Total	6020B	**0.0010**		mg/L	0.0010	0.0004	1	8/22/24	8/27/24 13:56	
Barium, Total	6010D	**0.038**		mg/L	0.020	0.003	1	8/20/24	8/21/24 22:49	
Beryllium, Total	6010D	ND	U	mg/L	0.0030	0.0002	1	8/20/24	8/21/24 22:49	
Boron, Total	6010D	**0.29**		mg/L	0.20	0.02	1	8/20/24	8/21/24 22:49	
Cadmium, Total	6010D	ND	U	mg/L	0.0050	0.0004	1	8/20/24	8/21/24 22:49	
Calcium, Total	6010D	**120**		mg/L	1.0	0.3	1	8/20/24	8/21/24 22:49	
Chromium, Total	6010D	ND	U	mg/L	0.010	0.002	1	8/20/24	8/21/24 22:49	
Cobalt, Total	6010D	ND	U	mg/L	0.050	0.0009	1	8/20/24	8/21/24 22:49	
Copper, Total	6010D	ND	U	mg/L	0.020	0.004	1	8/20/24	8/21/24 22:49	
Iron, Total	6010D	**0.27**		mg/L	0.10	0.07	1	8/20/24	8/21/24 22:49	
Lead, Total	6010D	ND	U	mg/L	0.050	0.004	1	8/20/24	8/21/24 22:49	
Magnesium, Total	6010D	**84.3**		mg/L	1.0	0.03	1	8/20/24	8/21/24 22:49	
Manganese, Total	6010D	**0.158**		mg/L	0.010	0.004	1	8/20/24	8/21/24 22:49	
Mercury, Total	7470A	ND	U	mg/L	0.00020	0.00008	1	8/21/24	8/22/24 09:54	
Molybdenum, Total	6010D	**0.008**	J	mg/L	0.025	0.003	1	8/20/24	8/21/24 22:49	
Nickel, Total	6010D	**0.035**	J	mg/L	0.040	0.003	1	8/20/24	8/21/24 22:49	
Potassium, Total	6010D	**4.3**		mg/L	2.0	0.4	1	8/20/24	8/21/24 22:49	
Selenium, Total	6010D	ND	U	mg/L	0.010	0.007	1	8/20/24	8/21/24 22:49	
Silver, Total	6010D	ND	U	mg/L	0.010	0.0006	1	8/20/24	8/21/24 22:49	
Sodium, Total	6010D	**152**		mg/L	1.0	0.3	1	8/20/24	8/21/24 22:49	
Strontium, Total	6010D	**2.30**		mg/L	0.10	0.002	1	8/20/24	8/21/24 22:49	
Thallium, Total	6020B	**0.0002**	J	mg/L	0.0010	0.00004	1	8/22/24	8/27/24 13:56	
Tin, Total	6010D	ND	U	mg/L	0.50	0.008	1	8/20/24	8/21/24 22:49	
Vanadium, Total	6010D	**0.003**	J	mg/L	0.050	0.0007	1	8/20/24	8/21/24 22:49	
Zinc, Total	6010D	**0.022**		mg/L	0.020	0.003	1	8/20/24	8/21/24 22:49	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	8/14/24
Sample Matrix:	Water	**Date Received:**	8/16/24
Sample Name:	2408140940X WB-5-345		
Lab Code:	R2407792-008	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Aluminum, Total	6010D	ND	U	mg/L	0.10	0.03	1	8/20/24	8/21/24 22:52	
Antimony, Total	6020B	ND	U	mg/L	0.0010	0.0002	1	8/22/24	8/27/24 13:58	
Arsenic, Total	6020B	**0.0005**	J	mg/L	0.0010	0.0004	1	8/22/24	8/27/24 13:58	
Barium, Total	6010D	**0.024**		mg/L	0.020	0.003	1	8/20/24	8/21/24 22:52	
Beryllium, Total	6010D	ND	U	mg/L	0.0030	0.0002	1	8/20/24	8/21/24 22:52	
Boron, Total	6010D	**0.12**	J	mg/L	0.20	0.02	1	8/20/24	8/21/24 22:52	
Cadmium, Total	6010D	ND	U	mg/L	0.0050	0.0004	1	8/20/24	8/21/24 22:52	
Calcium, Total	6010D	**122**		mg/L	1.0	0.3	1	8/20/24	8/21/24 22:52	
Chromium, Total	6010D	**0.002**	J	mg/L	0.010	0.002	1	8/20/24	8/21/24 22:52	
Cobalt, Total	6010D	ND	U	mg/L	0.050	0.0009	1	8/20/24	8/21/24 22:52	
Copper, Total	6010D	ND	U	mg/L	0.020	0.004	1	8/20/24	8/21/24 22:52	
Iron, Total	6010D	**0.23**		mg/L	0.10	0.07	1	8/20/24	8/21/24 22:52	
Lead, Total	6010D	ND	U	mg/L	0.050	0.004	1	8/20/24	8/21/24 22:52	
Magnesium, Total	6010D	**76.5**		mg/L	1.0	0.03	1	8/20/24	8/21/24 22:52	
Manganese, Total	6010D	**0.010**	J	mg/L	0.010	0.004	1	8/20/24	8/21/24 22:52	
Mercury, Total	7470A	ND	U	mg/L	0.00020	0.00008	1	8/21/24	8/22/24 10:07	
Molybdenum, Total	6010D	ND	U	mg/L	0.025	0.003	1	8/20/24	8/21/24 22:52	
Nickel, Total	6010D	**0.023**	J	mg/L	0.040	0.003	1	8/20/24	8/21/24 22:52	
Potassium, Total	6010D	**3.4**		mg/L	2.0	0.4	1	8/20/24	8/21/24 22:52	
Selenium, Total	6010D	ND	U	mg/L	0.010	0.007	1	8/20/24	8/21/24 22:52	
Silver, Total	6010D	ND	U	mg/L	0.010	0.0006	1	8/20/24	8/21/24 22:52	
Sodium, Total	6010D	**48.5**		mg/L	1.0	0.3	1	8/20/24	8/21/24 22:52	
Strontium, Total	6010D	**12.9**		mg/L	1.0	0.02	10	8/20/24	8/23/24 09:56	
Thallium, Total	6020B	ND	U	mg/L	0.0010	0.00004	1	8/22/24	8/27/24 13:58	
Tin, Total	6010D	ND	U	mg/L	0.50	0.008	1	8/20/24	8/21/24 22:52	
Vanadium, Total	6010D	**0.0007**	J	mg/L	0.050	0.0007	1	8/20/24	8/21/24 22:52	
Zinc, Total	6010D	**0.022**		mg/L	0.020	0.003	1	8/20/24	8/21/24 22:52	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	8/15/24
Sample Matrix:	Water	**Date Received:**	8/16/24
Sample Name:	2408150826A 300-002-GSV		
Lab Code:	R2407792-011	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Aluminum, Total	6010D	**0.09**	J	mg/L	0.10	0.03	1	8/20/24	8/21/24 22:55	
Antimony, Total	6020B	**0.0005**	J	mg/L	0.0010	0.0002	1	8/22/24	8/27/24 13:59	
Arsenic, Total	6020B	**0.0045**		mg/L	0.0010	0.0004	1	8/22/24	8/27/24 13:59	
Barium, Total	6010D	**0.070**		mg/L	0.020	0.003	1	8/20/24	8/21/24 22:55	
Beryllium, Total	6010D	ND	U	mg/L	0.0030	0.0002	1	8/20/24	8/21/24 22:55	
Boron, Total	6010D	**0.13**	J	mg/L	0.20	0.02	1	8/20/24	8/21/24 22:55	
Cadmium, Total	6010D	ND	U	mg/L	0.0050	0.0004	1	8/20/24	8/21/24 22:55	
Calcium, Total	6010D	**94.5**		mg/L	1.0	0.3	1	8/20/24	8/21/24 22:55	
Chromium, Total	6010D	ND	U	mg/L	0.010	0.002	1	8/20/24	8/21/24 22:55	
Cobalt, Total	6010D	**0.002**	J	mg/L	0.050	0.0009	1	8/20/24	8/21/24 22:55	
Copper, Total	6010D	ND	U	mg/L	0.020	0.004	1	8/20/24	8/21/24 22:55	
Iron, Total	6010D	**0.46**		mg/L	0.10	0.07	1	8/20/24	8/21/24 22:55	
Lead, Total	6010D	ND	U	mg/L	0.050	0.004	1	8/20/24	8/21/24 22:55	
Magnesium, Total	6010D	**55.7**		mg/L	1.0	0.03	1	8/20/24	8/21/24 22:55	
Manganese, Total	6010D	**0.463**		mg/L	0.010	0.004	1	8/20/24	8/21/24 22:55	
Mercury, Total	7470A	ND	U	mg/L	0.00020	0.00008	1	8/21/24	8/22/24 10:10	
Molybdenum, Total	6010D	**0.036**		mg/L	0.025	0.003	1	8/20/24	8/21/24 22:55	
Nickel, Total	6010D	**0.031**	J	mg/L	0.040	0.003	1	8/20/24	8/21/24 22:55	
Potassium, Total	6010D	**3.8**		mg/L	2.0	0.4	1	8/20/24	8/21/24 22:55	
Selenium, Total	6010D	ND	U	mg/L	0.010	0.007	1	8/20/24	8/21/24 22:55	
Silver, Total	6010D	ND	U	mg/L	0.010	0.0006	1	8/20/24	8/21/24 22:55	
Sodium, Total	6010D	**68.9**		mg/L	1.0	0.3	1	8/20/24	8/21/24 22:55	
Strontium, Total	6010D	**1.81**		mg/L	0.10	0.002	1	8/20/24	8/21/24 22:55	
Thallium, Total	6020B	**0.0002**	J	mg/L	0.0010	0.00004	1	8/22/24	8/27/24 13:59	
Tin, Total	6010D	ND	U	mg/L	0.50	0.008	1	8/20/24	8/21/24 22:55	
Vanadium, Total	6010D	ND	U	mg/L	0.050	0.0007	1	8/20/24	8/21/24 22:55	
Zinc, Total	6010D	**0.322**		mg/L	0.020	0.003	1	8/20/24	8/21/24 22:55	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R2407792-MB	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Aluminum, Total	6010D	ND	U	mg/L	0.10	0.03	1	8/20/24	8/21/24 21:57	
Antimony, Total	6020B	ND	U	mg/L	0.0010	0.0002	1	8/22/24	8/27/24 13:52	
Arsenic, Total	6020B	ND	U	mg/L	0.0010	0.0004	1	8/22/24	8/27/24 13:52	
Barium, Total	6010D	ND	U	mg/L	0.020	0.003	1	8/20/24	8/21/24 21:57	
Beryllium, Total	6010D	ND	U	mg/L	0.0030	0.0002	1	8/20/24	8/21/24 21:57	
Boron, Total	6010D	ND	U	mg/L	0.20	0.02	1	8/20/24	8/21/24 21:57	
Cadmium, Total	6010D	ND	U	mg/L	0.0050	0.0004	1	8/20/24	8/21/24 21:57	
Calcium, Total	6010D	ND	U	mg/L	1.0	0.3	1	8/20/24	8/21/24 21:57	
Chromium, Total	6010D	ND	U	mg/L	0.010	0.002	1	8/20/24	8/21/24 21:57	
Cobalt, Total	6010D	ND	U	mg/L	0.050	0.0009	1	8/20/24	8/21/24 21:57	
Copper, Total	6010D	ND	U	mg/L	0.020	0.004	1	8/20/24	8/21/24 21:57	
Iron, Total	6010D	ND	U	mg/L	0.10	0.07	1	8/20/24	8/21/24 21:57	
Lead, Total	6010D	ND	U	mg/L	0.050	0.004	1	8/20/24	8/21/24 21:57	
Magnesium, Total	6010D	ND	U	mg/L	1.0	0.03	1	8/20/24	8/21/24 21:57	
Manganese, Total	6010D	ND	U	mg/L	0.010	0.004	1	8/20/24	8/21/24 21:57	
Mercury, Total	7470A	ND	U	mg/L	0.00020	0.00008	1	8/21/24	8/22/24 09:39	
Molybdenum, Total	6010D	ND	U	mg/L	0.025	0.003	1	8/20/24	8/21/24 21:57	
Nickel, Total	6010D	ND	U	mg/L	0.040	0.003	1	8/20/24	8/21/24 21:57	
Potassium, Total	6010D	ND	U	mg/L	2.0	0.4	1	8/20/24	8/21/24 21:57	
Selenium, Total	6010D	ND	U	mg/L	0.010	0.007	1	8/20/24	8/21/24 21:57	
Silver, Total	6010D	ND	U	mg/L	0.010	0.0006	1	8/20/24	8/21/24 21:57	
Sodium, Total	6010D	ND	U	mg/L	1.0	0.3	1	8/20/24	8/21/24 21:57	
Strontium, Total	6010D	ND	U	mg/L	0.10	0.002	1	8/20/24	8/21/24 21:57	
Thallium, Total	6020B	ND	U	mg/L	0.0010	0.00004	1	8/22/24	8/27/24 13:52	
Tin, Total	6010D	ND	U	mg/L	0.50	0.008	1	8/20/24	8/21/24 21:57	
Vanadium, Total	6010D	ND	U	mg/L	0.050	0.0007	1	8/20/24	8/21/24 21:57	
Zinc, Total	6010D	ND	U	mg/L	0.020	0.003	1	8/20/24	8/21/24 21:57	

General Chemistry

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Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140835A 300-001-GSV	**Basis:**	NA
Lab Code:	R2407792-004		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**263**	mg/L	2.0	1.8	1	08/19/24 14:33	
Chloride	300.0	**73.7**	mg/L	2.0	0.5	10	08/23/24 22:06	
Fluoride, undistilled	300.0	**0.60**	mg/L	0.10	0.010	1	08/23/24 22:00	
Sulfate	300.0	**405**	mg/L	20	4	100	08/23/24 22:13	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140836A 300-001-GSV	**Basis:**	NA
Lab Code:	R2407792-005		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Solids, Total Dissolved (TDS)	SM 2540 C-2015	**1350**	mg/L	12	11	1	08/20/24 13:30	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140838A 300-001-GSV	**Basis:**	NA
Lab Code:	R2407792-007		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate+Nitrite as Nitrogen	353.2	**61.6**	mg/L	5.0	0.2	100	08/23/24 14:12	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150827A 300-002-GSV	**Basis:**	NA
Lab Code:	R2407792-012		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**239**	mg/L	2.0	1.8	1	08/19/24 14:40	
Chloride	300.0	**58.8**	mg/L	2.0	0.5	10	08/23/24 22:25	
Fluoride, undistilled	300.0	**0.83**	mg/L	0.10	0.010	1	08/23/24 22:19	
Sulfate	300.0	**293**	mg/L	20	4	100	08/23/24 22:31	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150828A 300-002-GSV	**Basis:**	NA
Lab Code:	R2407792-013		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Solids, Total Dissolved (TDS)	SM 2540 C-2015	**800**	mg/L	10	9	1	08/20/24 13:30	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150830A 300-002-GSV	**Basis:**	NA
Lab Code:	R2407792-015		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate+Nitrite as Nitrogen	353.2	**0.075**	mg/L	0.050	0.002	1	08/23/24 14:16	

QC Summary Forms

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Semivolatile Organic Compounds by GC/MS

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Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Extraction Method: EPA 3510C

Sample Name	Lab Code	2,4,6-Tribromophenol 31 - 133	2-Fluorobiphenyl 25 - 99	2-Fluorophenol 15 - 72
2408140833A 300-001-GSV	R2407792-001	100	73	52
2408150825A 300-002-GSV	R2407792-009	104	75	53
Method Blank	RQ2410083-01	85	71	46
Lab Control Sample	RQ2410083-02	116	76	49
Duplicate Lab Control Sample	RQ2410083-03	104	66	50

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Extraction Method: EPA 3510C

Sample Name	Lab Code	Nitrobenzene-d5 22 - 104	Phenol-d6 10 - 55	p-Terphenyl-d14 10 - 143
2408140833A 300-001-GSV	R2407792-001	73	37	71
2408150825A 300-002-GSV	R2407792-009	72	37	69
Method Blank	RQ2410083-01	69	37	82
Lab Control Sample	RQ2410083-02	78	38	80
Duplicate Lab Control Sample	RQ2410083-03	71	39	76

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/22/24 11:58
Sample Matrix:	Water	**Date Extracted:**	08/19/24

Method Blank Summary
Semivolatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Instrument ID:**	R-MS-64
Lab Code:	RQ2410083-01	**File ID:**	I:\ACQUDATA\5977-MS64\Data\082224\D8305.D\
Analysis Method:	8270E	**Analysis Lot:**	851525,851703
Prep Method:	EPA 3510C	**Extraction Lot:**	443361

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ2410083-02	I:\ACQUDATA\5977-MS64\Data\082124 \D8274.D\	08/21/24 20:04
Duplicate Lab Control Sample	RQ2410083-03	I:\ACQUDATA\5977-MS64\Data\082124 \D8275.D\	08/21/24 20:28
2408140833A 300-001-GSV	R2407792-001	I:\ACQUDATA\5977-MS64\Data\082224 \D8317.D\	08/22/24 17:45
2408150825A 300-002-GSV	R2407792-009	I:\ACQUDATA\5977-MS64\Data\082224 \D8318.D\	08/22/24 18:09

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2410083-01	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	ND U	10	1.2	1	08/22/24 11:58	8/19/24	
1,2,4-Trichlorobenzene	ND U	10	1.2	1	08/22/24 11:58	8/19/24	
1,2-Dichlorobenzene	ND U	10	1.2	1	08/22/24 11:58	8/19/24	
1,2-Diphenylhydrazine	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
1,3,5-Trinitrobenzene	ND U	10	4.4	1	08/22/24 11:58	8/19/24	
1,3-Dichlorobenzene	ND U	10	1.1	1	08/22/24 11:58	8/19/24	
1,3-Dinitrobenzene	ND U	10	1.8	1	08/22/24 11:58	8/19/24	
1,4-Dichlorobenzene	ND U	10	1.2	1	08/22/24 11:58	8/19/24	
1,4-Naphthoquinone	ND U	50	3.6	1	08/22/24 11:58	8/19/24	
1-Methylnaphthalene	ND U	10	1.5	1	08/22/24 11:58	8/19/24	
1-Naphthylamine	ND U	10	5.2	1	08/22/24 11:58	8/19/24	
2,3,4,6-Tetrachlorophenol	ND U	10	2.7	1	08/22/24 11:58	8/19/24	
2,4,5-Trichlorophenol	ND U	10	1.1	1	08/22/24 11:58	8/19/24	
2,4,6-Trichlorophenol	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
2,4-Dichlorophenol	ND U	10	1.3	1	08/22/24 11:58	8/19/24	
2,4-Dimethylphenol	ND U	10	4.3	1	08/22/24 11:58	8/19/24	
2,4-Dinitrophenol	ND U	50	20	1	08/22/24 11:58	8/19/24	
2,4-Dinitrotoluene	ND U	10	2.4	1	08/22/24 11:58	8/19/24	
2,6-Dichlorophenol	ND U	10	1.2	1	08/22/24 11:58	8/19/24	
2,6-Dinitrotoluene	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
2-Acetylaminofluorene	ND U	10	4.1	1	08/22/24 11:58	8/19/24	
2-Chloronaphthalene	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
2-Chlorophenol	ND U	10	1.1	1	08/22/24 11:58	8/19/24	
5-Nitro-o-toluidine	ND U	10	1.9	1	08/22/24 11:58	8/19/24	
2-Methylnaphthalene	ND U	10	1.3	1	08/22/24 11:58	8/19/24	
2-Methylphenol	ND U	10	1.0	1	08/22/24 11:58	8/19/24	
2-Naphthylamine	ND U	10	3.6	1	08/22/24 11:58	8/19/24	
2-Nitroaniline	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
2-Nitrophenol	ND U	10	1.5	1	08/22/24 11:58	8/19/24	
2-Picoline	ND U	50	13	1	08/22/24 11:58	8/19/24	
3,3'-Dichlorobenzidine	ND U	10	2.7	1	08/22/24 11:58	8/19/24	
3,3'-Dimethylbenzidine	ND U	50	18	1	08/22/24 11:58	8/19/24	
3- and 4-Methylphenol Coelution	ND U	10	1.2	1	08/22/24 11:58	8/19/24	
3-Methylcholanthrene	ND U	10	1.5	1	08/22/24 11:58	8/19/24	
3-Nitroaniline	ND U	10	2.8	1	08/22/24 11:58	8/19/24	
4,6-Dinitro-2-methylphenol	ND U	50	8.7	1	08/22/24 11:58	8/19/24	
4-Aminobiphenyl	ND U	10	2.7	1	08/22/24 11:58	8/19/24	
4-Bromophenyl Phenyl Ether	ND U	10	1.7	1	08/22/24 11:58	8/19/24	
4-Chloro-3-methylphenol	ND U	10	1.1	1	08/22/24 11:58	8/19/24	
4-Chloroaniline	ND U	10	2.6	1	08/22/24 11:58	8/19/24	
4-Chlorophenyl Phenyl Ether	ND U	10	1.5	1	08/22/24 11:58	8/19/24	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2410083-01	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4-Nitroaniline	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
4-Nitrophenol	ND U	50	6.4	1	08/22/24 11:58	8/19/24	
4-Nitroquinoline N-Oxide	ND U	50	17	1	08/22/24 11:58	8/19/24	
7,12-Dimethylbenz(a)anthracene	ND U	50	16	1	08/22/24 11:58	8/19/24	
Acenaphthene	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
Acenaphthylene	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
Acetophenone	ND U	10	1.3	1	08/22/24 11:58	8/19/24	
Aniline	ND U	10	3.1	1	08/22/24 11:58	8/19/24	
Anthracene	ND U	10	1.3	1	08/22/24 11:58	8/19/24	
Aramite, Total	ND U	10	5.2	1	08/22/24 11:58	8/19/24	
Benzidine	ND U	100	100	1	08/22/24 11:58	8/19/24	
Benzo(g,h,i)perylene	ND U	10	2.1	1	08/22/24 11:58	8/19/24	
Benzyl Alcohol	ND U	10	1.6	1	08/22/24 11:58	8/19/24	
2,2'-Oxybis(1-chloropropane)	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
Bis(2-chloroethoxy)methane	ND U	10	1.9	1	08/22/24 11:58	8/19/24	
Bis(2-chloroethyl) Ether	ND U	10	1.3	1	08/22/24 11:58	8/19/24	
Bis(2-ethylhexyl) Phthalate	ND U	10	4.3	1	08/22/24 11:58	8/19/24	
Butyl Benzyl Phthalate	ND U	10	2.9	1	08/22/24 11:58	8/19/24	
Chlorobenzilate	ND U	10	3.4	1	08/22/24 11:58	8/19/24	
Di-n-butyl Phthalate	ND U	10	1.7	1	08/22/24 11:58	8/19/24	
Di-n-octyl Phthalate	ND U	10	3.3	1	08/22/24 11:58	8/19/24	
Diallate	ND U	10	2.0	1	08/22/24 11:58	8/19/24	
Dibenzofuran	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
Diethyl Phthalate	ND U	10	1.1	1	08/22/24 11:58	8/19/24	
Dimethoate	ND U	10	1.8	1	08/22/24 11:58	8/19/24	
Dimethyl Phthalate	ND U	10	1.3	1	08/22/24 11:58	8/19/24	
Disulfoton	ND U	10	3.0	1	08/22/24 11:58	8/19/24	
Ethyl Methanesulfonate	ND U	10	1.1	1	08/22/24 11:58	8/19/24	
Fluoranthene	ND U	10	1.5	1	08/22/24 11:58	8/19/24	
Fluorene	ND U	10	1.3	1	08/22/24 11:58	8/19/24	
Hexachlorobutadiene	ND U	10	2.2	1	08/22/24 11:58	8/19/24	
Hexachlorocyclopentadiene	ND U	10	2.2	1	08/22/24 11:58	8/19/24	
Hexachloroethane	ND U	10	1.1	1	08/22/24 11:58	8/19/24	
Hexachloropropene	ND U	10	1.0	1	08/22/24 11:58	8/19/24	
Isodrin	ND U	10	1.5	1	08/22/24 11:58	8/19/24	
Isophorone	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
Isosafrole	ND U	10	1.7	1	08/22/24 11:58	8/19/24	
Methapyrilene	ND U	50	44	1	08/22/24 11:58	8/19/24	
Methyl Methanesulfonate	ND U	10	2.4	1	08/22/24 11:58	8/19/24	
Methyl Parathion	ND U	10	3.5	1	08/22/24 11:58	8/19/24	
N-Nitrosodi-n-propylamine	ND U	10	1.2	1	08/22/24 11:58	8/19/24	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2410083-01	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
N-Nitrosodiethylamine	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
N-Nitrosodimethylamine	ND U	10	1.0	1	08/22/24 11:58	8/19/24	
N-Nitrosodiphenylamine	ND U	10	6.3	1	08/22/24 11:58	8/19/24	
N-Nitrosomethylethylamine	ND U	10	2.6	1	08/22/24 11:58	8/19/24	
N-Nitrosomorpholine	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
N-Nitrosopiperidine	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
N-Nitrosopyrrolidine	ND U	10	1.0	1	08/22/24 11:58	8/19/24	
Naphthalene	ND U	10	1.2	1	08/22/24 11:58	8/19/24	
Nitrobenzene	ND U	10	1.5	1	08/22/24 11:58	8/19/24	
O,O,O-Triethyl Phosphorothioate	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
Ethyl Parathion	ND U	10	3.5	1	08/22/24 11:58	8/19/24	
Pentachlorobenzene	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
Pentachloroethane	ND U	10	1.2	1	08/22/24 11:58	8/19/24	
Pentachloronitrobenzene (PCNB)	ND U	10	1.5	1	08/22/24 11:58	8/19/24	
Phenacetin	ND U	10	1.5	1	08/22/24 11:58	8/19/24	
Phenanthrene	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
Phenol	ND U	10	1.0	1	08/22/24 11:58	8/19/24	
Phorate	ND U	10	1.4	1	08/22/24 11:58	8/19/24	
Pronamide	ND U	10	1.8	1	08/22/24 11:58	8/19/24	
Pyrene	ND U	10	1.5	1	08/22/24 11:58	8/19/24	
Pyridine	ND U	10	1.0	1	08/22/24 11:58	8/19/24	
Safrole	ND U	10	1.3	1	08/22/24 11:58	8/19/24	
Sulfotep	ND U	10	1.3	1	08/22/24 11:58	8/19/24	
Thionazin	ND U	10	1.6	1	08/22/24 11:58	8/19/24	
o-Toluidine	ND U	10	3.0	1	08/22/24 11:58	8/19/24	
p-Dimethylaminoazobenzene	ND U	10	3.2	1	08/22/24 11:58	8/19/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	85	31 - 133	08/22/24 11:58	
2-Fluorobiphenyl	71	25 - 99	08/22/24 11:58	
2-Fluorophenol	46	15 - 72	08/22/24 11:58	
Nitrobenzene-d5	69	22 - 104	08/22/24 11:58	
Phenol-d6	37	10 - 55	08/22/24 11:58	
p-Terphenyl-d14	82	10 - 143	08/22/24 11:58	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	unknown	3.10	4.5	J
000079-34-5	Ethane, 1,1,2,2-tetrachloro-	3.85	40	JN

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/21/24 20:04
Sample Matrix:	Water	**Date Extracted:**	08/19/24

Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Sample Name:	Lab Control Sample	**Instrument ID:**	R-MS-64
Lab Code:	RQ2410083-02	**File ID:**	I:\ACQUDATA\5977-MS64\Data\082124\D8274.D\
Analysis Method:	8270E	**Analysis Lot:**	851525,851703
Prep Method:	EPA 3510C	**Extraction Lot:**	443361

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Duplicate Lab Control Sample	RQ2410083-03	I:\ACQUDATA\5977-MS64\Data\082124 \D8275.D\	08/21/24 20:28
Method Blank	RQ2410083-01	I:\ACQUDATA\5977-MS64\Data\082224 \D8305.D\	08/22/24 11:58
2408140833A 300-001-GSV	R2407792-001	I:\ACQUDATA\5977-MS64\Data\082224 \D8317.D\	08/22/24 17:45
2408150825A 300-002-GSV	R2407792-009	I:\ACQUDATA\5977-MS64\Data\082224 \D8318.D\	08/22/24 18:09

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407792
Date Analyzed: 08/21/24

Duplicate Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

		Lab Control Sample			Duplicate Lab Control Sample					
		RQ2410083-02			RQ2410083-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,2,4,5-Tetrachlorobenzene	8270E	33.2	42.2	78	28.3	42.2	67	10-116	16	30
1,2,4-Trichlorobenzene	8270E	50.0	80.0	62	50.4	80.0	63	26-85	<1	30
1,2-Dichlorobenzene	8270E	48.1	80.0	60	48.1	80.0	60	20-85	<1	30
1,2-Diphenylhydrazine	8270E	60.5	80.0	76	59.2	80.0	74	54-122	2	30
1,3-Dichlorobenzene	8270E	46.3	80.0	58	46.7	80.0	58	18-83	<1	30
1,3-Dinitrobenzene	8270E	86.2	80.0	108	86.1	80.0	108	60-126	<1	30
1,4-Dichlorobenzene	8270E	46.4	80.0	58	46.4	80.0	58	18-82	<1	30
1-Methylnaphthalene	8270E	55.5	80.0	69	55.9	80.0	70	37-95	<1	30
2,3,4,6-Tetrachlorophenol	8270E	93.4	80.0	117	89.5	80.0	112	55-126	4	30
2,4,5-Trichlorophenol	8270E	76.7	80.0	96	75.5	80.0	94	55-114	2	30
2,4,6-Trichlorophenol	8270E	73.2	80.0	92	70.1	80.0	88	49-103	4	30
2,4-Dichlorophenol	8270E	66.3	80.0	83	63.4	80.0	79	43-101	4	30
2,4-Dimethylphenol	8270E	41.7	80.0	52	14.3	80.0	18 *	45-129	98*	30
2,4-Dinitrophenol	8270E	103	80.0	129	107	80.0	133 *	14-129	4	30
2,4-Dinitrotoluene	8270E	79.6	80.0	99	79.5	80.0	99	58-124	<1	30
2,6-Dinitrotoluene	8270E	79.4	80.0	99	78.6	80.0	98	62-126	1	30
2-Chloronaphthalene	8270E	61.0	80.0	76	59.2	80.0	74	38-97	3	30
2-Chlorophenol	8270E	56.5	80.0	71	55.5	80.0	69	33-93	2	30
2-Methylnaphthalene	8270E	55.4	80.0	69	55.3	80.0	69	35-94	<1	30
2-Methylphenol	8270E	54.0	80.0	68	46.4	80.0	58	41-97	15	30
2-Nitroaniline	8270E	67.0	80.0	84	67.6	80.0	84	56-122	<1	30
2-Nitrophenol	8270E	71.1	80.0	89	69.1	80.0	86	36-101	3	30
3- and 4-Methylphenol Coelution	8270E	51.4	80.0	64	48.5	80.0	61	40-92	6	30
3-Nitroaniline	8270E	74.8	80.0	93	70.7	80.0	88	52-115	6	30
4,6-Dinitro-2-methylphenol	8270E	91.6	80.0	114	92.9	80.0	116	31-119	1	30
4-Bromophenyl Phenyl Ether	8270E	65.6	80.0	82	65.9	80.0	82	54-123	<1	30
4-Chloro-3-methylphenol	8270E	63.5	80.0	79	61.0	80.0	76	52-104	4	30
4-Chloroaniline	8270E	66.3	80.0	83	58.0	80.0	72	43-113	13	30
4-Chlorophenyl Phenyl Ether	8270E	65.5	80.0	82	64.7	80.0	81	52-113	1	30
4-Nitroaniline	8270E	71.5	80.0	89	70.0	80.0	88	54-118	2	30
4-Nitrophenol	8270E	24.7 J	80.0	31	30.2 J	80.0	38	16-64	20	30
Acenaphthene	8270E	66.6	80.0	83	64.6	80.0	81	46-103	3	30
Acenaphthylene	8270E	69.3	80.0	87	66.7	80.0	83	51-114	4	30

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407792
Date Analyzed: 08/21/24

Duplicate Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

		Lab Control Sample			Duplicate Lab Control Sample					
		RQ2410083-02			RQ2410083-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Acetophenone	8270E	61.0	80.0	76	53.7	80.0	67	39-99	13	30
Aniline	8270E	51.6	80.0	64	33.6	80.0	42	15-104	42*	30
Anthracene	8270E	72.3	80.0	90	71.0	80.0	89	61-115	2	30
Benzo(g,h,i)perylene	8270E	78.3	80.0	98	76.6	80.0	96	60-123	2	30
Benzyl Alcohol	8270E	59.5	80.0	74	60.3	80.0	75	46-106	1	30
2,2'-Oxybis(1-chloropropane)	8270E	53.3	80.0	67	50.9	80.0	64	32-104	5	30
Bis(2-chloroethoxy)methane	8270E	63.6	80.0	79	61.3	80.0	77	55-126	4	30
Bis(2-chloroethyl) Ether	8270E	56.6	80.0	71	53.4	80.0	67	36-101	6	30
Bis(2-ethylhexyl) Phthalate	8270E	38.6	80.0	48 *	40.7	80.0	51	51-132	5	30
Butyl Benzyl Phthalate	8270E	44.1	80.0	55	46.2	80.0	58	54-122	5	30
Di-n-butyl Phthalate	8270E	51.4	80.0	64	52.8	80.0	66	61-147	3	30
Di-n-octyl Phthalate	8270E	32.5	80.0	41 *	35.1	80.0	44	43-139	7	30
Dibenzofuran	8270E	69.3	80.0	87	68.0	80.0	85	50-107	2	30
Diethyl Phthalate	8270E	63.6	80.0	80	62.9	80.0	79	57-113	1	30
Dimethyl Phthalate	8270E	67.9	80.0	85	65.6	80.0	82	64-114	3	30
Fluoranthene	8270E	69.1	80.0	86	69.3	80.0	87	58-129	<1	30
Fluorene	8270E	68.8	80.0	86	67.0	80.0	84	54-111	3	30
Hexachlorobutadiene	8270E	42.1	80.0	53	45.2	80.0	57	25-89	7	30
Hexachlorocyclopentadiene	8270E	43.3	80.0	54	48.3	80.0	60	10-71	11	30
Hexachloroethane	8270E	41.2	80.0	52	42.5	80.0	53	16-81	3	30
Isophorone	8270E	57.3	80.0	72	55.9	80.0	70	51-108	2	30
N-Nitrosodi-n-propylamine	8270E	53.5	80.0	67	51.3	80.0	64	44-101	4	30
N-Nitrosodimethylamine	8270E	40.4	80.0	51	39.9	80.0	50	19-81	1	30
N-Nitrosodiphenylamine	8270E	74.6	80.0	93	70.4	80.0	88	65-126	6	30
Naphthalene	8270E	55.4	80.0	69	54.6	80.0	68	32-91	1	30
Nitrobenzene	8270E	62.0	80.0	77	59.3	80.0	74	39-100	4	30
Phenanthrene	8270E	73.4	80.0	92	71.8	80.0	90	60-111	2	30
Phenol	8270E	32.2	80.0	40	33.1	80.0	41	10-67	3	30
Pyrene	8270E	70.0	80.0	88	69.0	80.0	86	62-111	1	30
Pyridine	8270E	33.4	80.0	42	9.87 J	80.0	12	10-86	109*	30

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/21/24 09:15

Tune Summary
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5977-MS64\Data\082124\D8251.D\ **Analytical Method:** 8270E
Instrument ID: R-MS-64 **Analysis Lot:** 851525

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
68	69	0.00	2	1.8	2787	Pass
69	69	100	100	100.0	154987	Pass
70	69	0.00	2	0.9	1325	Pass
197	198	0.00	2	0.5	1646	Pass
198	198	100	100	100.0	361131	Pass
199	198	5	9	6.8	24717	Pass
365	198	1	200	3.7	13419	Pass
441	443	0.01	150	81.7	54045	Pass
442	442	100	100	100.0	352896	Pass
443	442	15	24	18.8	66173	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ2410314-02	I:\ACQUDATA\5977-MS64\Data\082124\D8252.D\	08/21/24 10:43	
Lab Control Sample	RQ2410083-02	I:\ACQUDATA\5977-MS64\Data\082124\D8274.D\	08/21/24 20:04	
Duplicate Lab Control Sample	RQ2410083-03	I:\ACQUDATA\5977-MS64\Data\082124\D8275.D\	08/21/24 20:28	
Continuing Calibration Verification	RQ2410314-04	I:\ACQUDATA\5977-MS64\Data\082124\D8280.D\	08/21/24 22:29	

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/22/24 10:33

Tune Summary
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5977-MS64\Data\082224\D8302.D\ **Analytical Method:** 8270E
Instrument ID: R-MS-64 **Analysis Lot:** 851703

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
68	69	0.00	2	1.4	6134	Pass
69	69	100	100	100.0	443383	Pass
70	69	0.00	2	0.6	2596	Pass
197	198	0.00	2	0.7	6511	Pass
198	198	100	100	100.0	981227	Pass
199	198	5	9	6.8	66944	Pass
365	198	1	200	3.4	33683	Pass
441	443	0.01	150	75.9	131757	Pass
442	442	100	100	100.0	873685	Pass
443	442	15	24	19.9	173499	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ2410394-02	I:\ACQUDATA\5977-MS64\Data\082224\D8303.D\	08/22/24 10:49	
Method Blank	RQ2410083-01	I:\ACQUDATA\5977-MS64\Data\082224\D8305.D\	08/22/24 11:58	
2408140833A 300-001-GSV	R2407792-001	I:\ACQUDATA\5977-MS64\Data\082224\D8317.D\	08/22/24 17:45	
2408150825A 300-002-GSV	R2407792-009	I:\ACQUDATA\5977-MS64\Data\082224\D8318.D\	08/22/24 18:09	

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/21/24 10:43

Internal Standard Area and RT SUMMARY
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5977-MS64\Data\082124\D8252.D\ **Lab Code:**RQ2410314-02
Instrument ID: R-MS-64 **Analysis Lot:**851525
Analysis Method: 8270E **Signal ID:**1

		1,4-Dichlorobenzene-d4		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	376,139	4.61	830,316	7.50	1,288,290	12.13
	Upper Limit ==>	752,278	4.78	1,660,632	7.67	2,576,580	12.30
	Lower Limit ==>	188,070	4.44	415,158	7.33	644,145	11.96
Associated Analyses							
Continuing Calibration Verification	RQ2410314-02	376139	4.61	830316	7.50	1288290	12.13
Lab Control Sample	RQ2410083-02	247894	4.61	533207	7.50	777412	12.11
Duplicate Lab Control Sample	RQ2410083-03	255107	4.61	555160	7.50	821842	12.11

QA/QC Report

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/21/24 10:43

Internal Standard Area and RT SUMMARY
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5977-MS64\Data\082124\D8252.D\ **Lab Code:**RQ2410314-02
Instrument ID: R-MS-64 **Analysis Lot:**851525
Analysis Method: 8270E **Signal ID:**1

		Naphthalene-d8		Perylene-d12		Phenanthrene-d10	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	1,484,927	5.80	1,329,458	14.93	1,412,236	8.97
	Upper Limit ==>	2,969,854	5.97	2,658,916	15.10	2,824,472	9.14
	Lower Limit ==>	742,464	5.63	664,729	14.76	706,118	8.80
Associated Analyses							
Continuing Calibration Verification	RQ2410314-02	1484927	5.80	1329458	14.93	1412236	8.97
Lab Control Sample	RQ2410083-02	984484	5.79	797855	14.92	930491	8.96
Duplicate Lab Control Sample	RQ2410083-03	1013702	5.79	843835	14.92	979900	8.96

QA/QC Report

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/22/24 10:49

Internal Standard Area and RT SUMMARY
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5977-MS64\Data\082224\D8303.D\ **Lab Code:**RQ2410394-02
Instrument ID: R-MS-64 **Analysis Lot:**851703
Analysis Method: 8270E **Signal ID:**1

		1,4-Dichlorobenzene-d4		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	369,669	4.60	840,222	7.49	1,326,942	12.10
	Upper Limit ==>	739,338	4.77	1,680,444	7.66	2,653,884	12.27
	Lower Limit ==>	184,835	4.43	420,111	7.32	663,471	11.93
Associated Analyses							
Method Blank	RQ2410083-01	339735	4.60	736114	7.49	1095181	12.09
2408140833A 300-001-GSV	R2407792-001	370933	4.60	817564	7.49	1168693	12.09
2408150825A 300-002-GSV	R2407792-009	348480	4.60	776656	7.49	1120933	12.09

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QA/QC Report

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/22/24 10:49

Internal Standard Area and RT SUMMARY
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5977-MS64\Data\082224\D8303.D\ **Lab Code:**RQ2410394-02
Instrument ID: R-MS-64 **Analysis Lot:**851703
Analysis Method: 8270E **Signal ID:**1

		Naphthalene-d8		Perylene-d12		Phenanthrene-d10	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	1,491,746	5.79	1,348,291	14.90	1,477,245	8.96
	Upper Limit ==>	2,983,492	5.96	2,696,582	15.07	2,954,490	9.13
	Lower Limit ==>	745,873	5.62	674,146	14.73	738,623	8.79
Associated Analyses							
Method Blank	RQ2410083-01	1352716	5.79	1148990	14.90	1335422	8.95
2408140833A 300-001-GSV	R2407792-001	1473444	5.79	1242688	14.90	1451365	8.95
2408150825A 300-002-GSV	R2407792-009	1395560	5.79	1213891	14.90	1382644	8.95

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Low Level Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Extraction Method: EPA 3510C

Sample Name	Lab Code	2-Fluorobiphenyl 27 - 133	Nitrobenzene-d5 31 - 167	p-Terphenyl-d14 25 - 151
2408140833A 300-001-GSV	R2407792-002	86	81	90
2408150825A 300-002-GSV	R2407792-010	79	71	84
Method Blank	RQ2410246-01	102	89	115
Lab Control Sample	RQ2410246-02	74	62	72
Duplicate Lab Control Sample	RQ2410246-03	85	65	84

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/23/24 17:12
Sample Matrix:	Water	**Date Extracted:**	08/21/24

Method Blank Summary
Low Level Semivolatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Instrument ID:**	R-MS-53
Lab Code:	RQ2410246-01	**File ID:**	I:\ACQUDATA\5973C\DATA\082324\CM643.D\
Analysis Method:	8270E	**Analysis Lot:**	851820
Prep Method:	EPA 3510C	**Extraction Lot:**	443507

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ2410246-02	I:\ACQUDATA\5973C\DATA\082324\CM644.D\	08/23/24 17:40
Duplicate Lab Control Sample	RQ2410246-03	I:\ACQUDATA\5973C\DATA\082324\CM645.D\	08/23/24 18:08
2408140833A 300-001-GSV	R2407792-002	I:\ACQUDATA\5973C\DATA\082324\CM651.D\	08/23/24 20:58
2408150825A 300-002-GSV	R2407792-010	I:\ACQUDATA\5973C\DATA\082324\CM652.D\	08/23/24 21:26

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2410246-01	**Basis:**	NA

Low Level Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Acenaphthylene	ND U	0.20	0.093	1	08/23/24 17:12	8/21/24	
Benz(a)anthracene	ND U	0.20	0.070	1	08/23/24 17:12	8/21/24	
Benzo(a)pyrene	ND U	0.20	0.073	1	08/23/24 17:12	8/21/24	
Benzo(b)fluoranthene	ND U	0.20	0.068	1	08/23/24 17:12	8/21/24	
Benzo(k)fluoranthene	ND U	0.20	0.069	1	08/23/24 17:12	8/21/24	
Chrysene	ND U	0.20	0.080	1	08/23/24 17:12	8/21/24	
Dibenz(a,h)anthracene	ND U	0.20	0.090	1	08/23/24 17:12	8/21/24	
Hexachlorobenzene	ND U	0.20	0.13	1	08/23/24 17:12	8/21/24	
Indeno(1,2,3-cd)pyrene	ND U	0.20	0.070	1	08/23/24 17:12	8/21/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	102	27 - 133	08/23/24 17:12	
Nitrobenzene-d5	89	31 - 167	08/23/24 17:12	
p-Terphenyl-d14	115	25 - 151	08/23/24 17:12	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/23/24 17:40
Sample Matrix:	Water	**Date Extracted:**	08/21/24

Lab Control Sample Summary
Low Level Semivolatile Organic Compounds by GC/MS

Sample Name:	Lab Control Sample	**Instrument ID:**	R-MS-53
Lab Code:	RQ2410246-02	**File ID:**	I:\ACQUDATA\5973C\DATA\082324\CM644.D\
Analysis Method:	8270E	**Analysis Lot:**	851820
Prep Method:	EPA 3510C	**Extraction Lot:**	443507

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	RQ2410246-01	I:\ACQUDATA\5973C\DATA\082324\CM643.D\	08/23/24 17:12
Duplicate Lab Control Sample	RQ2410246-03	I:\ACQUDATA\5973C\DATA\082324\CM645.D\	08/23/24 18:08
2408140833A 300-001-GSV	R2407792-002	I:\ACQUDATA\5973C\DATA\082324\CM651.D\	08/23/24 20:58
2408150825A 300-002-GSV	R2407792-010	I:\ACQUDATA\5973C\DATA\082324\CM652.D\	08/23/24 21:26

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407792
Date Analyzed: 08/23/24

Duplicate Lab Control Sample Summary
Low Level Semivolatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

		Lab Control Sample			Duplicate Lab Control Sample					
		RQ2410246-02			RQ2410246-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Acenaphthylene	8270E	5.12	8.00	64	5.84	8.00	73	48-121	13	30
Benz(a)anthracene	8270E	5.36	8.00	67	6.21	8.00	78	54-120	15	30
Benzo(a)pyrene	8270E	5.14	8.00	64	6.30	8.00	79	57-124	20	30
Benzo(b)fluoranthene	8270E	4.85	8.00	61	6.01	8.00	75	57-117	21	30
Benzo(k)fluoranthene	8270E	4.47	8.00	56 *	5.60	8.00	70	59-123	22	30
Chrysene	8270E	5.54	8.00	69	6.58	8.00	82	58-124	17	30
Dibenz(a,h)anthracene	8270E	5.67	8.00	71	6.87	8.00	86	43-147	19	30
Hexachlorobenzene	8270E	5.49	8.00	69	6.21	8.00	78	49-118	12	30
Indeno(1,2,3-cd)pyrene	8270E	6.18	8.00	77	7.63	8.00	95	55-129	21	30

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/23/24 14:25

Tune Summary
Low Level Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5973C\DATA\082324\CM637.D\ **Analytical Method:** 8270E
Instrument ID: R-MS-53 **Analysis Lot:** 851820

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
68	69	0.00	2	0.0	0	Pass
69	69	100	100	100.0	64463	Pass
70	69	0.00	2	0.5	345	Pass
197	198	0.00	2	0.0	0	Pass
198	198	100	100	100.0	203581	Pass
199	198	5	9	6.8	13797	Pass
365	198	1	200	2.8	5736	Pass
441	443	0.01	150	92.5	40264	Pass
442	442	100	100	100.0	214128	Pass
443	442	15	24	20.3	43515	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ2410431-01	I:\ACQUDATA\5973C\DATA\082324\CM638.D\	08/23/24 14:50	
Method Blank	RQ2410246-01	I:\ACQUDATA\5973C\DATA\082324\CM643.D\	08/23/24 17:12	
Lab Control Sample	RQ2410246-02	I:\ACQUDATA\5973C\DATA\082324\CM644.D\	08/23/24 17:40	
Duplicate Lab Control Sample	RQ2410246-03	I:\ACQUDATA\5973C\DATA\082324\CM645.D\	08/23/24 18:08	
2408140833A 300-001-GSV	R2407792-002	I:\ACQUDATA\5973C\DATA\082324\CM651.D\	08/23/24 20:58	
2408150825A 300-002-GSV	R2407792-010	I:\ACQUDATA\5973C\DATA\082324\CM652.D\	08/23/24 21:26	

QA/QC Report

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/23/24 14:50

Internal Standard Area and RT SUMMARY
Low Level Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5973C\DATA\082324\CM638.D\ **Lab Code:**RQ2410431-01
Instrument ID: R-MS-53 **Analysis Lot:**851820
Analysis Method: 8270E **Signal ID:**1

		1,4-Dichlorobenzene-d4		Acenaphthene-d10		Chrysene-d12	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	407,864	4.95	782,995	7.83	1,108,250	12.73
	Upper Limit ==>	815,728	5.12	1,565,990	8.00	2,216,500	12.90
	Lower Limit ==>	203,932	4.78	391,498	7.66	554,125	12.56
Associated Analyses							
Method Blank	RQ2410246-01	270495	4.95	588625	7.82	746410	12.71
Lab Control Sample	RQ2410246-02	377677	4.95	779094	7.82	1040762	12.72
Duplicate Lab Control Sample	RQ2410246-03	359807	4.95	730811	7.82	1003354	12.72
2408140833A 300-001-GSV	R2407792-002	396735	4.95	808841	7.82	1101523	12.72
2408150825A 300-002-GSV	R2407792-010	392847	4.95	789867	7.82	1051273	12.72

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QA/QC Report

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B **Date Analyzed:**08/23/24 14:50

Internal Standard Area and RT SUMMARY
Low Level Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5973C\DATA\082324\CM638.D\ **Lab Code:**RQ2410431-01
Instrument ID: R-MS-53 **Analysis Lot:**851820
Analysis Method: 8270E **Signal ID:**1

		Naphthalene-d8		Perylene-d12		Phenanthrene-d10	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	1,581,778	6.12	1,106,329	15.78	1,389,015	9.30
	Upper Limit ==>	3,163,556	6.29	2,212,658	15.95	2,778,030	9.47
	Lower Limit ==>	790,889	5.95	553,165	15.61	694,508	9.13
Associated Analyses							
Method Blank	RQ2410246-01	1022008	6.11	723879	15.77	890987	9.30
Lab Control Sample	RQ2410246-02	1427200	6.11	1079633	15.78	1238194	9.30
Duplicate Lab Control Sample	RQ2410246-03	1364770	6.11	1018122	15.78	1200985	9.30
2408140833A 300-001-GSV	R2407792-002	1461577	6.11	1116644	15.77	1209864	9.30
2408150825A 300-002-GSV	R2407792-010	1446585	6.11	1050209	15.77	1304187	9.30

Metals

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Form 2

Calibration Verifications

Mercury by EPA 7470A,Metals by EPA 6010D,Metals by EPA 6020B

Workorder

R2407792

Client

NASA/WSTF/Navarro

Project

White Sands Test Facility

09/25/2024

ALS Environmental–Rochester Laboratory
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Phone (585) 288-5380 Fax (585) 288-8475
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Form 2 - Calibration Verifications

Client NASA/WSTF/Navarro

Project White Sands Test Facility

Workorder **R2407792**

Mercury by EPA 7470A

R-CVAA-03_851522		ICV			LLCCV			CCV			CCV			LLCCV			CCV		
Units mg/L	**Run Date**	08/22/24			08/22/24			08/22/24			08/22/24			08/22/24			08/22/24		
	Run Time	09:25			09:32			09:34			10:02			10:30			10:36		
Analyte		Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q
Mercury		3.14	**105**		0.246	**123**		3.11	**104**		3.07	**102**		0.231	**116**		3.03	**101**	

Q - %Recovery Flag * - %Recovery (%R) Outside Limits

QC ID	%R Limits	
CCV	80 - 120	**3.0** - Hg
ICV	90 - 110	**3.0** - Hg
LLCCV	70 - 130	**0.2** - Hg

Form 2 - Calibration Verifications

Client NASA/WSTF/Navarro

Project White Sands Test Facility

Workorder **R2407792**

Metals by EPA 6010D (P)

R-ICP-AES-07_851512		ICV			CCV			CCV			CCV			CCV		
Units ppm	**Run Date**	08/21/24			08/21/24			08/21/24			08/21/24			08/21/24		
	Run Time	15:55			21:51			22:26			23:05			23:31		
Analyte		Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q
Aluminum		9.81	**98**		9.96	**100**		9.96	**100**		9.93	**99**		9.91	**99**	
Barium		9.84	**98**		9.87	**99**		9.88	**99**		9.81	**98**		9.81	**98**	
Beryllium		0.247	**99**		0.249	**100**		0.248	**99**		0.248	**99**		0.248	**99**	
Boron		2.34	**94**		2.37	**95**		2.36	**94**		2.36	**94**		2.35	**94**	
Cadmium		0.500	**100**		0.507	**101**		0.503	**101**		0.503	**101**		0.503	**101**	
Calcium		24.90	**100**		25.20	**101**		25.10	**100**		25.00	**100**		25.00	**100**	
Chromium		0.515	**103**		0.521	**104**		0.518	**104**		0.518	**104**		0.518	**104**	
Cobalt		2.47	**99**		2.51	**100**		2.50	**100**		2.49	**100**		2.49	**100**	
Copper		1.25	**100**		1.26	**101**		1.25	**100**		1.25	**100**		1.25	**100**	
Iron		4.92	**98**		5.00	**100**		4.96	**99**		4.96	**99**		4.95	**99**	
Lead		0.499	**100**		0.504	**101**		0.500	**100**		0.499	**100**		0.500	**100**	
Magnesium		25.50	**102**		25.70	**103**		25.60	**102**		25.50	**102**		25.60	**102**	
Manganese		0.735	**98**		0.744	**99**		0.741	**99**		0.739	**99**		0.739	**99**	
Molybdenum		2.57	**103**		2.60	**104**		2.59	**104**		2.59	**103**		2.59	**104**	
Nickel		2.01	**100**		2.02	**101**		2.02	**101**		2.01	**100**		2.01	**100**	
Potassium		24.50	**98**		24.90	**100**		25.00	**100**		25.00	**100**		24.80	**99**	
Selenium		0.484	**97**		0.493	**99**		0.492	**98**		0.489	**98**		0.487	**97**	
Silver		0.509	**102**		0.512	**102**		0.510	**102**		0.510	**102**		0.510	**102**	
Sodium		24.90	**100**		25.00	**100**		25.00	**100**		25.00	**100**		24.90	**99**	
Strontium		2.50	**100**		2.54	**102**		2.53	**101**		2.52	**101**		2.53	**101**	
Tin		4.98	**100**		5.03	**101**		5.00	**100**		5.00	**100**		4.99	**100**	
Vanadium		2.54	**102**		2.57	**103**		2.56	**102**		2.55	**102**		2.56	**102**	
Zinc		0.991	**99**		0.999	**100**		0.997	**100**		0.992	**99**		0.993	**99**	

Q - %Recovery Flag * - %Recovery (%R) Outside Limits

QC ID	%R Limits	
CCV	90 - 110	**10.0** - Al, Ba; **0.250** - Be; **2.50** - B, Co, Mo, Sr, V; **0.5** - Cd, Cr, Pb, Se, Ag; **25.0** - Ca, Mg, K, Na; **1.25** - Cu; **5.0** - Fe, Sn; **0.750** - Mn; **2.0** - Ni; **1.0** - Zn
ICV	90 - 110	**10.0** - Al, Ba; **0.250** - Be; **2.50** - B, Co, Mo, Sr, V; **0.5** - Cd, Cr, Pb, Se, Ag; **25.0** - Ca, Mg, K, Na; **1.25** - Cu; **5.0** - Fe, Sn; **0.750** - Mn; **2.0** - Ni; **1.0** - Zn
ICV	90 - 110	**10.0** - Al, Ba; **0.250** - Be; **2.50** - B, Co, Mo, Sr, V; **0.5** - Cd, Cr, Pb, Se, Ag; **25.0** - Ca, Mg, K, Na; **1.25** - Cu; **5.0** - Fe, Sn; **0.750** - Mn; **2.0** - Ni; **1.0** - Zn

Form 2 - Calibration Verifications

Client NASA/WSTF/Navarro

Project White Sands Test Facility

Workorder **R2407792**

Metals by EPA 6010D (P)

R-ICP-AES-07_851748		ICV			CCV			CCV			CCV			CCV			CCV		
Units mg/L	**Run Date**	08/22/24			08/22/24			08/22/24			08/22/24			08/22/24			08/23/24		
	Run Time	15:06			15:22			15:59			16:23			16:48			09:46		
Analyte		Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q
Strontium		2.43	**97**		2.48	**99**		2.46	**99**		2.45	**98**		2.44	**97**		2.31	**92**	

R-ICP-AES-07_851748		CCV		
Units ppm	**Run Date**	08/23/24		
	Run Time	10:02		
Analyte		Found	%R	Q
Strontium		2.31	**92**	

Q - %Recovery Flag * - %Recovery (%R) Outside Limits

QC ID	%R Limits	
CCV	90 - 110	**2.50** - Sr
ICV	90 - 110	**2.50** - Sr

Form 2 - Calibration Verifications

Client NASA/WSTF/Navarro

Project White Sands Test Facility

Workorder **R2407792**

Metals by EPA 6020B (MS)

R-ICP-MS-02_852205		ICV			CCV			CCV			CCV			CCV			CCV		
Units mg/L	**Run Date**	08/27/24			08/27/24			08/27/24			08/27/24			08/27/24			08/27/24		
	Run Time	13:09			13:48			14:15			14:38			14:55			15:07		
	Data File	027_ICV			048_CCV			062_CCV			074_CCV			083_CCV			089_CCV		
Analyte		Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q
Antimony		49.30	**99**		0.0500	**100**		0.0475	**95**		0.0492	**98**		0.0504	**101**		0.0487	**97**	
Arsenic		48.70	**97**		0.0499	**100**		0.0500	**100**		0.0491	**98**		0.0487	**97**		0.0509	**102**	
Thallium		49.80	**100**		0.0510	**102**		0.0501	**100**		0.0504	**101**		0.0491	**98**		0.0496	**99**	

Q - %Recovery Flag * - %Recovery (%R) Outside Limits

QC ID	%R Limits	
CCV	90 - 110	**0.05** - Sb, As, Tl
ICV	90 - 110	**50.0** - Sb, As, Tl

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	8/14/24
Sample Matrix:	Water	**Date Received:**	8/16/24
		Date Analyzed:	8/22/24

Matrix Spike Summary
Inorganic Parameters

Sample Name:	2408140834A 300-001-GSV	**Units:**	mg/L
Lab Code:	R2407792-003	**Basis:**	NA

Analytical Method: 7470A
Prep Method: Method

		2408140834A 300-001-GSVMS			2408140834A 300-001-GSVDMS					
		Matrix Spike			**Duplicate Matrix Spike**					
		R2407792-003MS			R2407792-003DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Mercury, Total	ND	0.00109	0.00100	109	0.00109	0.00100	109	75 - 125	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407792
Date Analyzed: 8/21/24

Lab Control Sample Summary
Inorganic Parameters

Units: mg/L
Basis: NA

		Lab Control Sample R2407792-LCS1			Duplicate Lab Control Sample R2407792-DLCS1					
Analyte Name	**Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Aluminum, Total	6010D	1.95	2.00	97	1.95	2.00	97	80 - 120	<1	20
Barium, Total	6010D	1.93	2.00	97	1.93	2.00	96	80 - 120	<1	20
Beryllium, Total	6010D	0.0485	0.0500	97	0.0484	0.0500	97	80 - 120	<1	20
Boron, Total	6010D	0.906	1.00	91	0.904	1.00	90	80 - 120	<1	20
Cadmium, Total	6010D	0.0501	0.0500	100	0.0499	0.0500	100	80 - 120	<1	20
Calcium, Total	6010D	1.93	2.0	97	1.92	2.0	96	80 - 120	<1	20
Chromium, Total	6010D	0.202	0.200	101	0.198	0.200	99	80 - 120	2	20
Cobalt, Total	6010D	0.492	0.500	98	0.490	0.500	98	80 - 120	<1	20
Copper, Total	6010D	0.251	0.250	101	0.250	0.250	100	80 - 120	<1	20
Iron, Total	6010D	1.00	1.00	100	0.983	1.00	98	80 - 120	2	20
Lead, Total	6010D	0.502	0.500	100	0.500	0.500	100	80 - 120	<1	20
Magnesium, Total	6010D	1.92	2.0	96	1.92	2.0	96	80 - 120	<1	20
Manganese, Total	6010D	0.475	0.500	95	0.473	0.500	95	80 - 120	<1	20
Molybdenum, Total	6010D	0.492	0.500	98	0.490	0.500	98	80 - 120	<1	20
Nickel, Total	6010D	0.485	0.500	97	0.482	0.500	96	80 - 120	<1	20
Potassium, Total	6010D	18.8	20.0	94	18.7	20.0	93	80 - 120	<1	20
Selenium, Total	6010D	0.986	1.01	98	0.966	1.01	96	80 - 120	2	20
Silver, Total	6010D	0.0488	0.050	98	0.0487	0.050	97	80 - 120	<1	20
Sodium, Total	6010D	19.2	20.0	96	19.1	20.0	96	80 - 120	<1	20
Strontium, Total	6010D	1.97	2.00	99	1.93	2.00	97	80 - 120	2	20
Tin, Total	6010D	4.83	5.00	97	4.72	5.00	94	80 - 120	2	20
Vanadium, Total	6010D	0.487	0.500	97	0.485	0.500	97	80 - 120	<1	20
Zinc, Total	6010D	0.494	0.500	99	0.493	0.500	99	80 - 120	<1	20

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Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407792
Date Analyzed: 8/22/24 - 8/27/24

Lab Control Sample Summary
Inorganic Parameters

Units: mg/L
Basis: NA

Lab Control Sample
R2407792-LCS2

Analyte Name	Method	Result	Spike Amount	% Rec	% Rec Limits
Antimony, Total	6020B	0.0201	0.0200	101	80 - 120
Arsenic, Total	6020B	0.0194	0.0200	97	80 - 120
Mercury, Total	7470A	0.00108	0.00100	108	80 - 120
Thallium, Total	6020B	0.0201	0.0200	100	80 - 120

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General Chemistry

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Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R2407792-MB		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	ND	U	mg/L	2.0	1.8	1	08/19/24 12:10	
Chloride	300.0	ND	U	mg/L	0.20	0.05	1	08/23/24 20:33	
Fluoride, undistilled	300.0	ND	U	mg/L	0.10	0.010	1	08/23/24 20:33	
Nitrate+Nitrite as Nitrogen	353.2	ND	U	mg/L	0.050	0.002	1	08/23/24 13:58	
Solids, Total Dissolved (TDS)	SM 2540 C-2015	ND	U	mg/L	10	9	1	08/20/24 13:30	
Sulfate	300.0	ND	U	mg/L	0.20	0.04	1	08/23/24 20:33	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/16/24
		Date Analyzed:	08/23/24

Duplicate Matrix Spike Summary
Sulfate

Sample Name:	2408150827A 300-002-GSV	**Units:**	mg/L
Lab Code:	R2407792-012	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike			Duplicate Matrix Spike					
		R2407792-012MS			R2407792-012DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Sulfate	293	485	200	96	484	200	96	90-110	<1	20

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Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24
		Date Analyzed:	08/20/24

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	2408140836A 300-001-GSV	**Units:**	mg/L
Lab Code:	R2407792-005	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample R2407792-005DUP Result	Average	RPD	RPD Limit
Solids, Total Dissolved (TDS)	SM 2540 C-2015	12	11	1350	1360	1350	<1	10

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/16/24
		Date Analyzed:	08/20/24

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	2408150828A 300-002-GSV	**Units:**	mg/L
Lab Code:	R2407792-013	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample R2407792-013DUP Result	Average	RPD	RPD Limit
Solids, Total Dissolved (TDS)	SM 2540 C-2015	10	9	800	795	797	<1	10

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Service Request: R2407792
Date Analyzed: 08/19/24 - 08/23/24

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
R2407792-LCS

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	25.8	25.0	103	80-120
Chloride	300.0	1.96	2.00	98	90-110
Fluoride, undistilled	300.0	0.968	1.00	97	90-110
Nitrate+Nitrite as Nitrogen	353.2	0.518	0.500	104	90-110
Solids, Total Dissolved (TDS)	SM 2540 C-2015	890	914	97	90-110
Sulfate	300.0	1.97	2.00	99	90-110

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B

Continuing Calibration Blank (CCB) Summary
Chloride

Analysis Method: 300.0 **Units:**mg/L

	Analysis Lot	Lab Code	Date Analyzed	MRL	MDL	Result	Q
CCB1	851805	RQ2410516-02	08/23/24 20:33	0.20	0.05	ND	U
CCB2	851805	RQ2410516-06	08/23/24 21:48	0.20	0.05	ND	U
CCB3	851805	RQ2410516-10	08/23/24 23:03	0.20	0.05	ND	U

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B

Continuing Calibration Blank (CCB) Summary
Fluoride, undistilled

Analysis Method: 300.0 **Units:**mg/L

	Analysis Lot	Lab Code	Date Analyzed	MRL	MDL	Result	Q
CCB1	851805	RQ2410516-02	08/23/24 20:33	0.10	0.010	ND	U
CCB2	851805	RQ2410516-06	08/23/24 21:48	0.10	0.010	ND	U
CCB3	851805	RQ2410516-10	08/23/24 23:03	0.10	0.010	ND	U

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B

Continuing Calibration Blank (CCB) Summary

Nitrate+Nitrite as Nitrogen

Analysis Method: 353.2 **Units:**mg/L

	Analysis Lot	Lab Code	Date Analyzed	MRL	MDL	Result	Q
CCB1	851766	RQ2410413-02	08/23/24 13:58	0.050	0.002	ND	U
CCB2	851766	RQ2410413-04	08/23/24 14:14	0.050	0.002	ND	U
CCB3	851766	RQ2410413-06	08/23/24 14:31	0.050	0.002	ND	U
CCB4	851766	RQ2410413-08	08/23/24 14:40	0.050	0.002	ND	U

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B

Continuing Calibration Blank (CCB) Summary
Sulfate

Analysis Method: 300.0 **Units:**mg/L

	Analysis Lot	Lab Code	Date Analyzed	MRL	MDL	Result	Q
CCB1	851805	RQ2410516-02	08/23/24 20:33	0.20	0.04	ND	U
CCB2	851805	RQ2410516-06	08/23/24 21:48	0.20	0.04	ND	U
CCB3	851805	RQ2410516-10	08/23/24 23:03	0.20	0.04	ND	U

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility/24EC008B

Continuing Calibration Verification (CCV) Summary

Chloride

Analysis Method: 300.0 **Units:** mg/L

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery	Acceptance Limits
CCV1	851805	RQ2410516-01	08/23/24 20:26	4.00	4.19	105	90-110
CCV2	851805	RQ2410516-05	08/23/24 21:41	4.00	4.14	103	90-110
CCV3	851805	RQ2410516-09	08/23/24 22:56	4.00	4.11	103	90-110

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility/24EC008B

Continuing Calibration Verification (CCV) Summary

Fluoride, undistilled

Analysis Method: 300.0 **Units:** mg/L

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery	Acceptance Limits
CCV1	851805	RQ2410516-01	08/23/24 20:26	2.00	1.99	99	90-110
CCV2	851805	RQ2410516-05	08/23/24 21:41	2.00	1.97	99	90-110
CCV3	851805	RQ2410516-09	08/23/24 22:56	2.00	1.97	98	90-110

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility/24EC008B

Continuing Calibration Verification (CCV) Summary

Nitrate+Nitrite as Nitrogen

Analysis Method: 353.2 **Units:** mg/L

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery	Acceptance Limits
CCV1	851766	RQ2410413-01	08/23/24 13:57	1.00	0.962	96	90-110
CCV2	851766	RQ2410413-03	08/23/24 14:13	1.00	0.966	97	90-110
CCV3	851766	RQ2410413-05	08/23/24 14:29	1.00	0.957	96	90-110
CCV4	851766	RQ2410413-07	08/23/24 14:39	1.00	0.959	96	90-110

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility/24EC008B

Continuing Calibration Verification (CCV) Summary

Sulfate

Analysis Method: 300.0 **Units:** mg/L

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery	Acceptance Limits
CCV1	851805	RQ2410516-01	08/23/24 20:26	4.00	4.03	101	90-110
CCV2	851805	RQ2410516-05	08/23/24 21:41	4.00	4.00	100	90-110
CCV3	851805	RQ2410516-09	08/23/24 22:56	4.00	3.98	100	90-110

Raw Data

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Semivolatile Organic Compounds by GC/MS

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Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140833A 300-001-GSV	**Units:**	ug/L
Lab Code:	R2407792-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	ND U	10	1.2	1	08/22/24 17:45	8/19/24	
1,2,4-Trichlorobenzene	ND U	10	1.2	1	08/22/24 17:45	8/19/24	
1,2-Dichlorobenzene	ND U	10	1.2	1	08/22/24 17:45	8/19/24	
1,2-Diphenylhydrazine	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
1,3,5-Trinitrobenzene	ND U	10	4.4	1	08/22/24 17:45	8/19/24	
1,3-Dichlorobenzene	ND U	10	1.1	1	08/22/24 17:45	8/19/24	
1,3-Dinitrobenzene	ND U	10	1.8	1	08/22/24 17:45	8/19/24	
1,4-Dichlorobenzene	ND U	10	1.2	1	08/22/24 17:45	8/19/24	
1,4-Naphthoquinone	ND U	50	3.6	1	08/22/24 17:45	8/19/24	
1-Methylnaphthalene	ND U	10	1.5	1	08/22/24 17:45	8/19/24	
1-Naphthylamine	ND U	10	5.2	1	08/22/24 17:45	8/19/24	
2,3,4,6-Tetrachlorophenol	ND U	10	2.7	1	08/22/24 17:45	8/19/24	
2,4,5-Trichlorophenol	ND U	10	1.1	1	08/22/24 17:45	8/19/24	
2,4,6-Trichlorophenol	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
2,4-Dichlorophenol	ND U	10	1.3	1	08/22/24 17:45	8/19/24	
2,4-Dimethylphenol	ND U	10	4.3	1	08/22/24 17:45	8/19/24	
2,4-Dinitrophenol	ND U	50	20	1	08/22/24 17:45	8/19/24	
2,4-Dinitrotoluene	ND U	10	2.4	1	08/22/24 17:45	8/19/24	
2,6-Dichlorophenol	ND U	10	1.2	1	08/22/24 17:45	8/19/24	
2,6-Dinitrotoluene	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
2-Acetylaminofluorene	ND U	10	4.1	1	08/22/24 17:45	8/19/24	
2-Chloronaphthalene	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
2-Chlorophenol	ND U	10	1.1	1	08/22/24 17:45	8/19/24	
5-Nitro-o-toluidine	ND U	10	1.9	1	08/22/24 17:45	8/19/24	
2-Methylnaphthalene	ND U	10	1.3	1	08/22/24 17:45	8/19/24	
2-Methylphenol	ND U	10	1.0	1	08/22/24 17:45	8/19/24	
2-Naphthylamine	ND U	10	3.6	1	08/22/24 17:45	8/19/24	
2-Nitroaniline	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
2-Nitrophenol	ND U	10	1.5	1	08/22/24 17:45	8/19/24	
2-Picoline	ND U	50	13	1	08/22/24 17:45	8/19/24	
3,3'-Dichlorobenzidine	ND U	10	2.7	1	08/22/24 17:45	8/19/24	
3,3'-Dimethylbenzidine	ND U	50	18	1	08/22/24 17:45	8/19/24	
3- and 4-Methylphenol Coelution	ND U	10	1.2	1	08/22/24 17:45	8/19/24	
3-Methylcholanthrene	ND U	10	1.5	1	08/22/24 17:45	8/19/24	
3-Nitroaniline	ND U	10	2.8	1	08/22/24 17:45	8/19/24	
4,6-Dinitro-2-methylphenol	ND U	50	8.7	1	08/22/24 17:45	8/19/24	
4-Aminobiphenyl	ND U	10	2.7	1	08/22/24 17:45	8/19/24	
4-Bromophenyl Phenyl Ether	ND U	10	1.7	1	08/22/24 17:45	8/19/24	
4-Chloro-3-methylphenol	ND U	10	1.1	1	08/22/24 17:45	8/19/24	
4-Chloroaniline	ND U	10	2.6	1	08/22/24 17:45	8/19/24	
4-Chlorophenyl Phenyl Ether	ND U	10	1.5	1	08/22/24 17:45	8/19/24	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140833A 300-001-GSV	**Units:**	ug/L
Lab Code:	R2407792-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4-Nitroaniline	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
4-Nitrophenol	ND U	50	6.4	1	08/22/24 17:45	8/19/24	
4-Nitroquinoline N-Oxide	ND U	50	17	1	08/22/24 17:45	8/19/24	
7,12-Dimethylbenz(a)anthracene	ND U	50	16	1	08/22/24 17:45	8/19/24	
Acenaphthene	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
Acenaphthylene	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
Acetophenone	ND U	10	1.3	1	08/22/24 17:45	8/19/24	
Aniline	ND U	10	3.1	1	08/22/24 17:45	8/19/24	
Anthracene	ND U	10	1.3	1	08/22/24 17:45	8/19/24	
Aramite, Total	ND U	10	5.2	1	08/22/24 17:45	8/19/24	
Benzidine	ND U	100	100	1	08/22/24 17:45	8/19/24	
Benzo(g,h,i)perylene	ND U	10	2.1	1	08/22/24 17:45	8/19/24	
Benzyl Alcohol	ND U	10	1.6	1	08/22/24 17:45	8/19/24	
2,2'-Oxybis(1-chloropropane)	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
Bis(2-chloroethoxy)methane	ND U	10	1.9	1	08/22/24 17:45	8/19/24	
Bis(2-chloroethyl) Ether	ND U	10	1.3	1	08/22/24 17:45	8/19/24	
Bis(2-ethylhexyl) Phthalate	ND U	10	4.3	1	08/22/24 17:45	8/19/24	
Butyl Benzyl Phthalate	ND U	10	2.9	1	08/22/24 17:45	8/19/24	
Chlorobenzilate	ND U	10	3.4	1	08/22/24 17:45	8/19/24	
Di-n-butyl Phthalate	ND U	10	1.7	1	08/22/24 17:45	8/19/24	
Di-n-octyl Phthalate	ND U	10	3.3	1	08/22/24 17:45	8/19/24	
Diallate	ND U	10	2.0	1	08/22/24 17:45	8/19/24	
Dibenzofuran	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
Diethyl Phthalate	ND U	10	1.1	1	08/22/24 17:45	8/19/24	
Dimethoate	ND U	10	1.8	1	08/22/24 17:45	8/19/24	
Dimethyl Phthalate	ND U	10	1.3	1	08/22/24 17:45	8/19/24	
Disulfoton	ND U	10	3.0	1	08/22/24 17:45	8/19/24	
Ethyl Methanesulfonate	ND U	10	1.1	1	08/22/24 17:45	8/19/24	
Fluoranthene	ND U	10	1.5	1	08/22/24 17:45	8/19/24	
Fluorene	ND U	10	1.3	1	08/22/24 17:45	8/19/24	
Hexachlorobutadiene	ND U	10	2.2	1	08/22/24 17:45	8/19/24	
Hexachlorocyclopentadiene	ND U	10	2.2	1	08/22/24 17:45	8/19/24	
Hexachloroethane	ND U	10	1.1	1	08/22/24 17:45	8/19/24	
Hexachlorophene	ND U	500	-	1	08/22/24 17:45	8/19/24	
Hexachloropropene	ND U	10	1.0	1	08/22/24 17:45	8/19/24	
Isodrin	ND U	10	1.5	1	08/22/24 17:45	8/19/24	
Isophorone	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
Isosafrole	ND U	10	1.7	1	08/22/24 17:45	8/19/24	
Methapyrilene	ND U	50	44	1	08/22/24 17:45	8/19/24	
Methyl Methanesulfonate	ND U	10	2.4	1	08/22/24 17:45	8/19/24	
Methyl Parathion	ND U	10	3.5	1	08/22/24 17:45	8/19/24	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140833A 300-001-GSV	**Units:**	ug/L
Lab Code:	R2407792-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
N-Nitrosodi-n-propylamine	ND U	10	1.2	1	08/22/24 17:45	8/19/24	
N-Nitrosodiethylamine	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
N-Nitrosodimethylamine	**29**	10	1.0	1	08/22/24 17:45	8/19/24	
N-Nitrosodiphenylamine	ND U	10	6.3	1	08/22/24 17:45	8/19/24	
N-Nitrosomethylethylamine	ND U	10	2.6	1	08/22/24 17:45	8/19/24	
N-Nitrosomorpholine	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
N-Nitrosopiperidine	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
N-Nitrosopyrrolidine	ND U	10	1.0	1	08/22/24 17:45	8/19/24	
Naphthalene	ND U	10	1.2	1	08/22/24 17:45	8/19/24	
Nitrobenzene	ND U	10	1.5	1	08/22/24 17:45	8/19/24	
O,O,O-Triethyl Phosphorothioate	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
Ethyl Parathion	ND U	10	3.5	1	08/22/24 17:45	8/19/24	
Pentachlorobenzene	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
Pentachloroethane	ND U	10	1.2	1	08/22/24 17:45	8/19/24	
Pentachloronitrobenzene (PCNB)	ND U	10	1.5	1	08/22/24 17:45	8/19/24	
Phenacetin	ND U	10	1.5	1	08/22/24 17:45	8/19/24	
Phenanthrene	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
Phenol	ND U	10	1.0	1	08/22/24 17:45	8/19/24	
Phorate	ND U	10	1.4	1	08/22/24 17:45	8/19/24	
Pronamide	ND U	10	1.8	1	08/22/24 17:45	8/19/24	
Pyrene	ND U	10	1.5	1	08/22/24 17:45	8/19/24	
Pyridine	ND U	10	1.0	1	08/22/24 17:45	8/19/24	
Safrole	ND U	10	1.3	1	08/22/24 17:45	8/19/24	
Sulfotep	ND U	10	1.3	1	08/22/24 17:45	8/19/24	
Thionazin	ND U	10	1.6	1	08/22/24 17:45	8/19/24	
o-Toluidine	ND U	10	3.0	1	08/22/24 17:45	8/19/24	
p-Dimethylaminoazobenzene	ND U	10	3.2	1	08/22/24 17:45	8/19/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	100	31 - 133	08/22/24 17:45	
2-Fluorobiphenyl	73	25 - 99	08/22/24 17:45	
2-Fluorophenol	52	15 - 72	08/22/24 17:45	
Nitrobenzene-d5	73	22 - 104	08/22/24 17:45	
Phenol-d6	37	10 - 55	08/22/24 17:45	
p-Terphenyl-d14	71	10 - 143	08/22/24 17:45	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	unknown	2.25	4.6	J

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140833A 300-001-GSV	**Units:**	ug/L
Lab Code:	R2407792-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
006086-21-1	1-Methyl-1H-1,2,4-triazole	3.17	39	JN
	unknown	3.35	36	J
000079-34-5	Ethane, 1,1,2,2-tetrachloro-	3.85	17	JN
	unknown	4.99	4.4	J

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150825A 300-002-GSV	**Units:**	ug/L
Lab Code:	R2407792-009	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
1,2,4-Trichlorobenzene	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
1,2-Dichlorobenzene	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
1,2-Diphenylhydrazine	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
1,3,5-Trinitrobenzene	ND U	10	4.4	1	08/22/24 18:09	8/19/24	
1,3-Dichlorobenzene	ND U	10	1.1	1	08/22/24 18:09	8/19/24	
1,3-Dinitrobenzene	ND U	10	1.8	1	08/22/24 18:09	8/19/24	
1,4-Dichlorobenzene	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
1,4-Naphthoquinone	ND U	50	3.6	1	08/22/24 18:09	8/19/24	
1-Methylnaphthalene	ND U	10	1.5	1	08/22/24 18:09	8/19/24	
1-Naphthylamine	ND U	10	5.2	1	08/22/24 18:09	8/19/24	
2,3,4,6-Tetrachlorophenol	ND U	10	2.7	1	08/22/24 18:09	8/19/24	
2,4,5-Trichlorophenol	ND U	10	1.1	1	08/22/24 18:09	8/19/24	
2,4,6-Trichlorophenol	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
2,4-Dichlorophenol	ND U	10	1.3	1	08/22/24 18:09	8/19/24	
2,4-Dimethylphenol	ND U	10	4.3	1	08/22/24 18:09	8/19/24	
2,4-Dinitrophenol	ND U	50	20	1	08/22/24 18:09	8/19/24	
2,4-Dinitrotoluene	ND U	10	2.4	1	08/22/24 18:09	8/19/24	
2,6-Dichlorophenol	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
2,6-Dinitrotoluene	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
2-Acetylaminofluorene	ND U	10	4.1	1	08/22/24 18:09	8/19/24	
2-Chloronaphthalene	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
2-Chlorophenol	ND U	10	1.1	1	08/22/24 18:09	8/19/24	
5-Nitro-o-toluidine	ND U	10	1.9	1	08/22/24 18:09	8/19/24	
2-Methylnaphthalene	ND U	10	1.3	1	08/22/24 18:09	8/19/24	
2-Methylphenol	ND U	10	1.0	1	08/22/24 18:09	8/19/24	
2-Naphthylamine	ND U	10	3.6	1	08/22/24 18:09	8/19/24	
2-Nitroaniline	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
2-Nitrophenol	ND U	10	1.5	1	08/22/24 18:09	8/19/24	
2-Picoline	ND U	50	13	1	08/22/24 18:09	8/19/24	
3,3'-Dichlorobenzidine	ND U	10	2.7	1	08/22/24 18:09	8/19/24	
3,3'-Dimethylbenzidine	ND U	50	18	1	08/22/24 18:09	8/19/24	
3- and 4-Methylphenol Coelution	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
3-Methylcholanthrene	ND U	10	1.5	1	08/22/24 18:09	8/19/24	
3-Nitroaniline	ND U	10	2.8	1	08/22/24 18:09	8/19/24	
4,6-Dinitro-2-methylphenol	ND U	50	8.7	1	08/22/24 18:09	8/19/24	
4-Aminobiphenyl	ND U	10	2.7	1	08/22/24 18:09	8/19/24	
4-Bromophenyl Phenyl Ether	ND U	10	1.7	1	08/22/24 18:09	8/19/24	
4-Chloro-3-methylphenol	ND U	10	1.1	1	08/22/24 18:09	8/19/24	
4-Chloroaniline	ND U	10	2.6	1	08/22/24 18:09	8/19/24	
4-Chlorophenyl Phenyl Ether	ND U	10	1.5	1	08/22/24 18:09	8/19/24	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150825A 300-002-GSV	**Units:**	ug/L
Lab Code:	R2407792-009	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4-Nitroaniline	ND	U	10	1.4	1	08/22/24 18:09	8/19/24	
4-Nitrophenol	ND	U	50	6.4	1	08/22/24 18:09	8/19/24	
4-Nitroquinoline N-Oxide	ND	U	50	17	1	08/22/24 18:09	8/19/24	
7,12-Dimethylbenz(a)anthracene	ND	U	50	16	1	08/22/24 18:09	8/19/24	
Acenaphthene	ND	U	10	1.4	1	08/22/24 18:09	8/19/24	
Acenaphthylene	ND	U	10	1.4	1	08/22/24 18:09	8/19/24	
Acetophenone	ND	U	10	1.3	1	08/22/24 18:09	8/19/24	
Aniline	ND	U	10	3.1	1	08/22/24 18:09	8/19/24	
Anthracene	ND	U	10	1.3	1	08/22/24 18:09	8/19/24	
Aramite, Total	ND	U	10	5.2	1	08/22/24 18:09	8/19/24	
Benzidine	ND	U	100	100	1	08/22/24 18:09	8/19/24	
Benzo(g,h,i)perylene	ND	U	10	2.1	1	08/22/24 18:09	8/19/24	
Benzyl Alcohol	ND	U	10	1.6	1	08/22/24 18:09	8/19/24	
2,2'-Oxybis(1-chloropropane)	ND	U	10	1.4	1	08/22/24 18:09	8/19/24	
Bis(2-chloroethoxy)methane	ND	U	10	1.9	1	08/22/24 18:09	8/19/24	
Bis(2-chloroethyl) Ether	ND	U	10	1.3	1	08/22/24 18:09	8/19/24	
Bis(2-ethylhexyl) Phthalate	**22**		10	4.3	1	08/22/24 18:09	8/19/24	
Butyl Benzyl Phthalate	ND	U	10	2.9	1	08/22/24 18:09	8/19/24	
Chlorobenzilate	ND	U	10	3.4	1	08/22/24 18:09	8/19/24	
Di-n-butyl Phthalate	ND	U	10	1.7	1	08/22/24 18:09	8/19/24	
Di-n-octyl Phthalate	ND	U	10	3.3	1	08/22/24 18:09	8/19/24	
Diallate	ND	U	10	2.0	1	08/22/24 18:09	8/19/24	
Dibenzofuran	ND	U	10	1.4	1	08/22/24 18:09	8/19/24	
Diethyl Phthalate	ND	U	10	1.1	1	08/22/24 18:09	8/19/24	
Dimethoate	ND	U	10	1.8	1	08/22/24 18:09	8/19/24	
Dimethyl Phthalate	ND	U	10	1.3	1	08/22/24 18:09	8/19/24	
Disulfoton	ND	U	10	3.0	1	08/22/24 18:09	8/19/24	
Ethyl Methanesulfonate	ND	U	10	1.1	1	08/22/24 18:09	8/19/24	
Fluoranthene	ND	U	10	1.5	1	08/22/24 18:09	8/19/24	
Fluorene	ND	U	10	1.3	1	08/22/24 18:09	8/19/24	
Hexachlorobutadiene	ND	U	10	2.2	1	08/22/24 18:09	8/19/24	
Hexachlorocyclopentadiene	ND	U	10	2.2	1	08/22/24 18:09	8/19/24	
Hexachloroethane	ND	U	10	1.1	1	08/22/24 18:09	8/19/24	
Hexachlorophene	ND	U	500	-	1	08/22/24 18:09	8/19/24	
Hexachloropropene	ND	U	10	1.0	1	08/22/24 18:09	8/19/24	
Isodrin	ND	U	10	1.5	1	08/22/24 18:09	8/19/24	
Isophorone	ND	U	10	1.4	1	08/22/24 18:09	8/19/24	
Isosafrole	ND	U	10	1.7	1	08/22/24 18:09	8/19/24	
Methapyrilene	ND	U	50	44	1	08/22/24 18:09	8/19/24	
Methyl Methanesulfonate	ND	U	10	2.4	1	08/22/24 18:09	8/19/24	
Methyl Parathion	ND	U	10	3.5	1	08/22/24 18:09	8/19/24	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150825A 300-002-GSV	**Units:**	ug/L
Lab Code:	R2407792-009	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
N-Nitrosodi-n-propylamine	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
N-Nitrosodiethylamine	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
N-Nitrosodimethylamine	ND U	10	1.0	1	08/22/24 18:09	8/19/24	
N-Nitrosodiphenylamine	ND U	10	6.3	1	08/22/24 18:09	8/19/24	
N-Nitrosomethylethylamine	ND U	10	2.6	1	08/22/24 18:09	8/19/24	
N-Nitrosomorpholine	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
N-Nitrosopiperidine	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
N-Nitrosopyrrolidine	ND U	10	1.0	1	08/22/24 18:09	8/19/24	
Naphthalene	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
Nitrobenzene	ND U	10	1.5	1	08/22/24 18:09	8/19/24	
O,O,O-Triethyl Phosphorothioate	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
Ethyl Parathion	ND U	10	3.5	1	08/22/24 18:09	8/19/24	
Pentachlorobenzene	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
Pentachloroethane	ND U	10	1.2	1	08/22/24 18:09	8/19/24	
Pentachloronitrobenzene (PCNB)	ND U	10	1.5	1	08/22/24 18:09	8/19/24	
Phenacetin	ND U	10	1.5	1	08/22/24 18:09	8/19/24	
Phenanthrene	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
Phenol	ND U	10	1.0	1	08/22/24 18:09	8/19/24	
Phorate	ND U	10	1.4	1	08/22/24 18:09	8/19/24	
Pronamide	ND U	10	1.8	1	08/22/24 18:09	8/19/24	
Pyrene	ND U	10	1.5	1	08/22/24 18:09	8/19/24	
Pyridine	ND U	10	1.0	1	08/22/24 18:09	8/19/24	
Safrole	ND U	10	1.3	1	08/22/24 18:09	8/19/24	
Sulfotep	ND U	10	1.3	1	08/22/24 18:09	8/19/24	
Thionazin	ND U	10	1.6	1	08/22/24 18:09	8/19/24	
o-Toluidine	ND U	10	3.0	1	08/22/24 18:09	8/19/24	
p-Dimethylaminoazobenzene	ND U	10	3.2	1	08/22/24 18:09	8/19/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	104	31 - 133	08/22/24 18:09	
2-Fluorobiphenyl	75	25 - 99	08/22/24 18:09	
2-Fluorophenol	53	15 - 72	08/22/24 18:09	
Nitrobenzene-d5	72	22 - 104	08/22/24 18:09	
Phenol-d6	37	10 - 55	08/22/24 18:09	
p-Terphenyl-d14	69	10 - 143	08/22/24 18:09	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150825A 300-002-GSV	**Units:**	ug/L
Lab Code:	R2407792-009	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

LSC Area Percent Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8317.D
Acq On : 22 Aug 2024 05:45 pm
Operator : EDeGray
Sample : R2407792-001
Misc : 443361 HEXA/TICS
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Title : 8270 BNA ANALYSIS

Signal : TIC: D8317.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.022	125	128	142	rBV	103516	148453	3.98%	0.613%
2	2.252	165	171	181	rVB	47804	64912	1.74%	0.268%
3	2.364	187	192	198	rVB	23455	30102	0.81%	0.124%
4	3.102	325	330	339	rVB	27243	37974	1.02%	0.157%
5	3.166	339	342	357	rBV	383156	543914	14.57%	2.245%
6	3.348	371	376	386	rVB	480838	511078	13.69%	2.110%
7	3.444	389	394	410	rVB	364585	419732	11.24%	1.733%
8	3.776	448	456	465	rBV2	26049	42456	1.14%	0.175%
9	3.846	465	469	475	rVB	232717	231740	6.21%	0.957%
10	4.001	495	498	510	rBV	19664	34625	0.93%	0.143%
11	4.279	543	550	554	rBV	315943	311975	8.36%	1.288%
12	4.322	554	558	568	rVB	408052	400702	10.73%	1.654%
13	4.600	605	610	614	rBV	2503372	2244647	60.13%	9.266%
14	4.990	679	683	697	rBV3	32414	61136	1.64%	0.252%
15	5.108	700	705	710	rVV	299145	281895	7.55%	1.164%
16	5.787	827	832	836	rBV	3526877	3051463	81.74%	12.596%
17	6.830	1023	1027	1031	rBV	700953	560689	15.02%	2.315%
18	7.493	1147	1151	1155	rBV	4301836	3486577	93.39%	14.393%
19	8.269	1292	1296	1311	rBV	611370	539197	14.44%	2.226%
20	8.954	1420	1424	1428	rBV	4460573	3733256	100.00%	15.411%
21	10.601	1728	1732	1745	rVB	493137	517490	13.86%	2.136%
22	12.093	2003	2011	2024	rBV2	2455193	3347911	89.68%	13.820%
23	12.189	2024	2029	2034	rVB2	36821	53356	1.43%	0.220%
24	13.537	2276	2281	2290	rBV2	17764	32328	0.87%	0.133%
25	14.896	2524	2535	2559	rBV	1950107	3537161	94.75%	14.601%

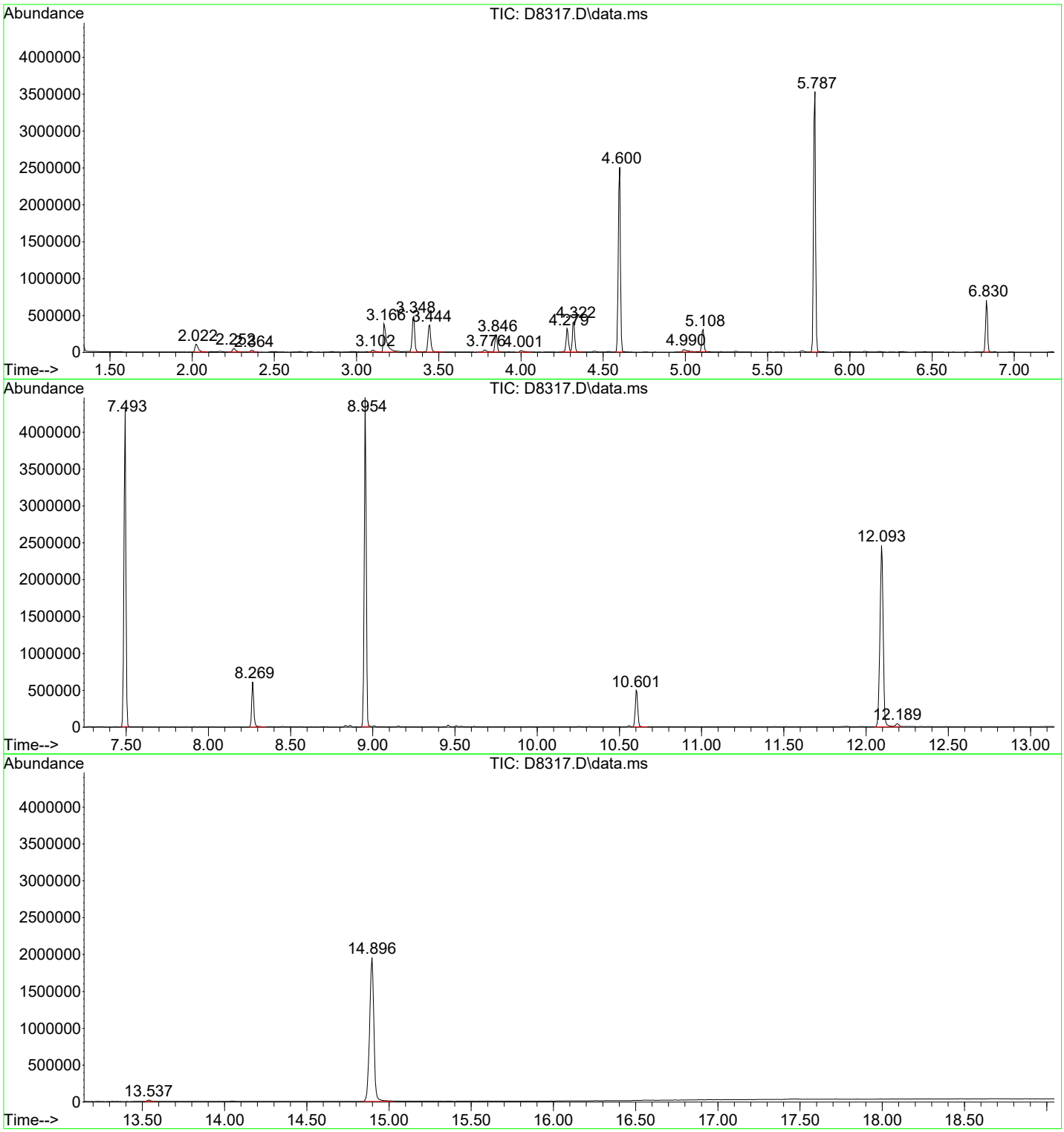
Sum of corrected areas: 24224769

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8317.D
Acq On : 22 Aug 2024 05:45 pm
Operator : EDeGray
Sample : R2407792-001
Misc : 443361 HEXA/TICS
ALS Vial : 15 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P



Library Search Compound Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8317.D
Acq On : 22 Aug 2024 05:45 pm
Operator : EDeGray
Sample : R2407792-001
Misc : 443361 HEXA/TICS
ALS Vial : 15 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

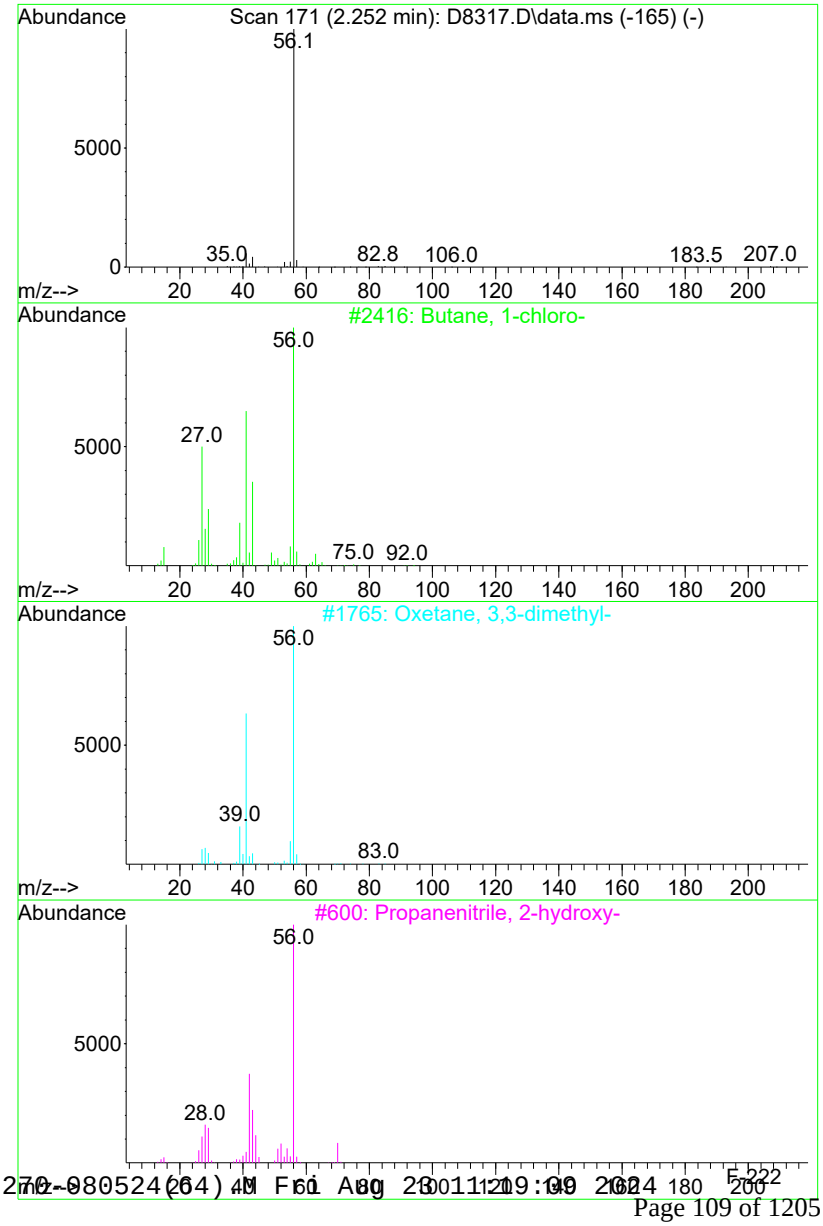
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

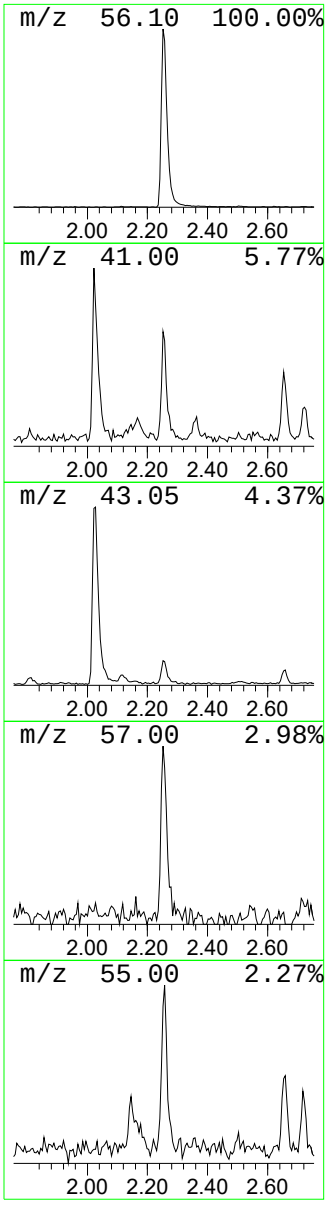
****

Peak Number 1 unknown Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.252	1.16 ppm	64912	d4-1,4-Dichlorobenzene	4.600

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 1-chloro-	92	C4H9Cl	000109-69-3	5
2	Oxetane, 3,3-dimethyl-	86	C5H10O	006921-35-3	4
3	Propanenitrile, 2-hydroxy-	71	C3H5NO	000078-97-7	4
4	2-Propenal	56	C3H4O	000107-02-8	3
5	Ethane, diazo-	56	C2H4N2	001117-96-0	3





Library Search Compound Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8317.D
Acq On : 22 Aug 2024 05:45 pm
Operator : EDeGray
Sample : R2407792-001
Misc : 443361 HEXA/TICS
ALS Vial : 15 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

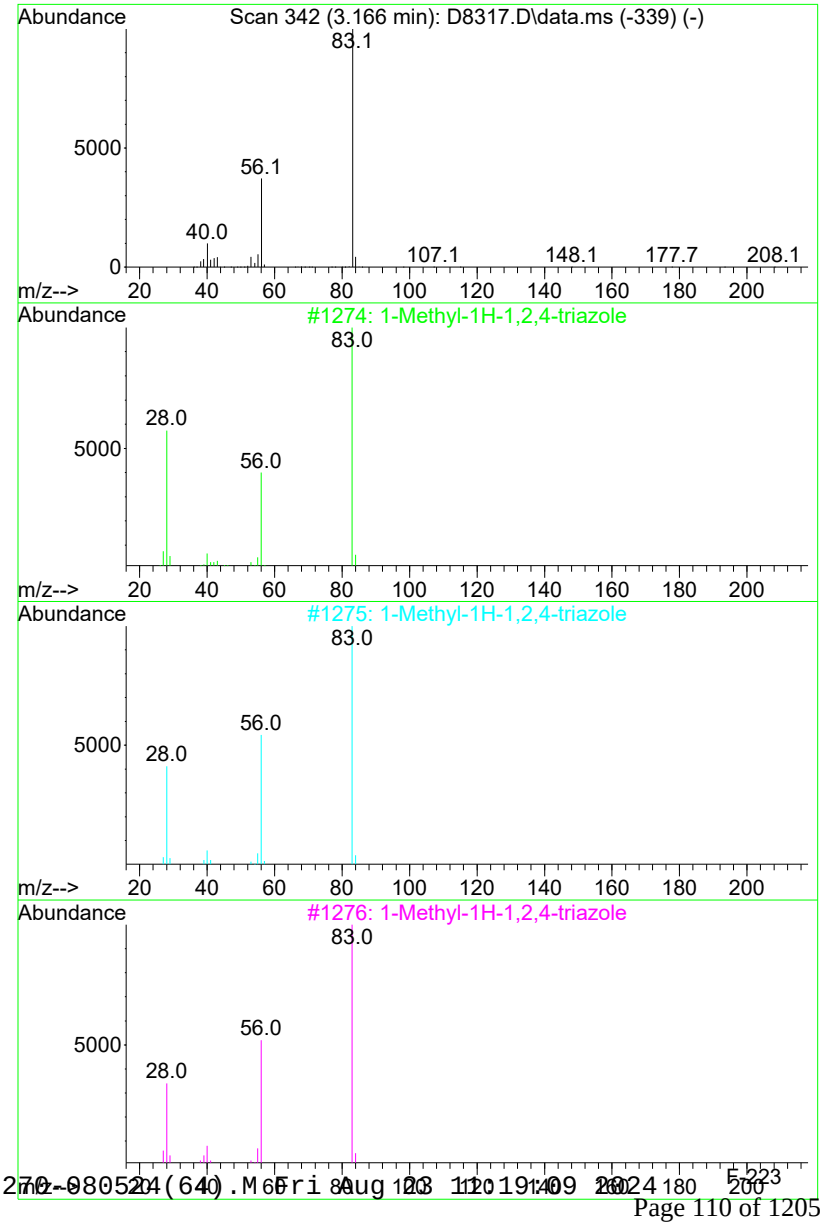
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

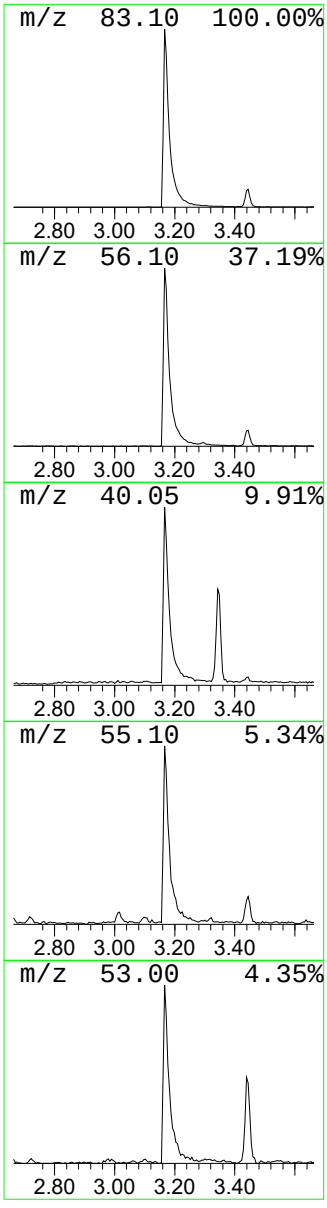
****

Peak Number 2 1-Methyl-1H-1,2,4-triazole Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.166	9.69 ppm	543914	d4-1,4-Dichlorobenzene	4.600

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Methyl-1H-1,2,4-triazole	83	C3H5N3	006086-21-1	90
2	1-Methyl-1H-1,2,4-triazole	83	C3H5N3	006086-21-1	80
3	1-Methyl-1H-1,2,4-triazole	83	C3H5N3	006086-21-1	72
4	1H-Imidazol-2-amine	83	C3H5N3	007720-39-0	64
5	4H-1,2,4-Triazole, 4-methyl-	83	C3H5N3	010570-40-8	9





Library Search Compound Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8317.D
Acq On : 22 Aug 2024 05:45 pm
Operator : EDeGray
Sample : R2407792-001
Misc : 443361 HEXA/TICS
ALS Vial : 15 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

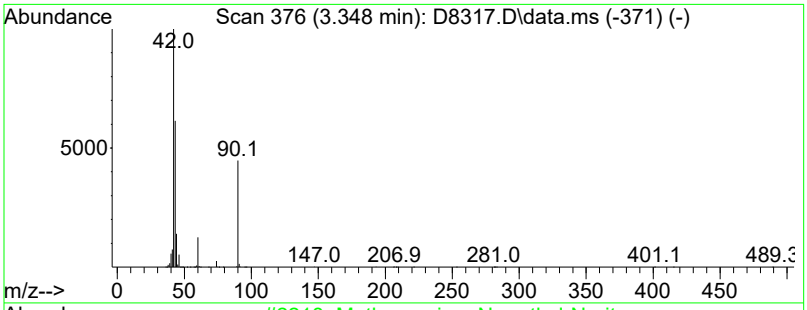
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

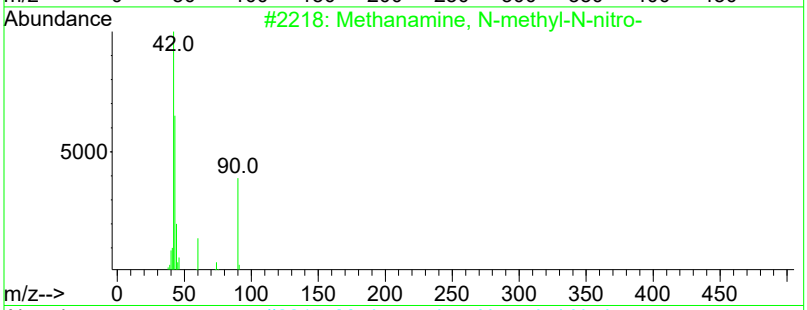
****

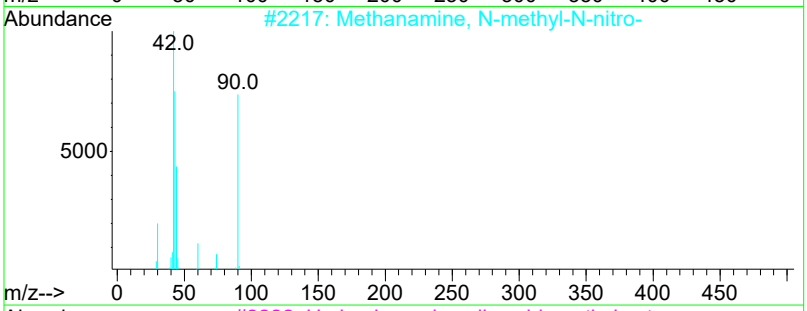
Peak Number 3 unknown Concentration Rank 2

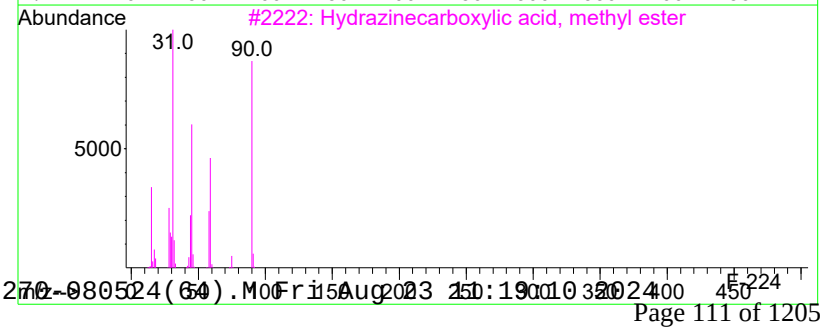
R.T.	EstConc	Area	Relative to ISTD	R.T.
3.348	9.11 ppm	511078	d4-1,4-Dichlorobenzene	4.600

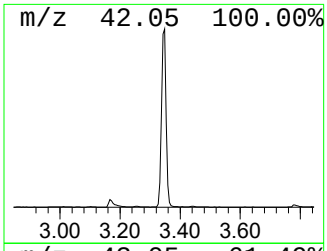
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Methanamine, N-methyl-N-nitro-	90	C2H6N2O2	004164-28-7	56
2	Methanamine, N-methyl-N-nitro-	90	C2H6N2O2	004164-28-7	38
3	Hydrazinecarboxylic acid, methyl...	90	C2H6N2O2	006294-89-9	9
4	1-Butanol	74	C4H10O	000071-36-3	4
5	Hydroxyacetic acid, hydrazide	90	C2H6N2O2	003530-14-1	4

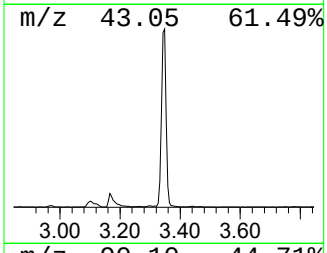


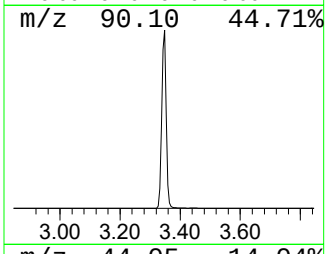


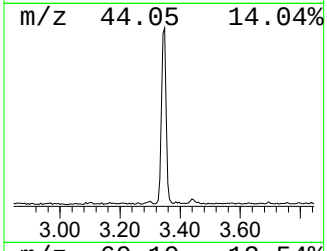


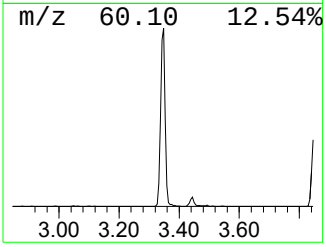












Library Search Compound Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8317.D
Acq On : 22 Aug 2024 05:45 pm
Operator : EDeGray
Sample : R2407792-001
Misc : 443361 HEXA/TICS
ALS Vial : 15 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

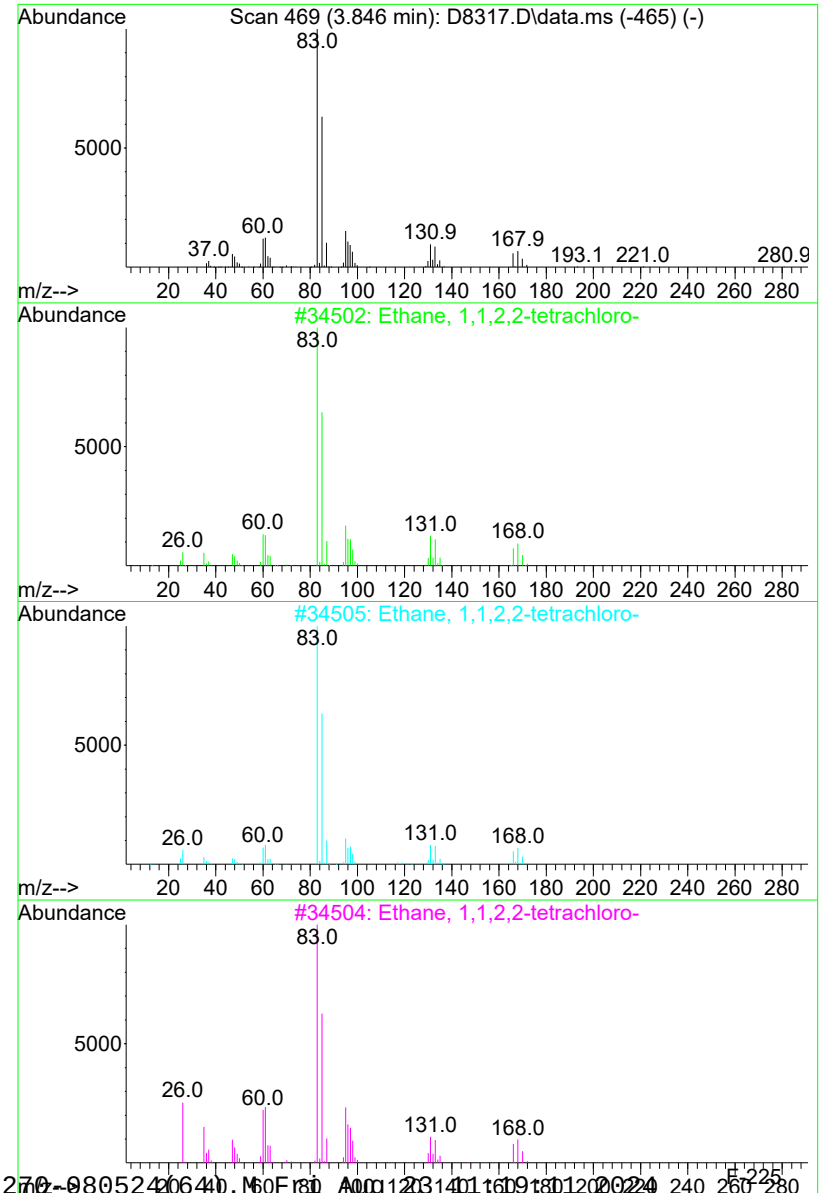
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

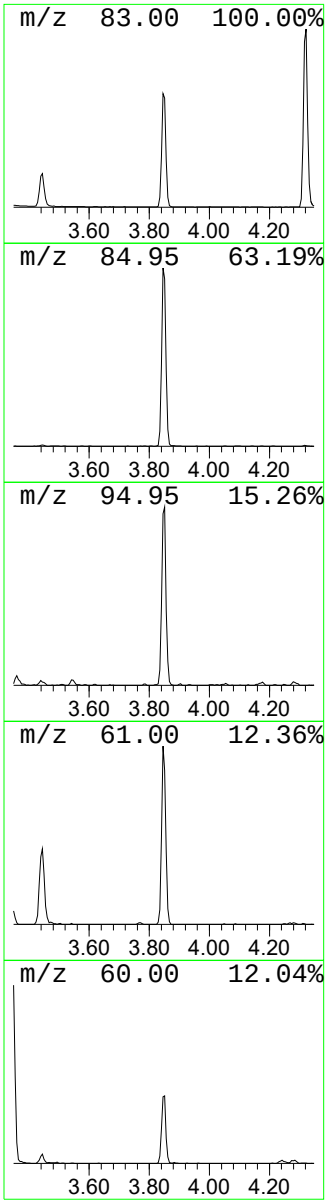
****

Peak Number 4 Ethane, 1,1,2,2-tetrachloro- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.846	4.13 ppm	231740	d4-1,4-Dichlorobenzene	4.600

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Ethane, 1,1,2,2-tetrachloro-	166	C2H2Cl4	000079-34-5	97
2	Ethane, 1,1,2,2-tetrachloro-	166	C2H2Cl4	000079-34-5	96
3	Ethane, 1,1,2,2-tetrachloro-	166	C2H2Cl4	000079-34-5	91
4	Ethane, 1,1,2-trichloro-2-fluoro-	150	C2H2Cl3F	000359-28-4	59
5	Methane, dichloronitro-	129	CHCl2NO2	007119-89-3	50





Library Search Compound Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8317.D
Acq On : 22 Aug 2024 05:45 pm
Operator : EDeGray
Sample : R2407792-001
Misc : 443361 HEXA/TICS
ALS Vial : 15 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

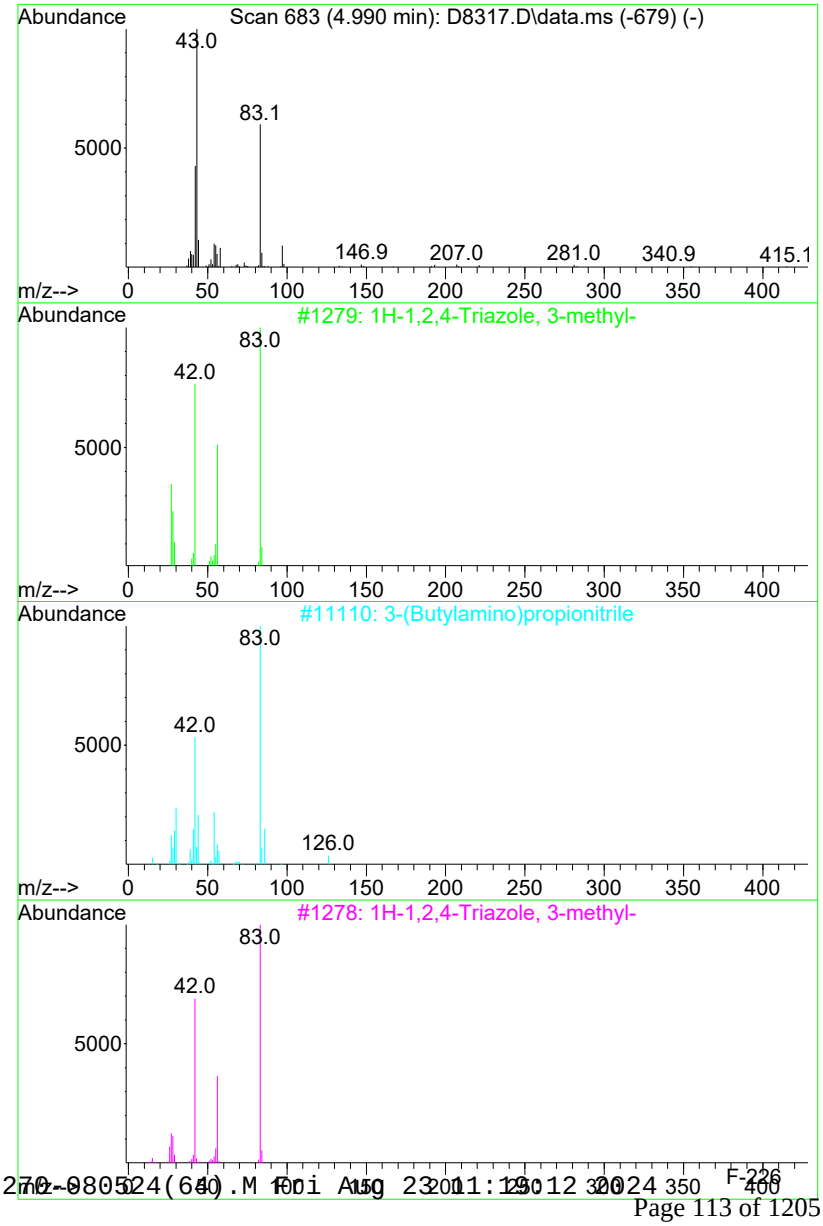
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

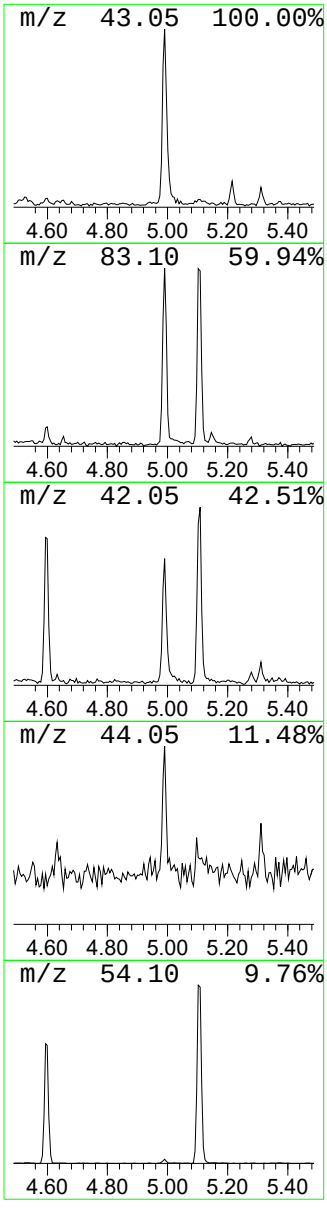
****

Peak Number 5 unknown Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.990	1.09 ppm	61136	d4-1,4-Dichlorobenzene	4.600

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-1,2,4-Triazole, 3-methyl-	83	C3H5N3	007170-01-6	47
2	3-(Butylamino)propionitrile	126	C7H14N2	000693-51-6	40
3	1H-1,2,4-Triazole, 3-methyl-	83	C3H5N3	007170-01-6	28
4	Isoxazole, 5-methyl-	83	C4H5NO	005765-44-6	25
5	1H-Imidazol-2-amine	83	C3H5N3	007720-39-0	10





Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8317.D
Acq On : 22 Aug 2024 05:45 pm
Operator : EDeGray
Sample : R2407792-001
Misc : 443361 HEXA/TICS
ALS Vial : 15 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown	2.252	1.2	ppm	64912	1	4.600	2244650	40.0
1-Methyl-1H-1,2...	3.166	9.7	ppm	543914	1	4.600	2244650	40.0
unknown	3.348	9.1	ppm	511078	1	4.600	2244650	40.0
Ethane, 1,1,2,2...	3.846	4.1	ppm	231740	1	4.600	2244650	40.0
unknown	4.990	1.1	ppm	61136	1	4.600	2244650	40.0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8317.D
Acq On : 22 Aug 2024 05:45 pm
Operator : EDeGray
Sample : R2407792-001
Misc : 443361 HEXA/TICS
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 23 09:25:00 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

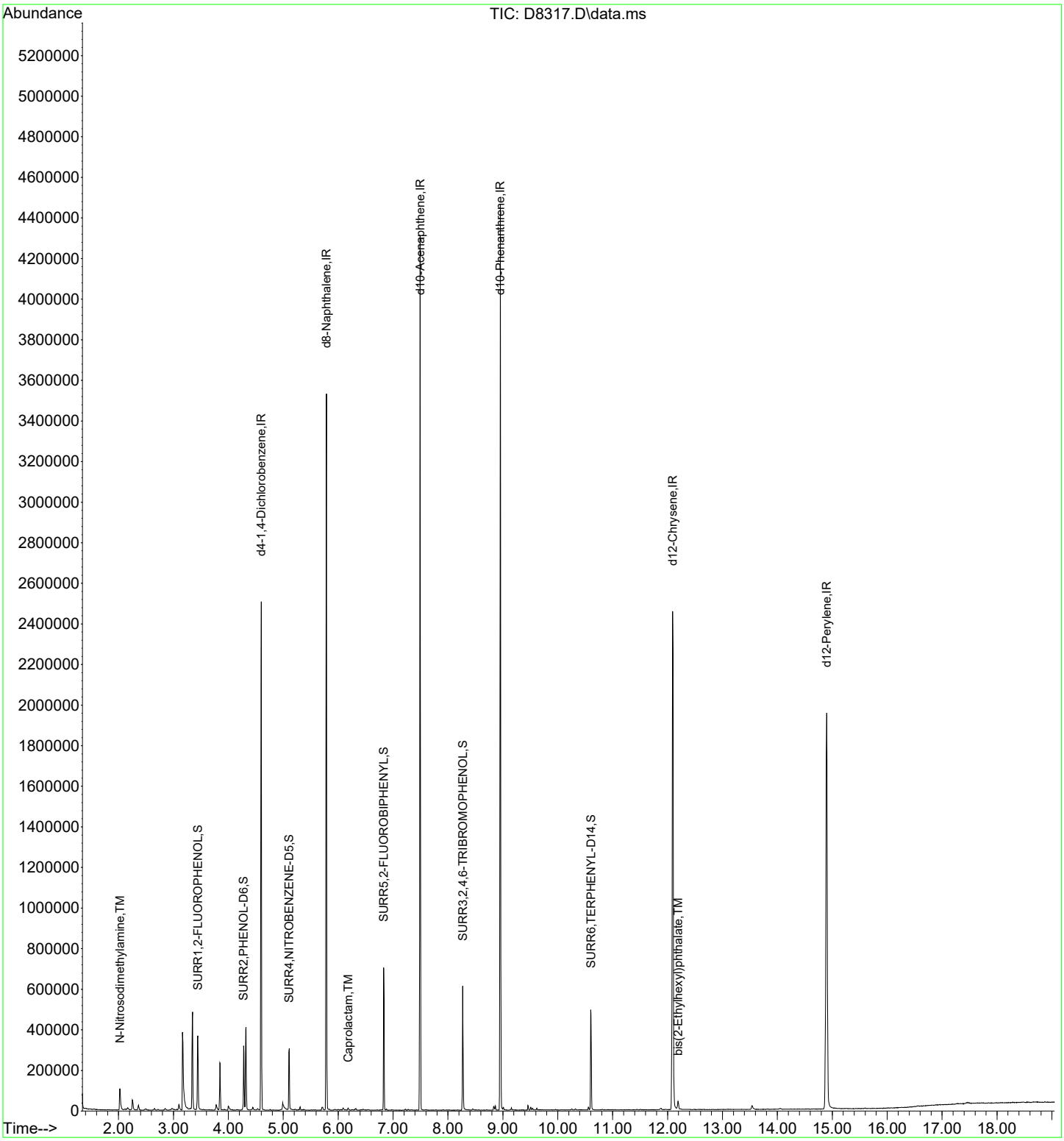
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.600	152	370933	40.00	ppm	-0.02
34) d8-Naphthalene	5.787	136	1473444	40.00	ppm	-0.02
58) d10-Acenaphthene	7.493	164	817564	40.00	ppm	-0.02
92) d10-Phenanthrene	8.954	188	1451365	40.00	ppm	-0.03
118) d12-Chrysene	12.093	240	1168693	40.00	ppm	-0.05
136) d12-Perylene	14.896	264	1242688	40.00	ppm	-0.05
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	3.444	112	122978	10.43	ppm	-0.02
Spiked Amount 20.000	Range 10 - 70		Recovery = 52.15%			
13) SURR2,PHENOL-D6	4.279	99	114509	7.46	ppm	-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery = 37.30%			
35) SURR4,NITROBENZENE-D5	5.108	82	95455	7.30	ppm	-0.02
Spiked Amount 10.000	Range 31 - 110		Recovery = 73.00%			
64) SURR5,2-FLUOROBIPHENYL	6.830	172	187972	7.28	ppm	-0.02
Spiked Amount 10.000	Range 31 - 118		Recovery = 72.80%			
89) SURR3,2,4,6-TRIBROMOPH...	8.269	330	60614	19.91	ppm	-0.03
Spiked Amount 20.000	Range 35 - 141		Recovery = 99.55%			
125) SURR6,TERPHENYL-D14	10.606	244	179707	7.13	ppm	-0.03
Spiked Amount 10.000	Range 10 - 165		Recovery = 71.30%			
Target Compounds						Qvalue
4) N-Nitrosodimethylamine	2.027	74	64995	7.330	ppm	97
53) Caprolactam	6.183	113	1616	0.376	ppm	78
135) bis(2-Ethylhexyl)phtha...	12.189	149	14231	0.531	ppm	93

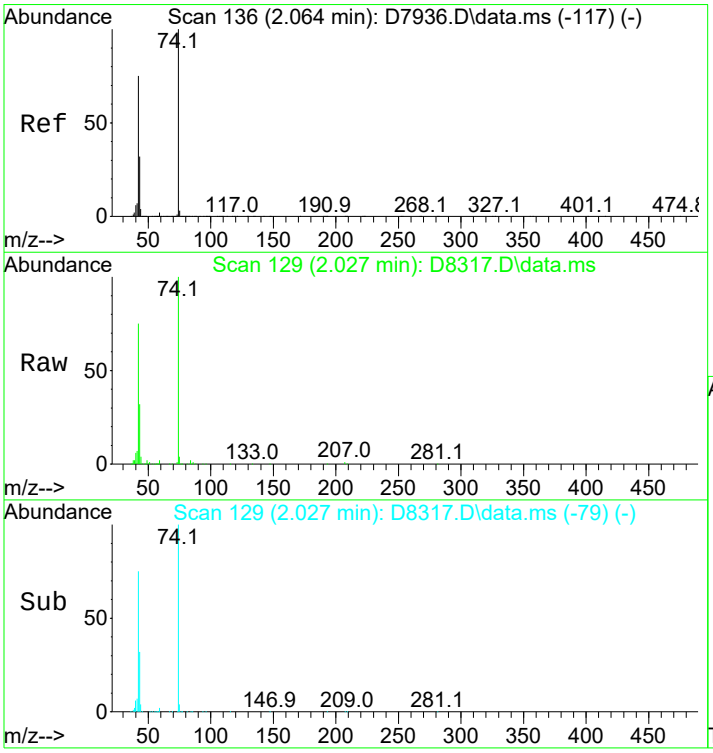
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8317.D
Acq On : 22 Aug 2024 05:45 pm
Operator : EDeGray
Sample : R2407792-001
Misc : 443361 HEXA/TICS
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 23 09:25:00 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

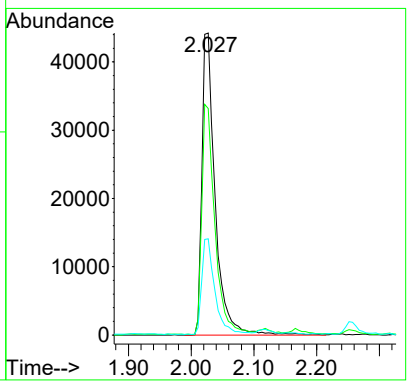


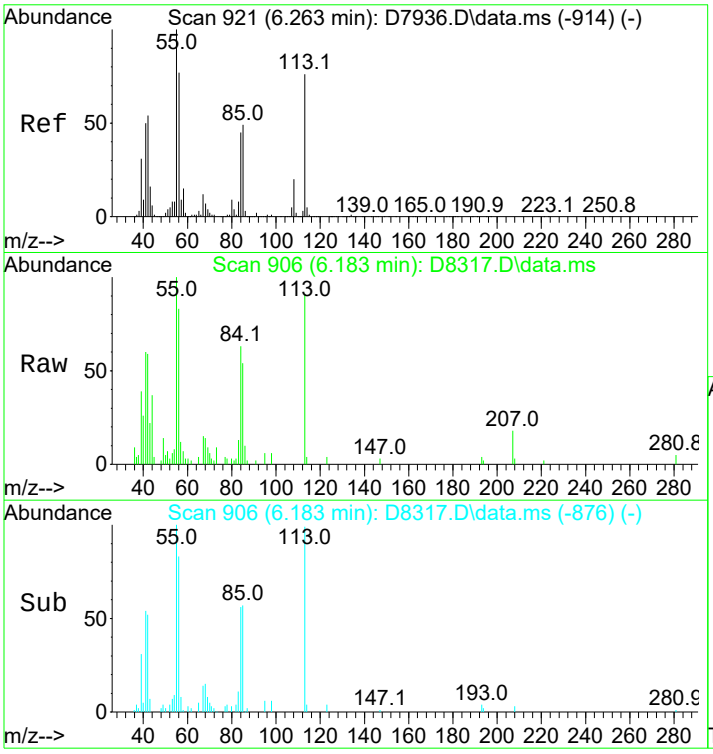


#4
N-Nitrosodimethylamine
Concen: 7.33 ppm
RT: 2.027 min Scan# 129
Delta R.T. -0.033 min
Lab File: D8317.D
Acq: 22 Aug 2024 05:45 pm

Tgt Ion: 74 Resp: 64995

Ion	Ratio	Lower	Upper
74	100		
42	74.7	47.6	107.6
43	31.5	1.8	61.8

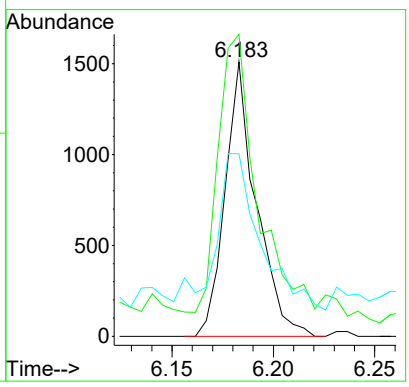


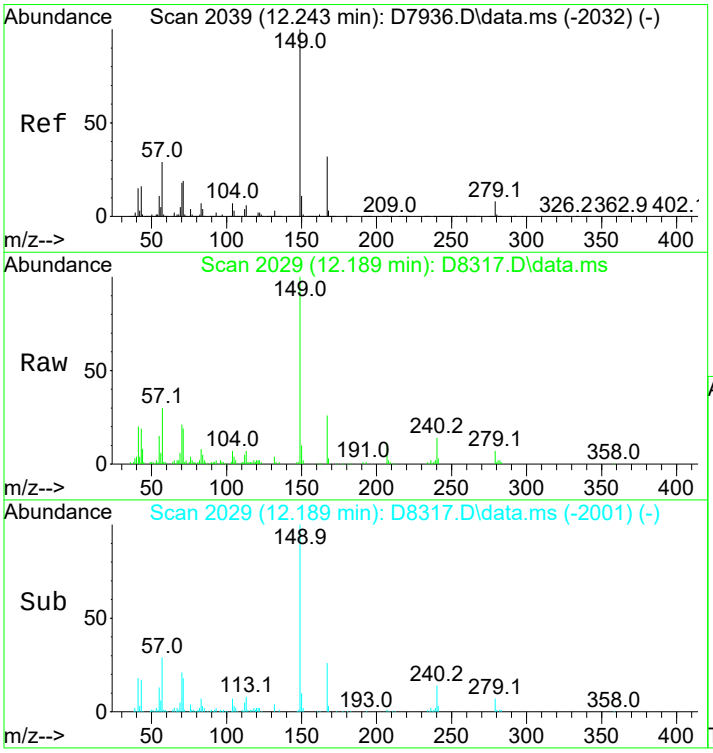


#53
Caprolactam
Concen: 0.38 ppm
RT: 6.183 min Scan# 906
Delta R.T. -0.037 min
Lab File: D8317.D
Acq: 22 Aug 2024 05:45 pm

Tgt Ion:113 Resp: 1616

Ion	Ratio	Lower	Upper
113	100		
55	101.3	92.0	170.9
41	57.1	48.9	90.7

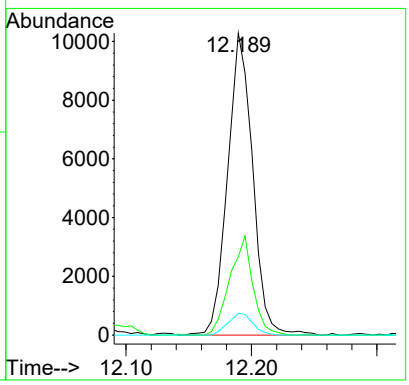




#135
bis(2-Ethylhexyl)phthalate
Concen: 0.53 ppm
RT: 12.189 min Scan# 2029
Delta R.T. -0.051 min
Lab File: D8317.D
Acq: 22 Aug 2024 05:45 pm

Tgt Ion:149 Resp: 14231

Ion	Ratio	Lower	Upper
149	100		
167	25.9	10.7	50.7
279	7.1	0.0	27.0



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8317.D
Acq On : 22 Aug 2024 05:45 pm
Operator : EDeGray
Sample : R2407792-001
Misc : 443361 HEXA/TICS
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 23 12:27:09 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration

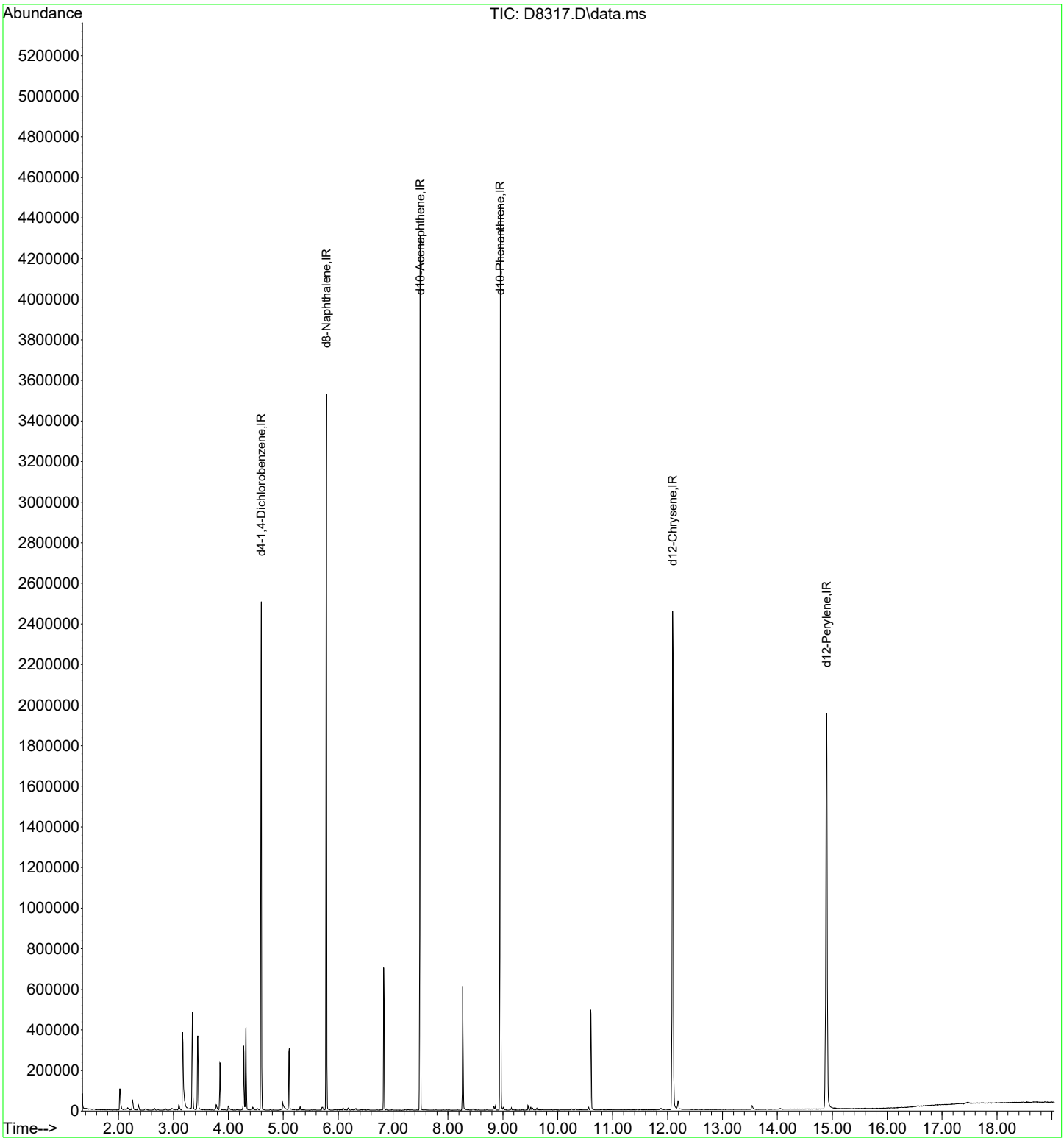
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.600	152	370933	40.00	ppm	0.00
2) d8-Naphthalene	5.787	136	1477060	40.00	ppm	0.00
3) d10-Acenaphthene	7.493	164	817564	40.00	ppm	0.00
4) d10-Phenanthrene	8.954	188	1451365	40.00	ppm	0.00
5) d12-Chrysene	12.093	240	1168693	40.00	ppm	0.00
7) d12-Perylene	14.896	264	1243564	40.00	ppm	-0.02
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st AM 08/23/24
2nd BA 08/26/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8317.D
Acq On : 22 Aug 2024 05:45 pm
Operator : EDeGray
Sample : R2407792-001
Misc : 443361 HEXA/TICS
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 23 12:27:09 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration



LSC Area Percent Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8318.D
Acq On : 22 Aug 2024 06:09 pm
Operator : EDeGray
Sample : R2407792-009
Misc : 443361 HEXA/TICS
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Title : 8270 BNA ANALYSIS

Signal : TIC: D8318.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.364	187	192	198	rBV	22579	30673	0.86%	0.141%
2	3.102	325	330	340	rVB	25982	32942	0.93%	0.151%
3	3.439	386	393	402	rBV	370021	401725	11.29%	1.841%
4	4.279	543	550	557	rBV	305113	293650	8.25%	1.345%
5	4.600	605	610	614	rBV	2367226	2128014	59.82%	9.750%
6	5.108	697	705	710	rBV	293735	273909	7.70%	1.255%
7	5.787	827	832	836	rBV	3310311	2881014	80.98%	13.199%
8	6.830	1023	1027	1031	rBV	697273	552464	15.53%	2.531%
9	7.493	1147	1151	1155	rBV	4019308	3318842	93.29%	15.205%
10	8.269	1292	1296	1306	rBV2	604538	559669	15.73%	2.564%
11	8.954	1420	1424	1428	rBV	4309773	3557587	100.00%	16.299%
12	9.456	1513	1518	1522	rBV	29468	27198	0.76%	0.125%
13	10.601	1728	1732	1738	rBV	444158	468430	13.17%	2.146%
14	12.093	2003	2011	2023	rBV	2478359	3221570	90.55%	14.760%
15	12.190	2023	2029	2046	rVB	380725	513698	14.44%	2.354%
16	13.537	2275	2281	2294	rVB3	25210	53994	1.52%	0.247%
17	14.072	2371	2381	2390	rBV2	39950	81210	2.28%	0.372%
18	14.896	2524	2535	2552	rBV	1798042	3430191	96.42%	15.716%

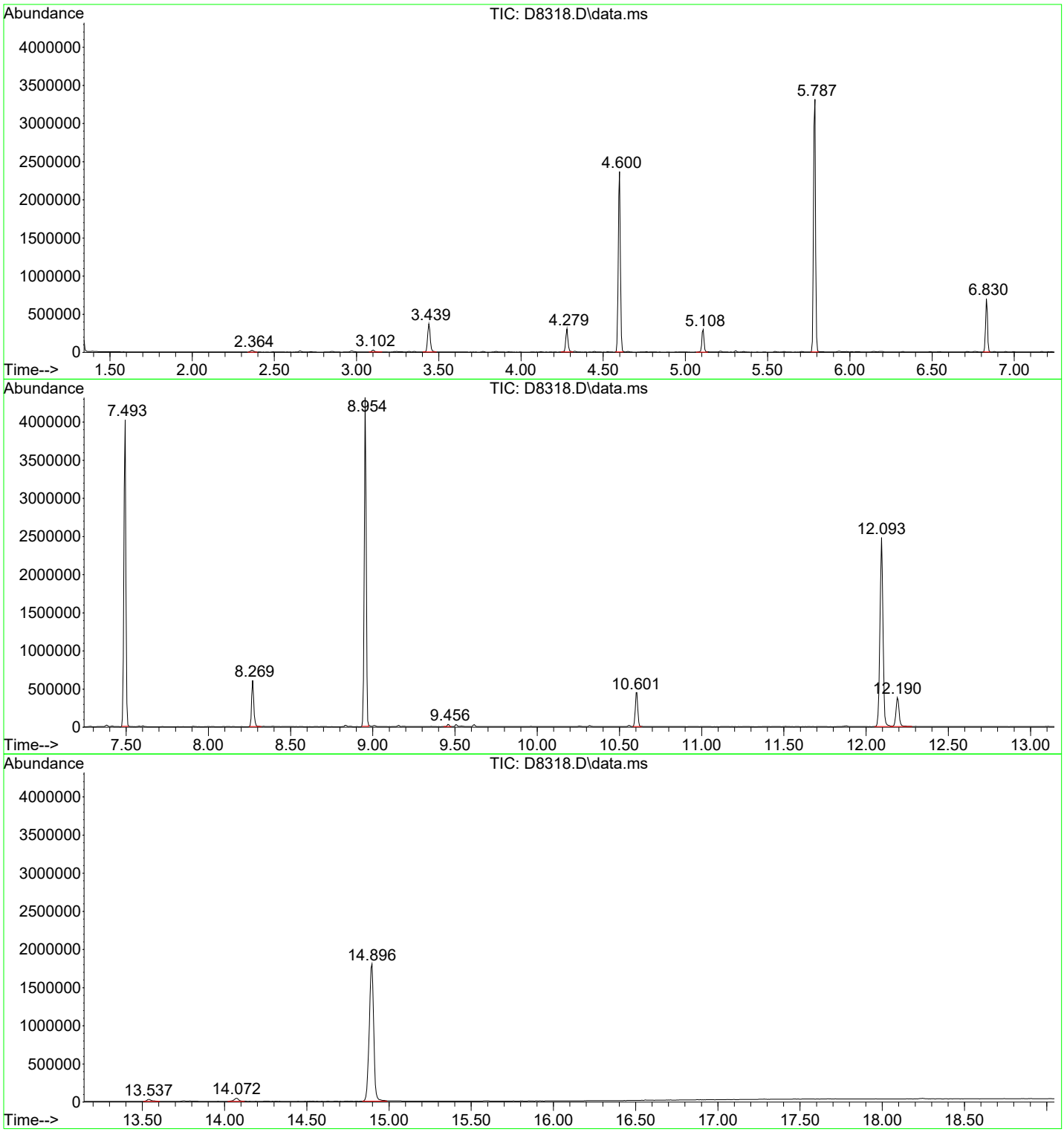
Sum of corrected areas: 21826780

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8318.D
Acq On : 22 Aug 2024 06:09 pm
Operator : EDeGray
Sample : R2407792-009
Misc : 443361 HEXA/TICS
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P



Library Search Compound Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8318.D
Acq On : 22 Aug 2024 06:09 pm
Operator : EDeGray
Sample : R2407792-009
Misc : 443361 HEXA/TICS
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8318.D
Acq On : 22 Aug 2024 06:09 pm
Operator : EDeGray
Sample : R2407792-009
Misc : 443361 HEXA/TICS
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8318.D
Acq On : 22 Aug 2024 06:09 pm
Operator : EDeGray
Sample : R2407792-009
Misc : 443361 HEXA/TICS
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 23 09:25:09 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

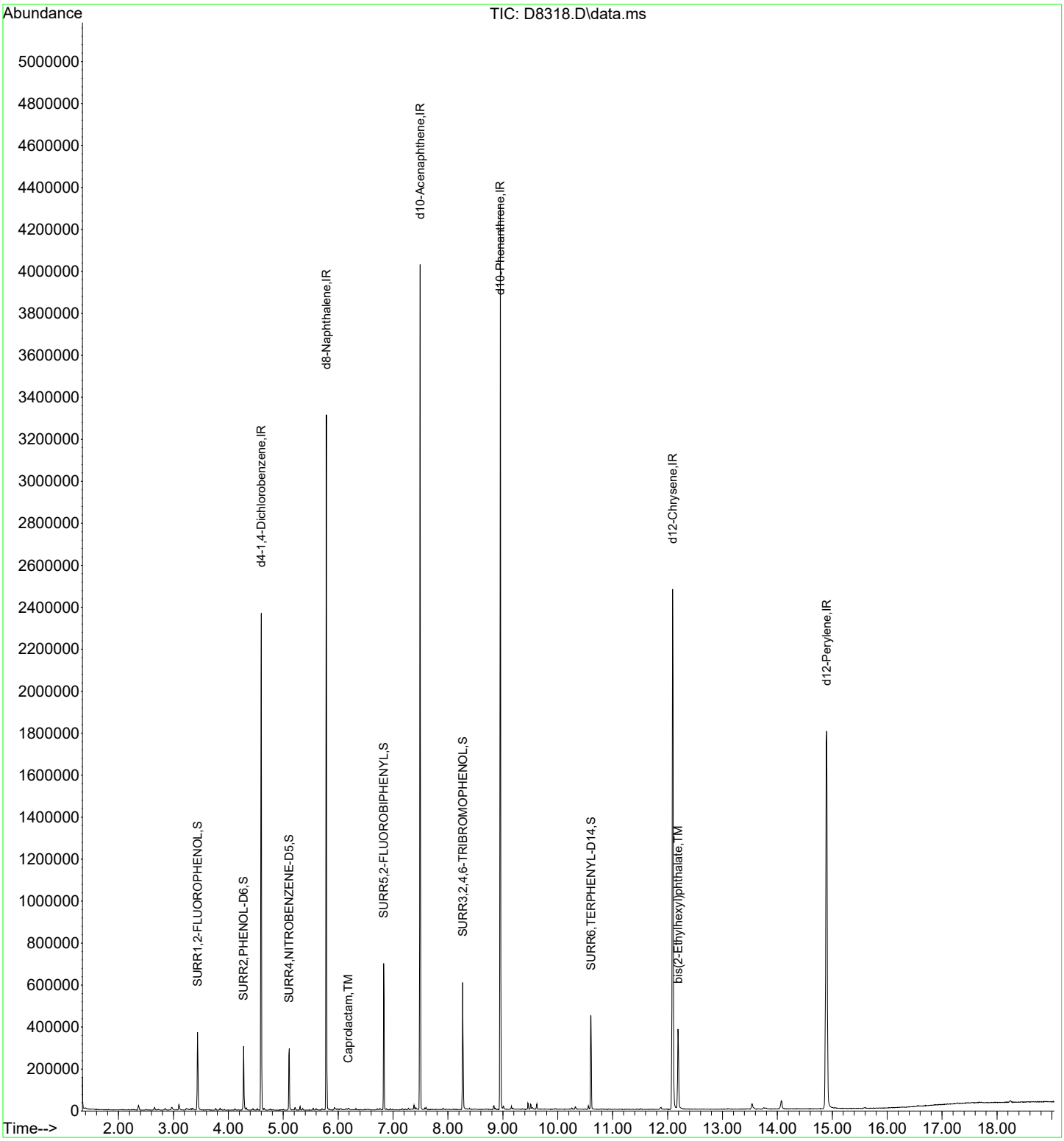
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.600	152	348480	40.00	ppm	-0.02
34) d8-Naphthalene	5.787	136	1395560	40.00	ppm	-0.02
58) d10-Acenaphthene	7.493	164	776656	40.00	ppm	-0.02
92) d10-Phenanthrene	8.954	188	1382644	40.00	ppm	-0.03
118) d12-Chrysene	12.093	240	1120933	40.00	ppm	-0.05
136) d12-Perylene	14.896	264	1213891	40.00	ppm	-0.05
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	3.439	112	117550	10.61	ppm	-0.02
Spiked Amount 20.000	Range 10 - 70		Recovery = 53.05%			
13) SURR2,PHENOL-D6	4.279	99	106001	7.35	ppm	-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery = 36.75%			
35) SURR4,NITROBENZENE-D5	5.108	82	89799	7.25	ppm	-0.02
Spiked Amount 10.000	Range 31 - 110		Recovery = 72.50%			
64) SURR5,2-FLUOROBIPHENYL	6.830	172	182909	7.46	ppm	-0.02
Spiked Amount 10.000	Range 31 - 118		Recovery = 74.60%			
89) SURR3,2,4,6-TRIBROMOPH...	8.269	330	60282	20.85	ppm	-0.03
Spiked Amount 20.000	Range 35 - 141		Recovery = 104.25%			
125) SURR6,TERPHENYL-D14	10.606	244	167819	6.94	ppm	-0.03
Spiked Amount 10.000	Range 10 - 165		Recovery = 69.40%			
Target Compounds						Qvalue
53) Caprolactam	6.183	113	1192	0.293	ppm	85
135) bis(2-Ethylhexyl)phtha...	12.190	149	143171	5.573	ppm	99

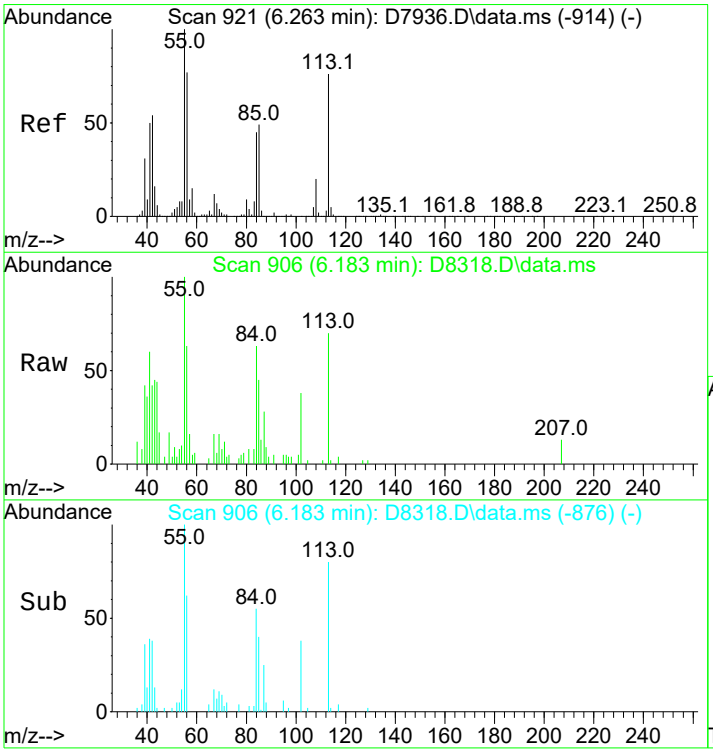
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8318.D
Acq On : 22 Aug 2024 06:09 pm
Operator : EDeGray
Sample : R2407792-009
Misc : 443361 HEXA/TICS
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 23 09:25:09 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

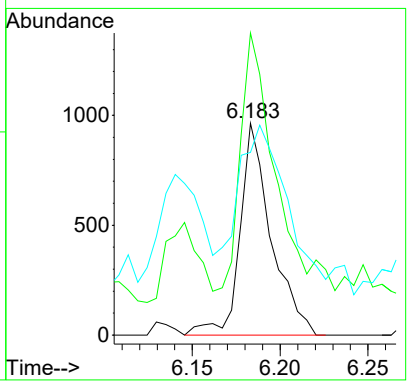


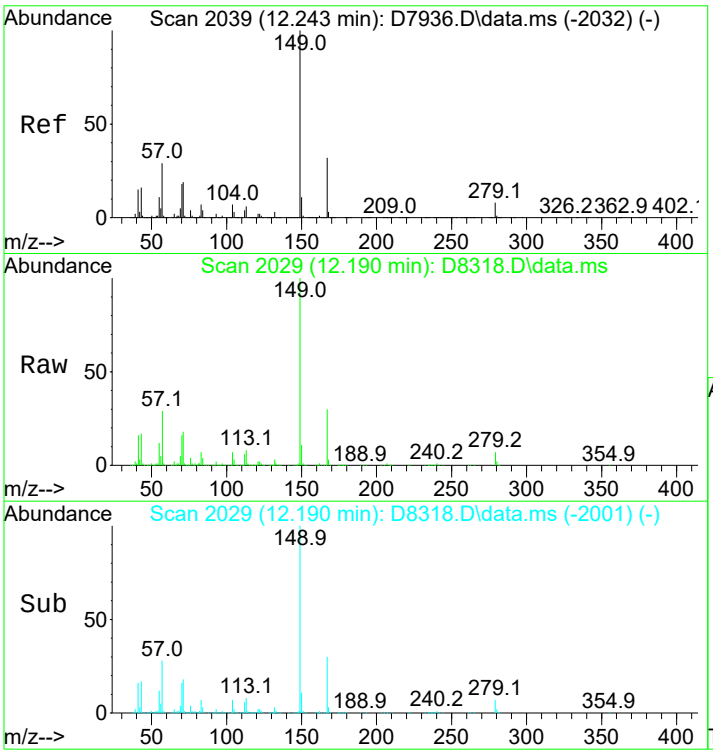


#53
Caprolactam
Concen: 0.29 ppm
RT: 6.183 min Scan# 906
Delta R.T. -0.037 min
Lab File: D8318.D
Acq: 22 Aug 2024 06:09 pm

Tgt Ion:113 Resp: 1192

Ion	Ratio	Lower	Upper
113	100		
55	111.7	92.0	170.9
41	60.0	48.9	90.7

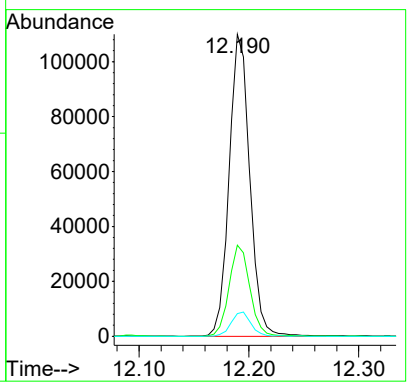




#135
bis(2-Ethylhexyl)phthalate
Concen: 5.57 ppm
RT: 12.190 min Scan# 2029
Delta R.T. -0.050 min
Lab File: D8318.D
Acq: 22 Aug 2024 06:09 pm

Tgt Ion:149 Resp: 143171

Ion	Ratio	Lower	Upper
149	100		
167	30.2	10.7	50.7
279	7.5	0.0	27.0



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8318.D
Acq On : 22 Aug 2024 06:09 pm
Operator : EDeGray
Sample : R2407792-009
Misc : 443361 HEXA/TICS
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 23 12:27:11 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration

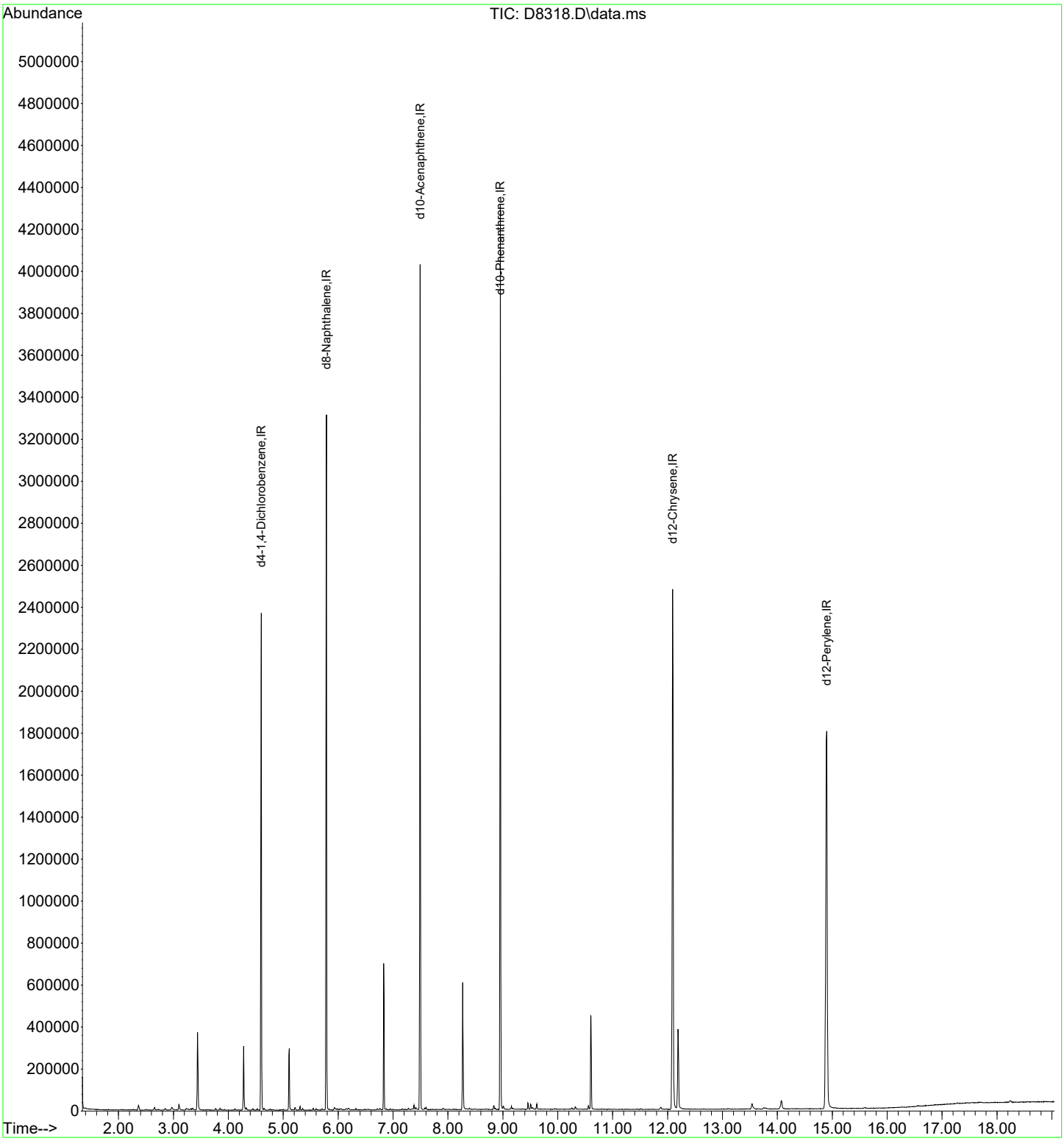
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.600	152	348480	40.00	ppm	0.00
2) d8-Naphthalene	5.787	136	1399818	40.00	ppm	0.00
3) d10-Acenaphthene	7.493	164	776656	40.00	ppm	0.00
4) d10-Phenanthrene	8.954	188	1382644	40.00	ppm	0.00
5) d12-Chrysene	12.093	240	1120933	40.00	ppm	0.00
7) d12-Perylene	14.896	264	1214078	40.00	ppm	-0.02
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st AM 08/23/24
2nd BA 08/26/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8318.D
Acq On : 22 Aug 2024 06:09 pm
Operator : EDeGray
Sample : R2407792-009
Misc : 443361 HEXA/TICS
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 23 12:27:11 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration



LSC Area Percent Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8305.D
Acq On : 22 Aug 2024 11:58 am
Operator : EDeGray
Sample : RQ2410083-01
Misc : 443361
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Title : 8270 BNA ANALYSIS

Signal : TIC: D8305.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.364	186	192	202	rVB	22181	31265	0.90%	0.148%
2	2.482	209	214	221	rVB	25596	35035	1.01%	0.166%
3	3.102	325	330	339	rVB	45010	59292	1.71%	0.281%
4	3.445	389	394	400	rBV	307084	335465	9.68%	1.588%
5	3.846	465	469	474	rBV	560253	522146	15.07%	2.472%
6	4.279	546	550	563	rVB	266161	284029	8.20%	1.345%
7	4.509	588	593	596	rBV	40571	44707	1.29%	0.212%
8	4.600	605	610	614	rBV	2381710	2090967	60.34%	9.898%
9	5.108	699	705	716	rBV	271523	258822	7.47%	1.225%
10	5.787	827	832	836	rBV	3168506	2823117	81.47%	13.364%
11	6.830	1023	1027	1031	rBV	634293	494247	14.26%	2.340%
12	7.493	1147	1151	1155	rBV	3886578	3193168	92.15%	15.115%
13	8.269	1292	1296	1311	rBV2	452256	453876	13.10%	2.149%
14	8.954	1420	1424	1428	rBV	4126751	3465334	100.00%	16.404%
15	9.462	1515	1519	1522	rBV	30251	26967	0.78%	0.128%
16	10.606	1728	1733	1741	rBV	543874	554473	16.00%	2.625%
17	12.093	2003	2011	2032	rBV2	2302924	3164142	91.31%	14.978%
18	13.537	2275	2281	2286	rBV2	16357	28898	0.83%	0.137%
19	14.896	2525	2535	2554	rBV2	1770325	3259285	94.05%	15.428%

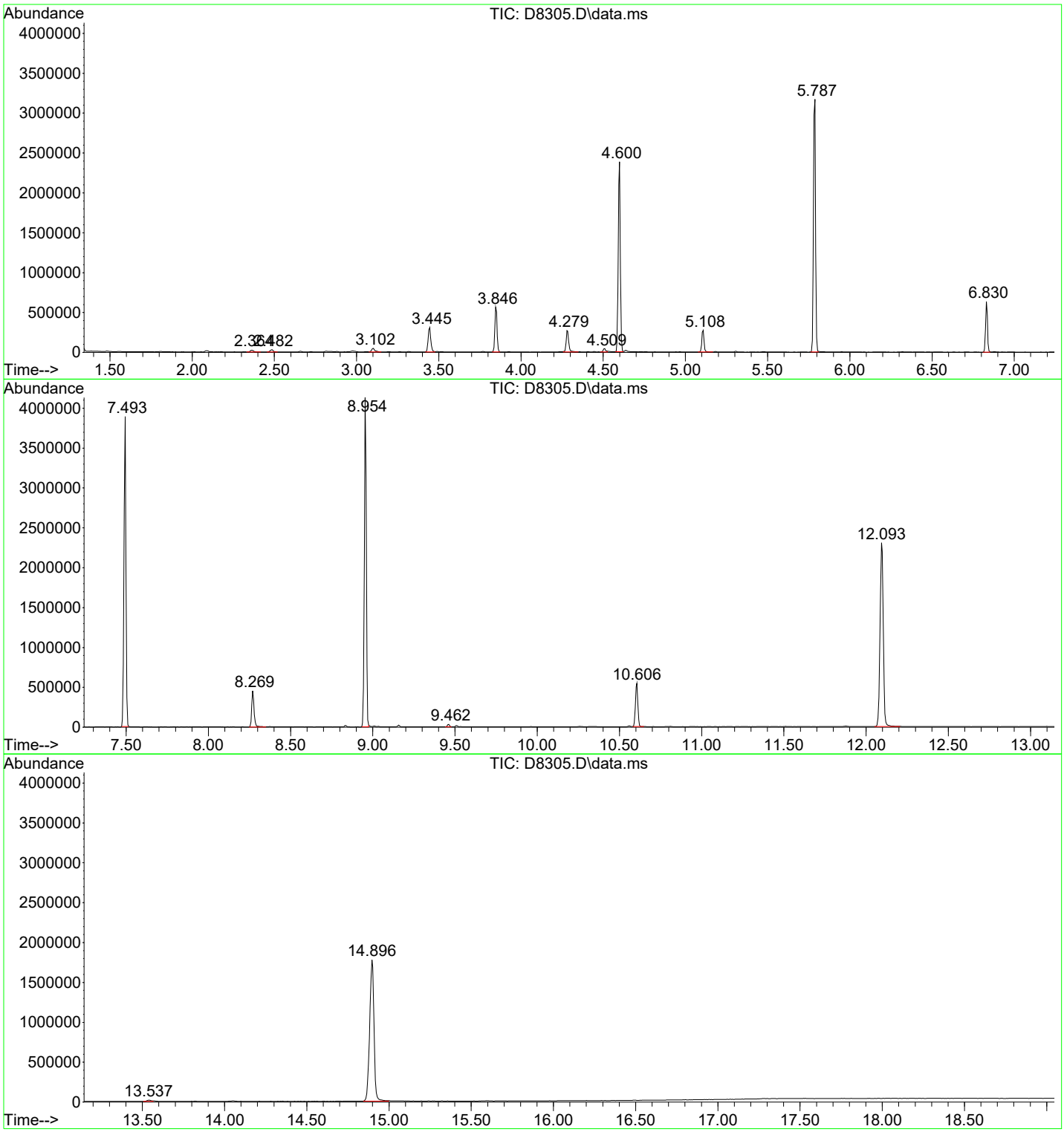
Sum of corrected areas: 21125235

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8305.D
Acq On : 22 Aug 2024 11:58 am
Operator : EDeGray
Sample : RQ2410083-01
Misc : 443361
ALS Vial : 5 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P



Library Search Compound Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8305.D
Acq On : 22 Aug 2024 11:58 am
Operator : EDeGray
Sample : RQ2410083-01
Misc : 443361
ALS Vial : 5 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

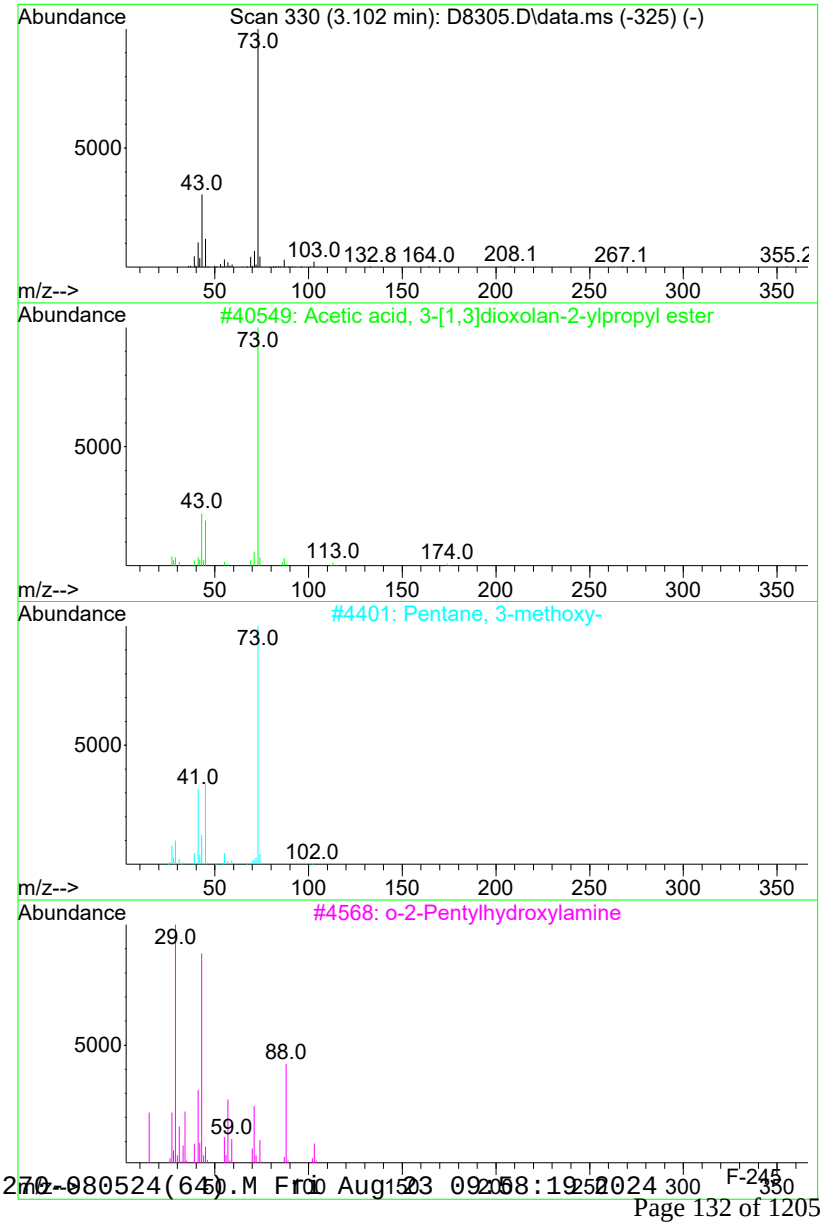
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

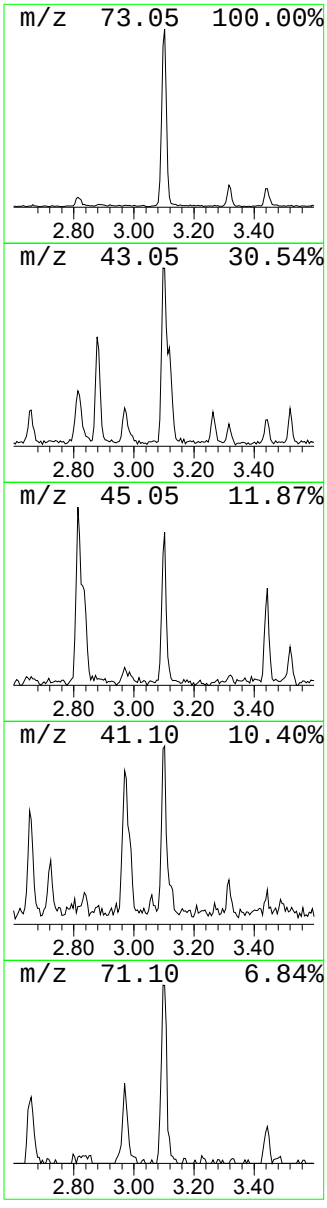
****

Peak Number 1 unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.102	1.13 ppm	59292	d4-1,4-Dichlorobenzene	4.600

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Acetic acid, 3-[1,3]dioxolan-2-y...	174	C8H14O4	1000186-02-3	40
2	Pentane, 3-methoxy-	102	C6H14O	036839-67-5	17
3	o-2-Pentylhydroxylamine	103	C5H13NO	1000322-43-4	9
4	Methane, isothiocyanato-	73	C2H3NS	000556-61-6	9
5	2-Hydroxy-2-methylbutyric acid	118	C5H10O3	003739-30-8	9





Library Search Compound Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8305.D
Acq On : 22 Aug 2024 11:58 am
Operator : EDeGray
Sample : RQ2410083-01
Misc : 443361
ALS Vial : 5 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

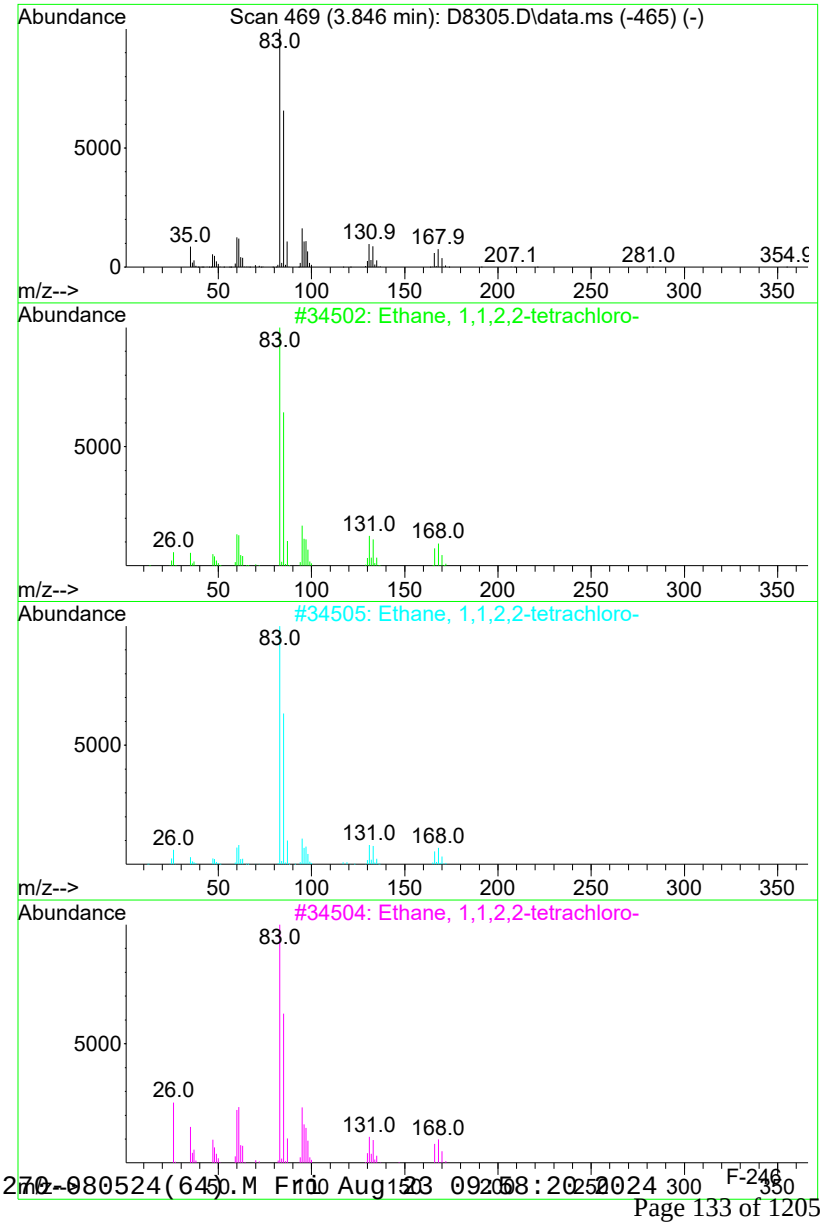
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

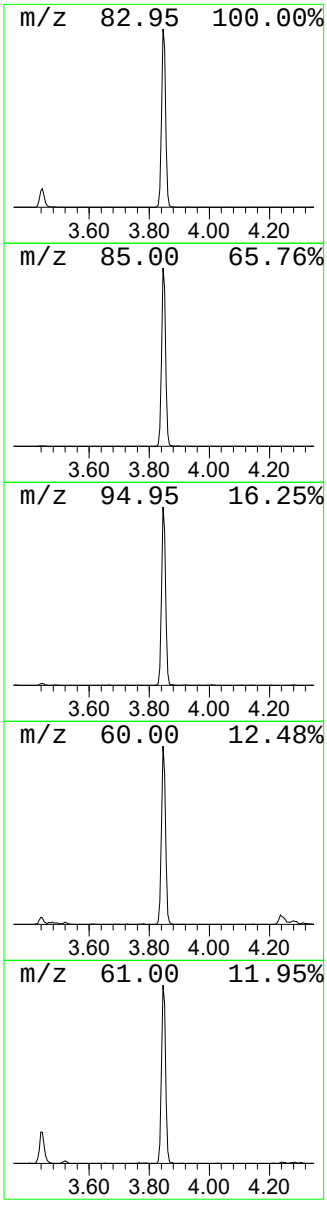
****

Peak Number 2 Ethane, 1,1,2,2-tetrachloro- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.846	9.99 ppm	522146	d4-1,4-Dichlorobenzene	4.600

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Ethane, 1,1,2,2-tetrachloro-	166	C2H2Cl4	000079-34-5	98
2	Ethane, 1,1,2,2-tetrachloro-	166	C2H2Cl4	000079-34-5	96
3	Ethane, 1,1,2,2-tetrachloro-	166	C2H2Cl4	000079-34-5	95
4	Ethane, 1,2,2-trichloro-1,1-difl...	168	C2HCl3F2	000354-21-2	68
5	Ethane, 1,1,2-trichloro-2-fluoro-	150	C2H2Cl3F	000359-28-4	64





Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8305.D
Acq On : 22 Aug 2024 11:58 am
Operator : EDeGray
Sample : RQ2410083-01
Misc : 443361
ALS Vial : 5 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown	3.102	1.1	ppm	59292	1	4.600	2090970	40.0
Ethane, 1,1,2,2...	3.846	10.0	ppm	522146	1	4.600	2090970	40.0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8305.D
Acq On : 22 Aug 2024 11:58 am
Operator : EDeGray
Sample : RQ2410083-01
Misc : 443361
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 23 09:23:49 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

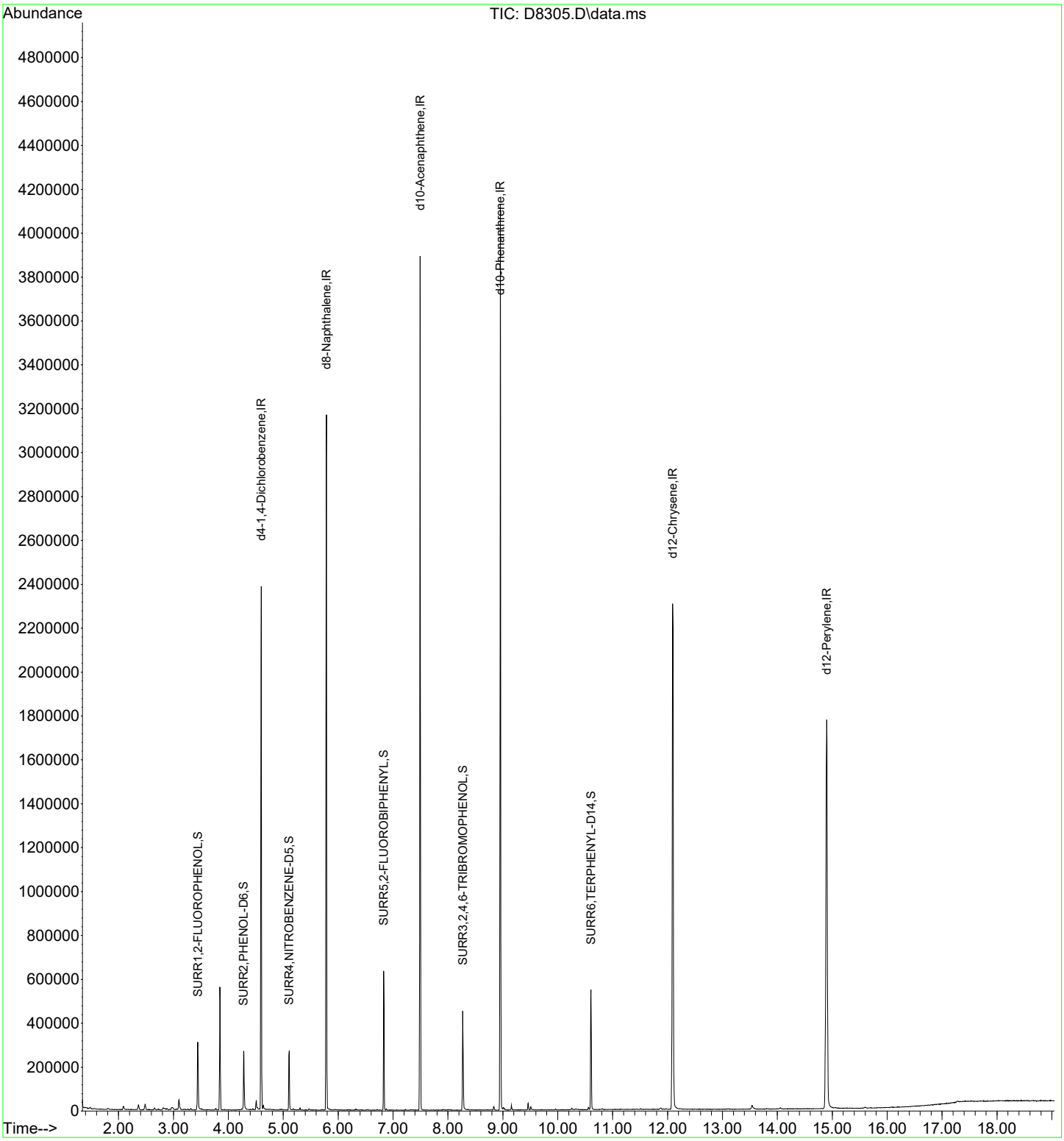
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.600	152	339735	40.00	ppm	-0.02
34) d8-Naphthalene	5.787	136	1352716	40.00	ppm	-0.02
58) d10-Acenaphthene	7.493	164	736114	40.00	ppm	-0.02
92) d10-Phenanthrene	8.954	188	1335422	40.00	ppm	-0.03
118) d12-Chrysene	12.093	240	1095181	40.00	ppm	-0.05
136) d12-Perylene	14.896	264	1148990	40.00	ppm	-0.05
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	3.445	112	100213	9.28	ppm	-0.02
Spiked Amount 20.000	Range 10 - 70		Recovery = 46.40%			
13) SURR2,PHENOL-D6	4.279	99	103068	7.33	ppm	-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery = 36.65%			
35) SURR4,NITROBENZENE-D5	5.108	82	83284	6.94	ppm	-0.02
Spiked Amount 10.000	Range 31 - 110		Recovery = 69.40%			
64) SURR5,2-FLUOROBIPHENYL	6.830	172	164803	7.09	ppm	-0.02
Spiked Amount 10.000	Range 31 - 118		Recovery = 70.90%			
89) SURR3,2,4,6-TRIBROMOPH...	8.269	330	46498	16.96	ppm	-0.03
Spiked Amount 20.000	Range 35 - 141		Recovery = 84.80%			
125) SURR6,TERPHENYL-D14	10.606	244	194573	8.23	ppm	-0.03
Spiked Amount 10.000	Range 10 - 165		Recovery = 82.30%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8305.D
Acq On : 22 Aug 2024 11:58 am
Operator : EDeGray
Sample : RQ2410083-01
Misc : 443361
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 23 09:23:49 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration



Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8274.D
Acq On : 21 Aug 2024 08:04 pm
Operator : EDeGray
Sample : RQ2410083-02
Misc : 443361
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 22 08:56:21 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.605	152	247894	40.00	ppm		-0.01
34) d8-Naphthalene	5.792	136	984484	40.00	ppm		-0.01
58) d10-Acenaphthene	7.504	164	533207	40.00	ppm		-0.01
92) d10-Phenanthrene	8.964	188	930491	40.00	ppm		-0.02
118) d12-Chrysene	12.115	240	777412	40.00	ppm		-0.02
136) d12-Perylene	14.917	264	797855	40.00	ppm		-0.03
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.450	112	77648	9.86	ppm		-0.01
Spiked Amount 20.000	Range 10 - 70		Recovery = 49.30%				
13) SURR2,PHENOL-D6	4.284	99	77467	7.55	ppm		-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery = 37.75%				
35) SURR4,NITROBENZENE-D5	5.113	82	68279	7.81	ppm		-0.01
Spiked Amount 10.000	Range 31 - 110		Recovery = 78.10%				
64) SURR5,2-FLUOROBIPHENYL	6.841	172	127782	7.59	ppm		-0.01
Spiked Amount 10.000	Range 31 - 118		Recovery = 75.90%				
89) SURR3,2,4,6-TRIBROMOPH...	8.280	330	46223	23.28	ppm		-0.02
Spiked Amount 20.000	Range 35 - 141		Recovery = 116.40%				
125) SURR6,TERPHENYL-D14	10.617	244	133728	7.97	ppm		-0.02
Spiked Amount 10.000	Range 10 - 165		Recovery = 79.70%				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.642	88	35456	10.006	ppm		98
3) Pyridine	2.081	79	75319	8.346	ppm		98
4) N-Nitrosodimethylamine	2.027	74	59896	10.108	ppm		98
6) N-Nitrosomethylamine	2.974	42	15868	4.841	ppm	#	1
11) Benzaldehyde	4.209	106	102730	16.328	ppm		99
12) Aniline	4.306	93	166703	12.898	ppm		98
14) Phenol	4.300	94	96081	8.045	ppm		73
15) bis(2-Clethyl)Ether	4.359	93	128996	14.156	ppm		98
17) 2-Chlorophenol	4.423	128	121069	14.120	ppm		95
18) 1,3-Diclbenzene	4.552	146	105674	11.580	ppm		99
19) 1,4-Dichlorobenzene	4.621	146	109797	11.610	ppm		99
20) 1,2-Diclbenzene	4.760	146	106855	12.020	ppm		98
21) Benzyl Alcohol	4.728	79	95385	14.870	ppm		97
22) 1-Methyl-2-pyrrolidinone	4.744	99	41271	7.351	ppm		93
23) 2,2'-oxybis(1-Chloropr...	4.851	45	147740	13.323	ppm		96
24) 2-Methylphenol	4.840	108	105870	13.507	ppm		96
25) 3+4-Methylphenol	4.985	108	111319	12.860	ppm		99
26) Acetophenone	4.969	105	191951	15.261	ppm		99
27) N-Nitroso-Di-n-propyla...	4.969	70	94672	13.375	ppm		96
29) N-Nitrosomorpholine	4.969	56	6724	1.165	ppm		37
30) o-Toluidine	4.969	106	15586	1.129	ppm	#	1
31) Hexachloroethane	5.070	117	39332	10.302	ppm		88
33) Alpha-terpinol	5.819	121	49190	14.287	ppm		97
36) Nitrobenzene	5.129	77	137656	15.490	ppm		97
38) Isophorone	5.354	82	245739	14.317	ppm		97
39) 2-Nitrophenol	5.429	139	64709	17.763	ppm		96
40) Benzoic Acid	5.546	105	25524	15.365	ppm		96
41) 2,4-Dimethylphenol	5.477	107	91375	10.427	ppm		95
42) bis(-2-Chloroethoxy)Me...	5.557	93	161889	15.894	ppm		99
43) 2,4-Dichlorophenol	5.669	162	105642	16.566	ppm		99
45) 1,2,4-Trichlorobenzene	5.739	180	88600	12.491	ppm		98
46) Naphthalene	5.814	128	343854	13.839	ppm		99
47) 4-Chloroaniline	5.867	127	161962	16.569	ppm		99

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8274.D
Acq On : 21 Aug 2024 08:04 pm
Operator : EDeGray
Sample : RQ2410083-02
Misc : 443361
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 22 08:56:21 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49)	Hexachlorobutadiene	5.932	225	42535	10.536	ppm		97
51)	4-Chloro-3-methylphenol	6.354	107	113826	15.869	ppm		98
53)	Caprolactam	6.188	113	15865	5.526	ppm		90
56)	2-Methylnaphthalene	6.482	142	228448	13.854	ppm		99
57)	1-Methylnaphthalene	6.579	142	214062	13.879	ppm		98
59)	Hexachlorocyclopentadiene	6.632	237	28977	10.821	ppm		99
60)	1,2,4,5-Tetrachloroben...	6.643	216	55582	8.289	ppm		99
61)	1,2,3,4-Tetrachloroben...	6.921	216	107123	16.052	ppm		99
62)	2,4,6-Trichlorophenol	6.766	196	72517	18.309	ppm		99
63)	2,4,5-Trichlorophenol	6.809	196	80048	19.171	ppm		98
66)	1,1'-Biphenyl	6.937	154	316853	15.962	ppm		100
67)	2-Chloronaphthalene	6.958	162	221271	15.243	ppm		99
68)	2-Nitroaniline	7.060	65	73631	16.742	ppm		95
70)	m-Dinitrobenzene	7.274	168	47345	21.562	ppm		90
71)	Acenaphthylene	7.365	152	372597	17.320	ppm		99
72)	Dimethyl phthalate	7.242	163	283314	16.976	ppm		99
73)	2,6-Dinitrotoluene	7.301	165	66261	19.861	ppm		77
74)	Acenaphthene	7.531	153	252931	16.644	ppm		99
75)	3-Nitroaniline	7.467	138	74325	18.692	ppm		93
76)	2,4-Dinitrophenol	7.574	184	21752	25.703	ppm		100
77)	Dibenzofuran	7.702	168	357538	17.328	ppm		97
78)	2,4-Dinitrotoluene	7.697	165	86094	19.888	ppm		97
79)	4-Nitrophenol	7.665	65	20907	6.169	ppm		89
83)	2,3,4,6-Tetrachlorophenol	7.830	232	64584	23.354	ppm		97
84)	Fluorene	8.039	166	295891	17.211	ppm		100
85)	4-Chlorophenyl-phenyle...	8.044	204	131089	16.386	ppm		94
86)	Diethylphthalate	7.932	149	268358	15.908	ppm		99
87)	4-Nitroaniline	8.066	138	75606	17.864	ppm		96
88)	5-Nitro-o-toluidine	8.098	152	1955	0.436	ppm	#	1
94)	4,6-Dinitro-2-methylph...	8.098	198	38341	22.892	ppm		98
95)	Diphenylamine	8.157	169	255792	18.663	ppm		98
96)	1,2 Diphenylhydrazine	8.194	77	302337	15.122	ppm		99
97)	N-Nitrosodiphenylamine	8.157	169	255792	18.659	ppm		98
98)	1,3,5-Trinirobenzene	8.451	213	394	1.182	ppm	#	1
102)	4-Bromophenyl-phenylether	8.526	248	75114	16.403	ppm		91
103)	Hexachlorobenzene	8.579	284	94137	18.001	ppm		95
104)	Dimethoate	8.686	87	4179	0.737	ppm	#	24
105)	Atrazine	8.691	215	39378	18.116	ppm	#	85
106)	Pentachlorophenol	8.782	266	32958	15.744	ppm		98
107)	4-Aminobiphenyl	8.782	169	4655	0.326	ppm		84
108)	Pentachloronitrobenzene	8.782	237	1030	0.550	ppm	#	1
109)	Pronamide	8.686	173	20123	2.548	ppm		71
111)	Disulfoton	8.964	88	11716	0.946	ppm		42
112)	Phenanthrene	8.986	178	444319	18.359	ppm		100
113)	Anthracene	9.039	178	426331	18.079	ppm		100
114)	Carbazole	9.205	167	422463	19.836	ppm		99
115)	Di-n-butylphthalate	9.547	149	368163	12.855	ppm		100
117)	Fluoranthene	10.184	202	421405	17.272	ppm		97
120)	Ethyl Parathion	9.692	97	557	0.975	ppm	#	19
124)	Pyrene	10.435	202	453206	17.505	ppm		100
129)	Butyl benzyl phthalate	11.269	149	141416	11.015	ppm		98
133)	Benzo(a)anthracene	12.099	228	388270	16.543	ppm		99
134)	Chrysene	12.157	228	412993	19.011	ppm		99
135)	bis(2-Ethylhexyl)phtha...	12.211	149	171739	9.639	ppm		100
137)	Di-n-octyl phthalate	13.473	149	230316	8.132	ppm		98
139)	Benzo(b)Fluoranthene	14.115	252	377347	16.785	ppm		94

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8274.D
Acq On : 21 Aug 2024 08:04 pm
Operator : EDeGray
Sample : RQ2410083-02
Misc : 443361
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 22 08:56:21 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
140) Benzo(k)fluoranthene	14.174	252	398262	18.691	ppm	99
141) Benzo(a)pyrene	14.794	252	338569	18.307	ppm	99
143) Indeno(1,2,3-cd)Pyrene	16.918	276	317465	20.168	ppm	94
144) Dibenz(a,h)anthracene	16.966	278	337124	21.161	ppm	99
145) Benzo(g,h,i)perylene	17.340	276	334565	19.571	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8274.D
Acq On : 21 Aug 2024 08:04 pm
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Misc : 443361
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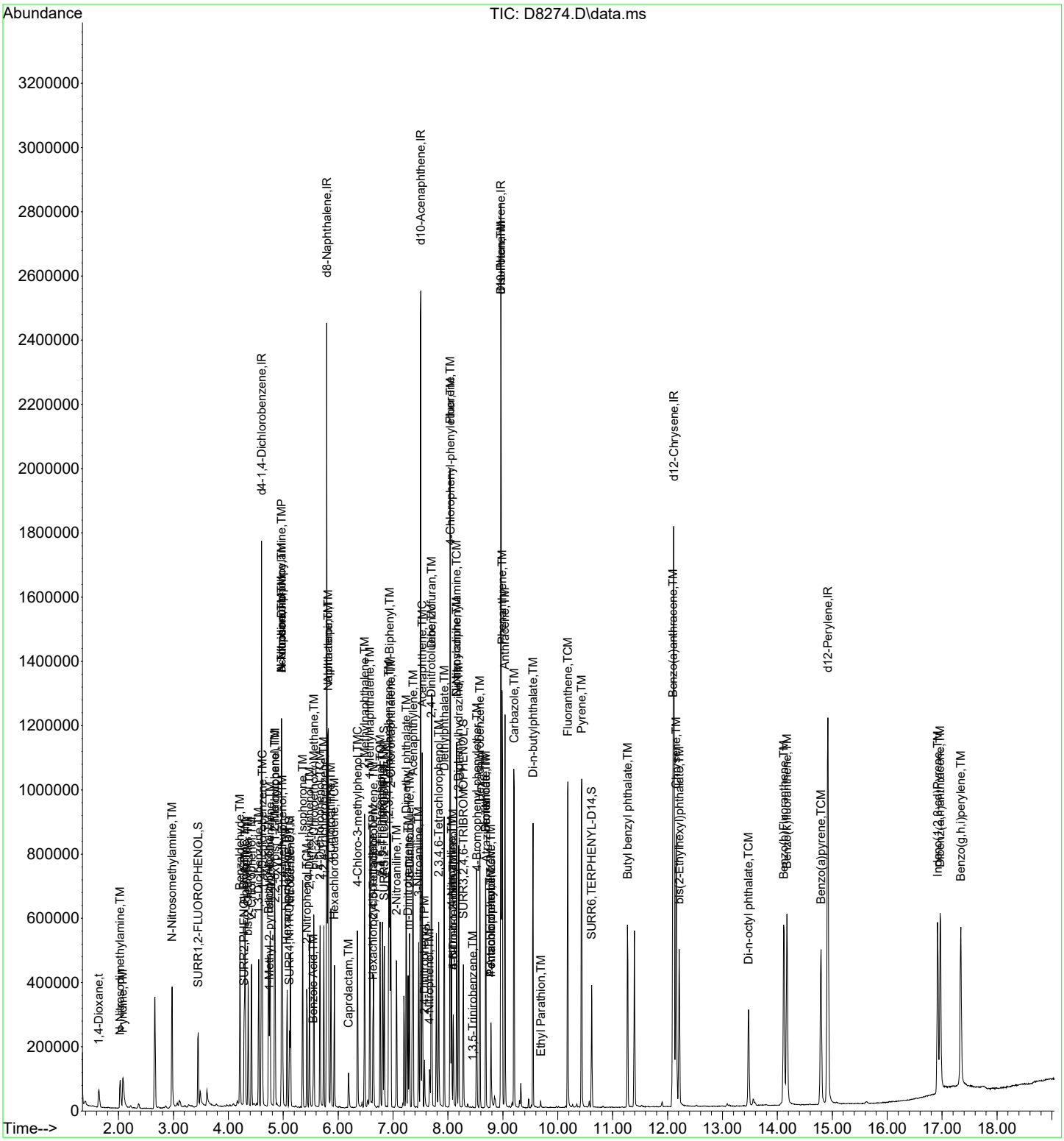
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8274.D
Acq On : 21 Aug 2024 08:04 pm
Operator : EDeGray
Sample : RQ2410083-02
Misc : 443361
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 22 11:42:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\Kep-Fam061824.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jun 25 13:50:40 2024
Response via : Initial Calibration

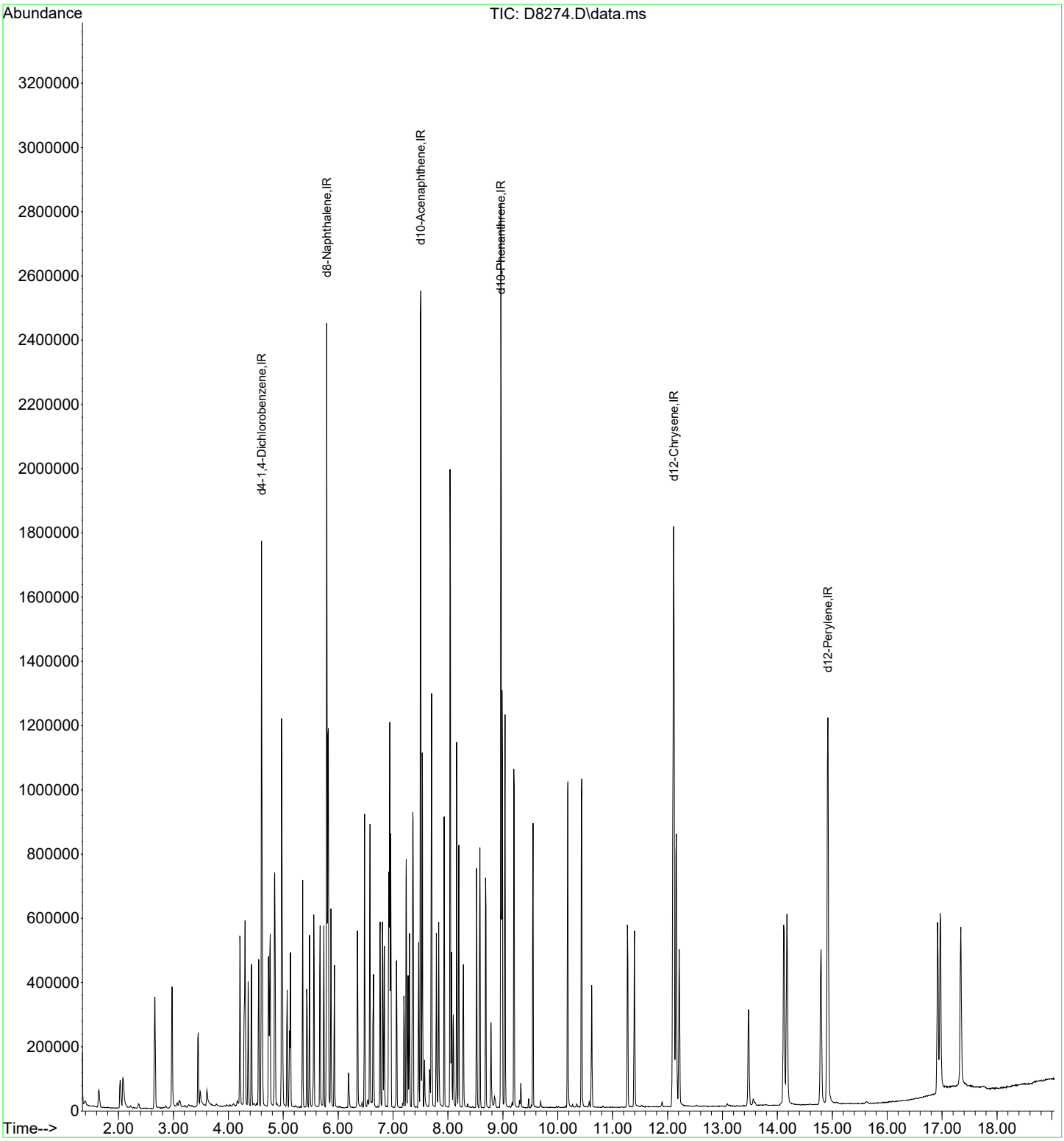
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.605	152	247894	40.00	ppm	-0.05
2) d8-Naphthalene	5.792	136	984484	40.00	ppm	-0.05
3) d10-Acenaphthene	7.504	164	533269	40.00	ppm	-0.04
4) d10-Phenanthrene	8.964	188	930491	40.00	ppm	-0.05
5) d12-Chrysene	12.115	240	777412	40.00	ppm	-0.07
8) d12-Perylene	14.917	264	797855	40.00	ppm	-0.09
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8274.D
Acq On : 21 Aug 2024 08:04 pm
Operator : EDeGray
Sample : RQ2410083-02
Misc : 443361
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 22 11:42:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\Kep-Fam061824.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jun 25 13:50:40 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8275.D
Acq On : 21 Aug 2024 08:28 pm
Operator : EDeGray
Sample : RQ2410083-03
Misc : 443361
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Aug 22 08:56:29 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.605	152	255107	40.00	ppm		-0.01
34) d8-Naphthalene	5.793	136	1013702	40.00	ppm		-0.01
58) d10-Acenaphthene	7.499	164	555160	40.00	ppm		-0.02
92) d10-Phenanthrene	8.964	188	979900	40.00	ppm		-0.02
118) d12-Chrysene	12.115	240	821842	40.00	ppm		-0.02
136) d12-Perylene	14.917	264	843835	40.00	ppm		-0.03
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.450	112	80760	9.96	ppm		-0.01
Spiked Amount 20.000	Range 10 - 70		Recovery = 49.80%				
13) SURR2,PHENOL-D6	4.284	99	83103	7.87	ppm		-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery = 39.35%				
35) SURR4,NITROBENZENE-D5	5.113	82	63463	7.05	ppm		-0.01
Spiked Amount 10.000	Range 31 - 110		Recovery = 70.50%				
64) SURR5,2-FLUOROBIPHENYL	6.841	172	116193	6.63	ppm		-0.01
Spiked Amount 10.000	Range 31 - 118		Recovery = 66.30%				
89) SURR3,2,4,6-TRIBROMOPH...	8.280	330	42844	20.73	ppm		-0.02
Spiked Amount 20.000	Range 35 - 141		Recovery = 103.65%				
125) SURR6,TERPHENYL-D14	10.617	244	134560	7.59	ppm		-0.02
Spiked Amount 10.000	Range 10 - 165		Recovery = 75.90%				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.647	88	33567	9.205	ppm		98
3) Pyridine	2.091	79	22911	2.467	ppm		92
4) N-Nitrosodimethylamine	2.032	74	60759	9.963	ppm		93
6) N-Nitrosomethylamine	2.974	42	21267	6.304	ppm	#	1
11) Benzaldehyde	4.215	106	91965	14.204	ppm		94
12) Aniline	4.306	93	111681	8.396	ppm		87
14) Phenol	4.300	94	101760	8.280	ppm		92
15) bis(2-Clethyl)Ether	4.364	93	125258	13.357	ppm		96
17) 2-Chlorophenol	4.423	128	122437	13.876	ppm		96
18) 1,3-Diclbenzene	4.552	146	109572	11.668	ppm		99
19) 1,4-Dichlorobenzene	4.621	146	112965	11.608	ppm		98
20) 1,2-Diclbenzene	4.760	146	109907	12.013	ppm		97
21) Benzyl Alcohol	4.734	79	99477	15.069	ppm		98
22) 1-Methyl-2-pyrrolidinone	4.744	99	41739	7.225	ppm		96
23) 2,2'-oxybis(1-Chloropr...	4.851	45	145236	12.726	ppm		97
24) 2-Methylphenol	4.840	108	93647	11.610	ppm		98
25) 3+4-Methylphenol	4.985	108	107907	12.113	ppm		98
26) Acetophenone	4.969	105	173743	13.423	ppm		99
27) N-Nitroso-Di-n-propyla...	4.969	70	93501	12.836	ppm		99
29) N-Nitrosomorpholine	4.969	56	6866	1.156	ppm		36
30) o-Toluidine	4.974	106	14394	1.013	ppm	#	1
31) Hexachloroethane	5.071	117	41758	10.629	ppm		89
33) Alpha-terpinol	5.819	121	49224	13.893	ppm		97
36) Nitrobenzene	5.129	77	135644	14.824	ppm		99
38) Isophorone	5.354	82	247195	13.987	ppm		97
39) 2-Nitrophenol	5.429	139	64623	17.276	ppm		93
40) Benzoic Acid	5.547	105	37819	19.377	ppm		96
41) 2,4-Dimethylphenol	5.477	107	32187	3.567	ppm		97
42) bis(-2-Chloroethoxy)Me...	5.557	93	160639	15.317	ppm		99
43) 2,4-Dichlorophenol	5.670	162	104129	15.858	ppm		99
45) 1,2,4-Trichlorobenzene	5.739	180	92006	12.597	ppm		99
46) Naphthalene	5.814	128	349055	13.643	ppm		99
47) 4-Chloroaniline	5.867	127	145863	14.492	ppm		100

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8275.D
Acq On : 21 Aug 2024 08:28 pm
Operator : EDeGray
Sample : RQ2410083-03
Misc : 443361
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Aug 22 08:56:29 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49)	Hexachlorobutadiene	5.932	225	47012	11.309	ppm		98
51)	4-Chloro-3-methylphenol	6.354	107	112685	15.257	ppm		97
53)	Caprolactam	6.188	113	16951	5.734	ppm		97
56)	2-Methylnaphthalene	6.483	142	234806	13.830	ppm		99
57)	1-Methylnaphthalene	6.579	142	221892	13.972	ppm		98
59)	Hexachlorocyclopentadiene	6.632	237	34037	12.086	ppm		100
60)	1,2,4,5-Tetrachloroben...	6.643	216	49433	7.080	ppm		99
61)	1,2,3,4-Tetrachloroben...	6.921	216	94578	13.612	ppm		99
62)	2,4,6-Trichlorophenol	6.766	196	72268	17.524	ppm		99
63)	2,4,5-Trichlorophenol	6.809	196	82010	18.864	ppm		100
66)	1,1'-Biphenyl	6.937	154	280598	13.577	ppm		99
67)	2-Chloronaphthalene	6.959	162	223815	14.808	ppm		99
68)	2-Nitroaniline	7.060	65	77334	16.889	ppm		95
70)	m-Dinitrobenzene	7.274	168	49225	21.536	ppm		88
71)	Acenaphthylene	7.365	152	373520	16.676	ppm		99
72)	Dimethyl phthalate	7.242	163	285096	16.407	ppm		99
73)	2,6-Dinitrotoluene	7.301	165	68233	19.643	ppm		82
74)	Acenaphthene	7.531	153	255436	16.144	ppm		98
75)	3-Nitroaniline	7.467	138	73208	17.683	ppm		95
76)	2,4-Dinitrophenol	7.574	184	23955	26.657	ppm		97
77)	Dibenzofuran	7.702	168	365059	16.993	ppm		100
78)	2,4-Dinitrotoluene	7.697	165	89612	19.883	ppm		97
79)	4-Nitrophenol	7.665	65	26639	7.550	ppm		89
83)	2,3,4,6-Tetrachlorophenol	7.830	232	64035	22.375	ppm		97
84)	Fluorene	8.039	166	299821	16.750	ppm		99
85)	4-Chlorophenyl-phenyle...	8.039	204	134706	16.172	ppm		99
86)	Diethylphthalate	7.932	149	276298	15.731	ppm		99
87)	4-Nitroaniline	8.066	138	77166	17.512	ppm		92
88)	5-Nitro-o-toluidine	8.098	152	2102	0.451	ppm	#	1
93)	Thionazin	7.830	107	4207	1.293	ppm		52
94)	4,6-Dinitro-2-methylph...	8.098	198	41167	23.229	ppm		96
95)	Diphenylamine	8.157	169	254082	17.603	ppm		99
96)	1,2 Diphenylhydrazine	8.194	77	311740	14.806	ppm		99
97)	N-Nitrosodiphenylamine	8.157	169	254082	17.600	ppm		99
98)	1,3,5-Trinirobenzene	8.451	213	139	0.872	ppm	#	1
102)	4-Bromophenyl-phenylether	8.526	248	79498	16.485	ppm		91
103)	Hexachlorobenzene	8.579	284	97659	17.733	ppm		95
104)	Dimethoate	8.686	87	4120	0.690	ppm	#	25
105)	Atrazine	8.686	215	39305	17.171	ppm		95
106)	Pentachlorophenol	8.782	266	34873	15.804	ppm		97
107)	4-Aminobiphenyl	8.782	169	4649	0.309	ppm		91
108)	Pentachloronitrobenzene	8.782	237	1116	0.566	ppm	#	1
109)	Pronamide	8.686	173	18870	2.268	ppm		75
111)	Disulfoton	8.964	88	12758	0.978	ppm		42
112)	Phenanthrene	8.986	178	457677	17.957	ppm		100
113)	Anthracene	9.039	178	440742	17.747	ppm		100
114)	Carbazole	9.200	167	427823	19.075	ppm		100
115)	Di-n-butylphthalate	9.547	149	398076	13.199	ppm		100
117)	Fluoranthene	10.178	202	444856	17.314	ppm		100
120)	Ethyl Parathion	9.735	97	116	0.834	ppm	#	4
124)	Pyrene	10.430	202	472150	17.251	ppm		100
129)	Butyl benzyl phthalate	11.270	149	156643	11.541	ppm		97
133)	Benzo(a)anthracene	12.099	228	408755	16.474	ppm		99
134)	Chrysene	12.157	228	426825	18.585	ppm		99
135)	bis(2-Ethylhexyl)phtha...	12.211	149	191695	10.178	ppm		98
137)	Di-n-octyl phthalate	13.473	149	262571	8.765	ppm		97

Quantitation Report (QT Reviewed)

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Misc : 443361
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Aug 22 08:56:29 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
139) Benzo(b)Fluoranthene	14.115	252	394330	16.585	ppm	95
140) Benzo(k)fluoranthene	14.174	252	417700	18.535	ppm	98
141) Benzo(a)pyrene	14.789	252	355677	18.184	ppm	100
143) Indeno(1,2,3-cd)Pyrene	16.918	276	331556	19.916	ppm	98
144) Dibenz(a,h)anthracene	16.971	278	348539	20.686	ppm	97
145) Benzo(g,h,i)perylene	17.340	276	346147	19.145	ppm	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

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Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
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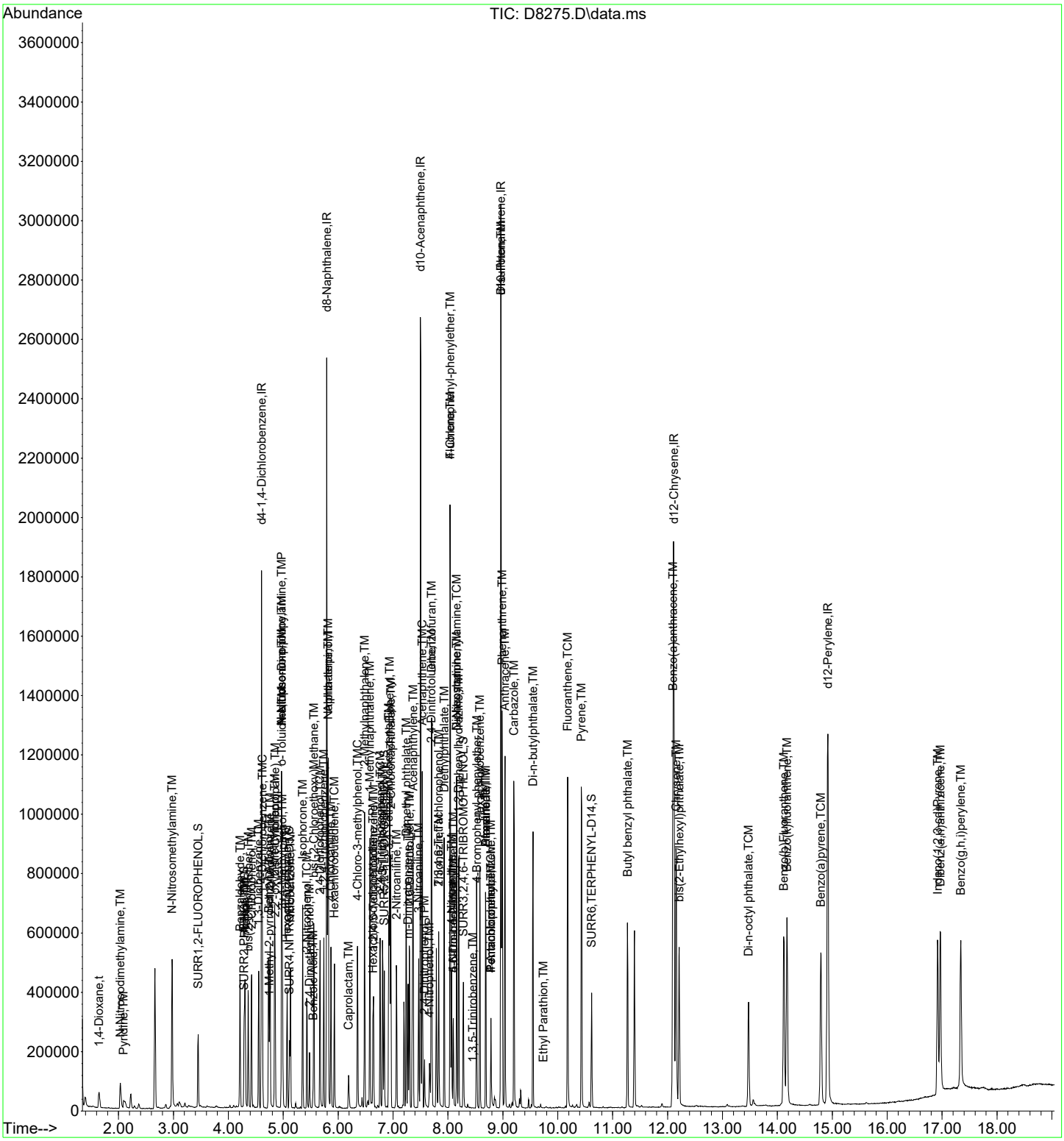

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
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Acq On : 21 Aug 2024 08:28 pm
Operator : EDeGray
Sample : RQ2410083-03
Misc : 443361
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Aug 22 11:42:19 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\Kep-Fam061824.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jun 25 13:50:40 2024
Response via : Initial Calibration

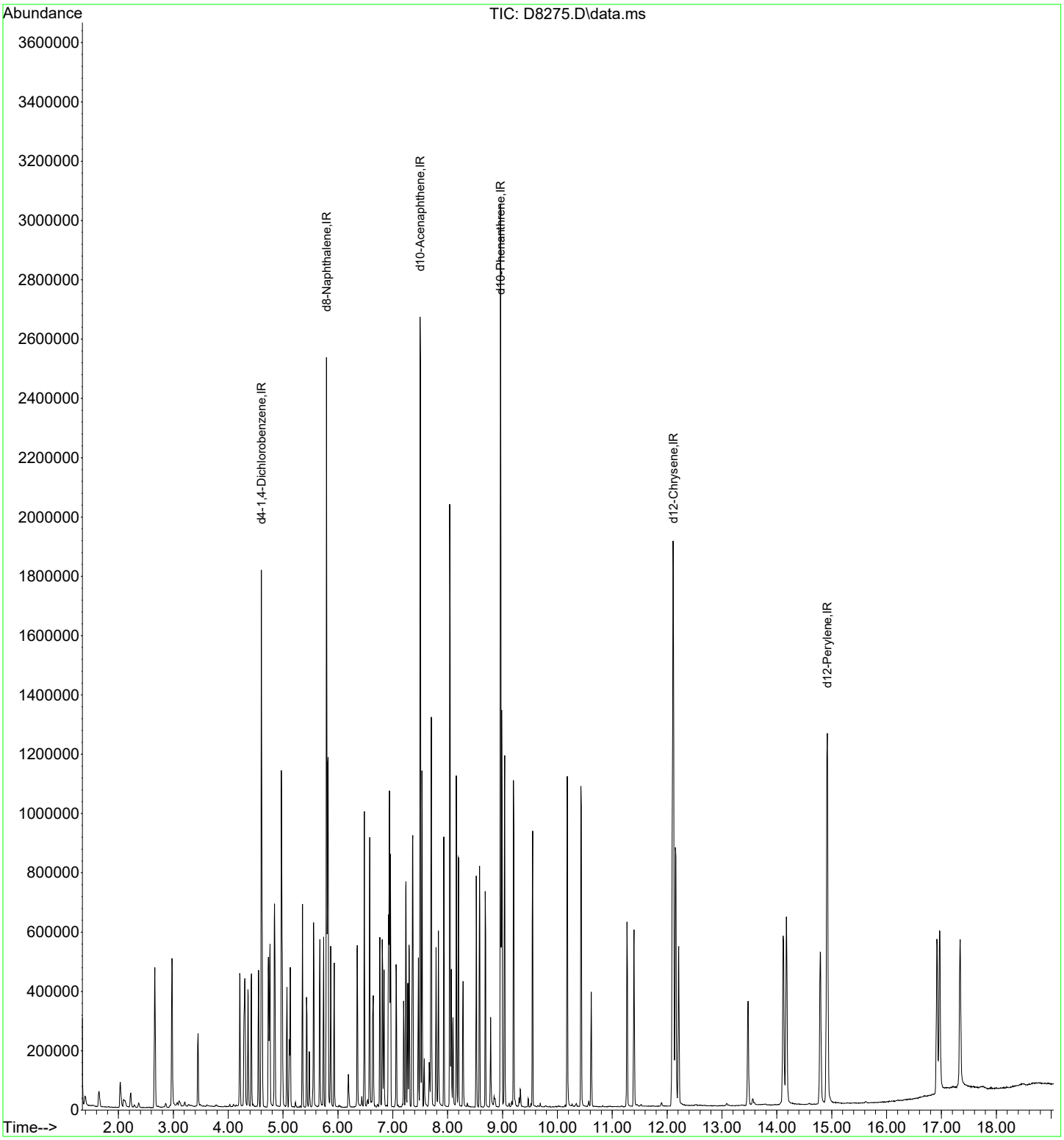
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.605	152	255107	40.00	ppm	-0.05
2) d8-Naphthalene	5.793	136	1013702	40.00	ppm	-0.05
3) d10-Acenaphthene	7.499	164	555160	40.00	ppm	-0.05
4) d10-Phenanthrene	8.964	188	979900	40.00	ppm	-0.05
5) d12-Chrysene	12.115	240	821842	40.00	ppm	-0.07
8) d12-Perylene	14.917	264	843835	40.00	ppm	-0.09
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8275.D
Acq On : 21 Aug 2024 08:28 pm
Operator : EDeGray
Sample : RQ2410083-03
Misc : 443361
ALS Vial : 24 Sample Multiplier: 1

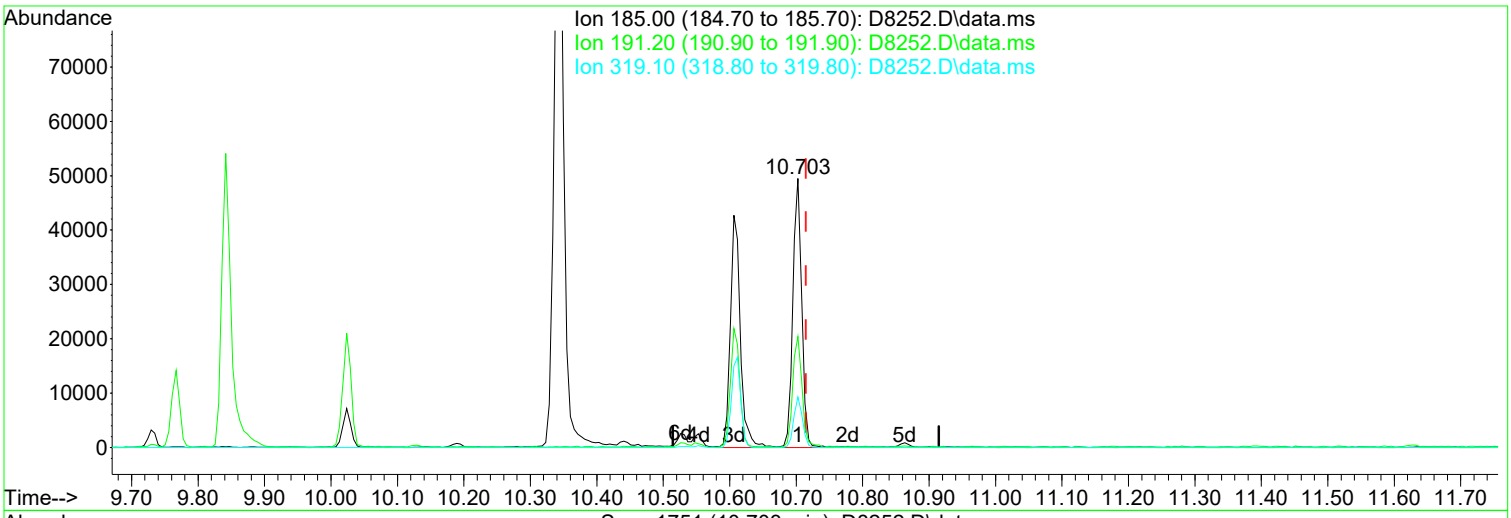
Quant Time: Aug 22 11:42:19 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\Kep-Fam061824.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jun 25 13:50:40 2024
Response via : Initial Calibration

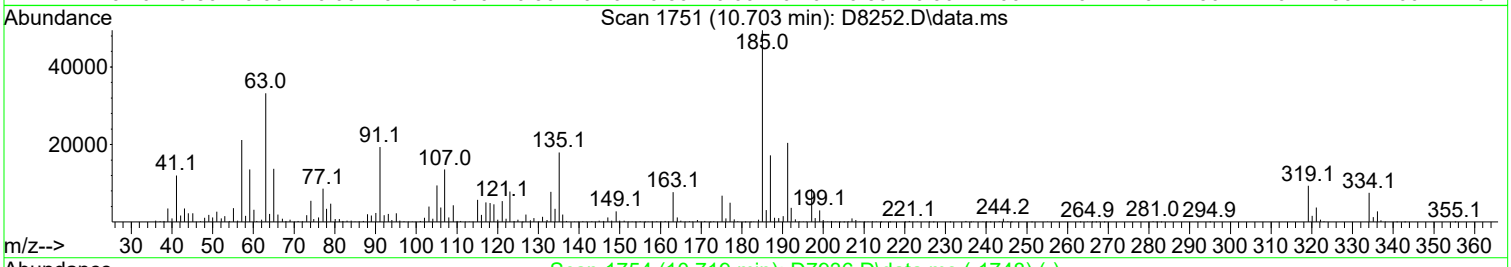


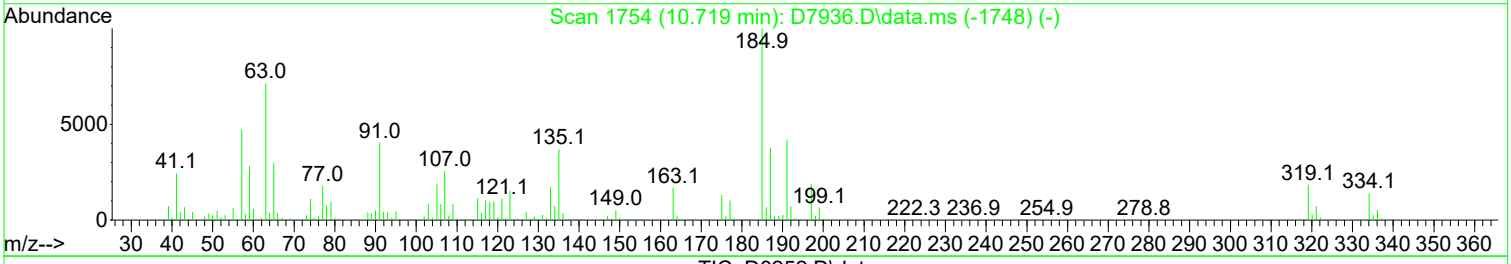
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8252.D
Acq On : 21 Aug 2024 10:43 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 11:28:44 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration







TIC: D8252.D\data.ms

(126) Aramite (TM)

10.703min (-0.012) 38.04 ppm m

response 90842

Ion	Exp%	Act%
185.00	100.00	100.00
191.20	40.80	41.31
319.10	19.60	18.83
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/22/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
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Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

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QLast Update : Tue Aug 06 17:39:38 2024
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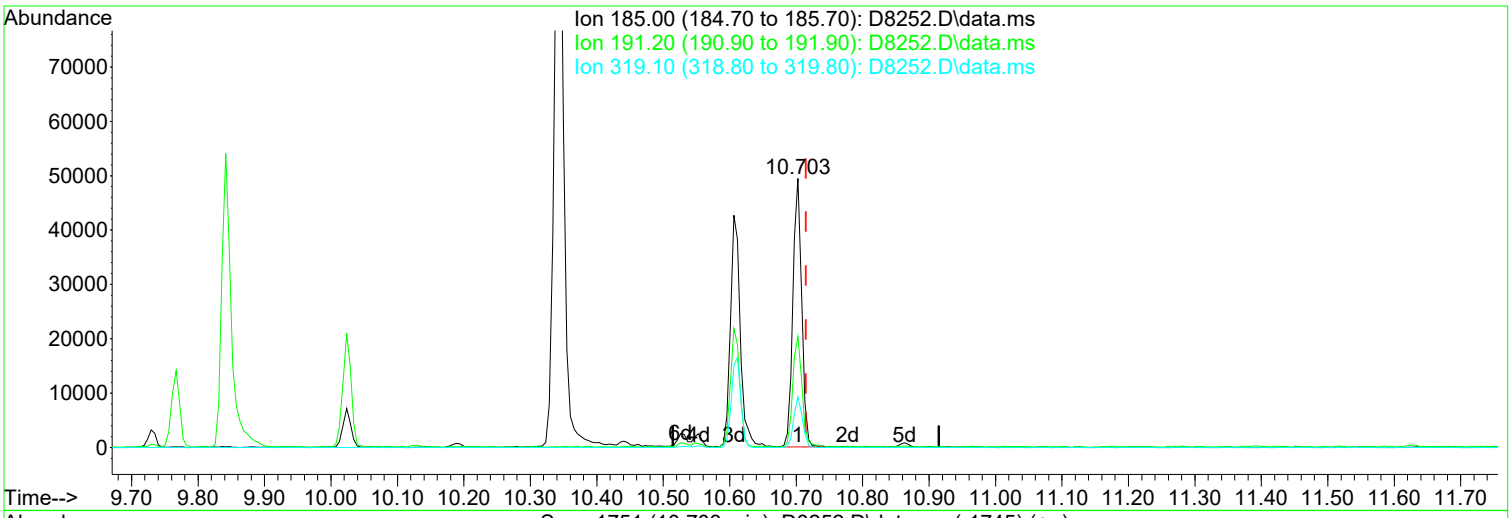

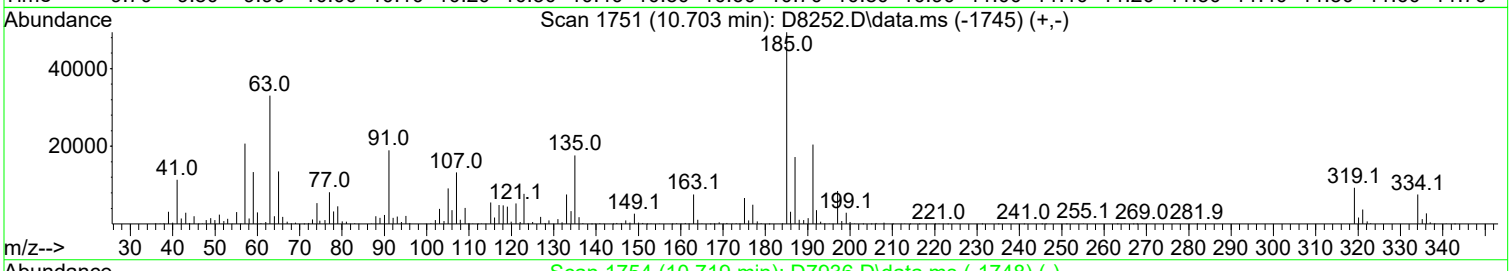

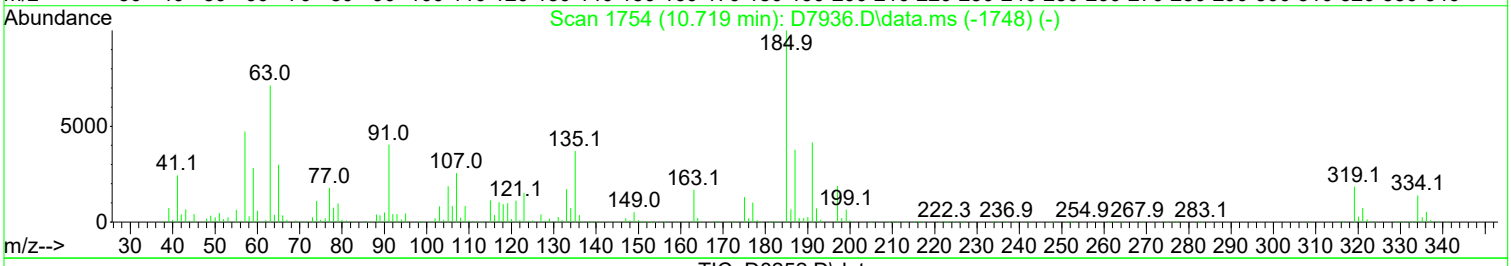

TIC: D8252.D\data.ms

(126) Aramite (TM)

10.703min (-0.012) 19.23 ppm

response 45917

Ion	Exp%	Act%
185.00	100.00	100.00
191.20	40.80	41.07
319.10	19.60	18.87
0.00	0.00	0.00

Manual Integration:

Before

08/22/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
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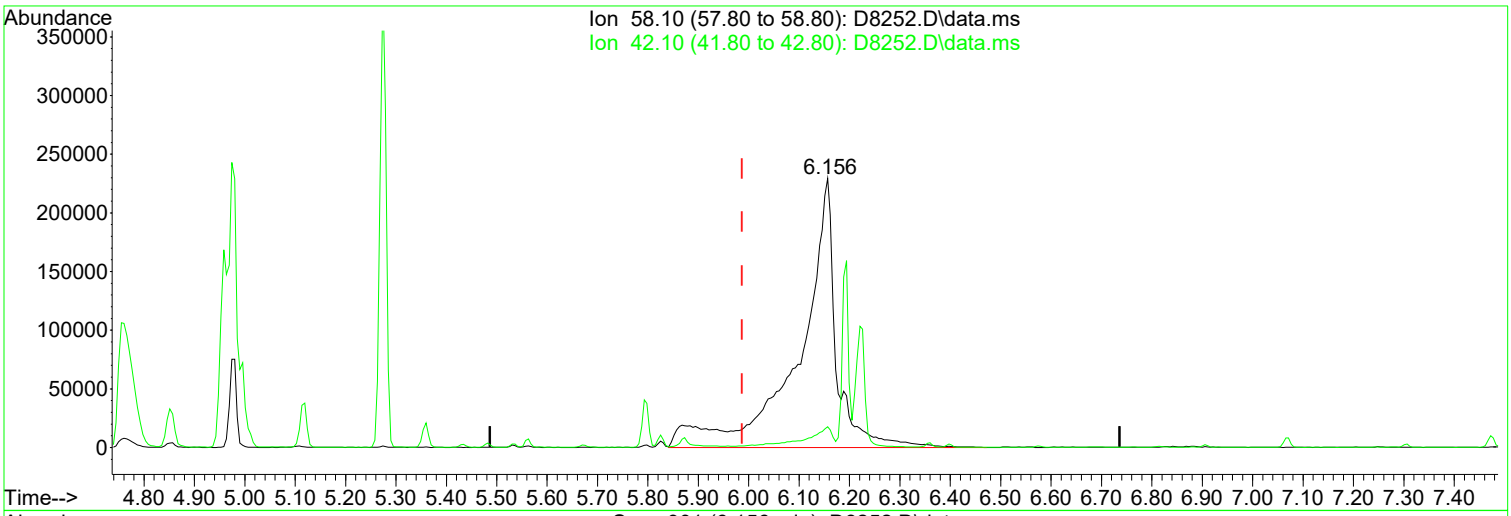

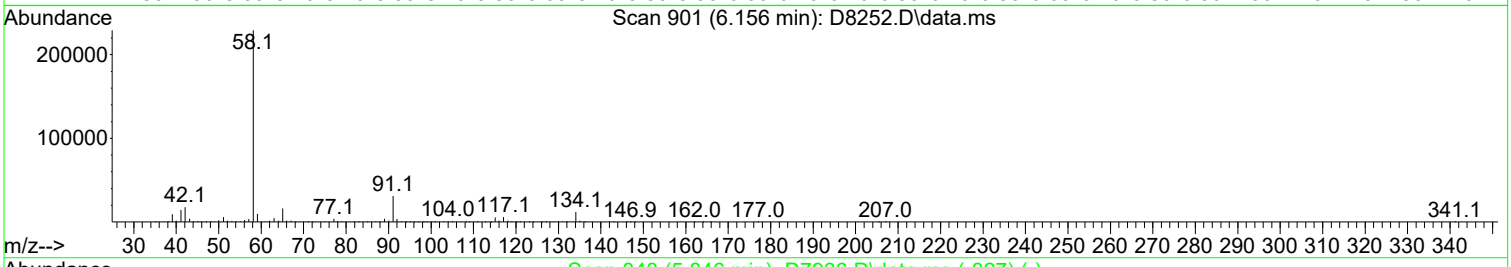

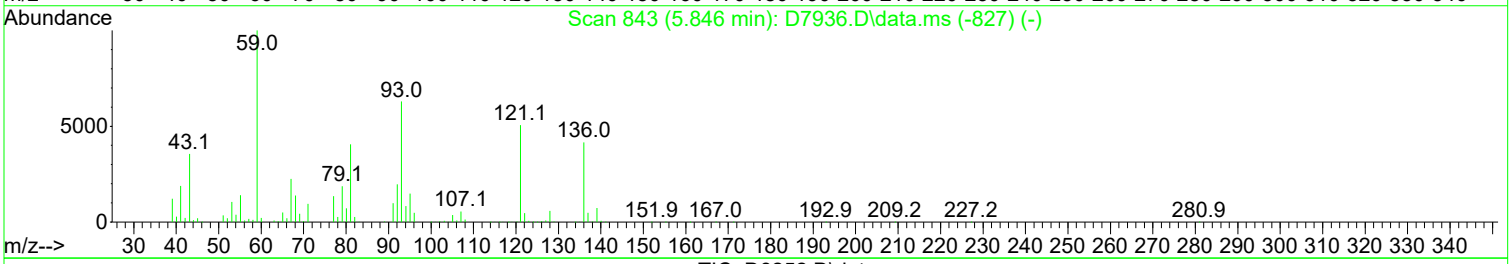

TIC: D8252.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

6.156min (+ 0.170) 39.43 ppm m

response 1178939

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.40	7.73
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/22/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
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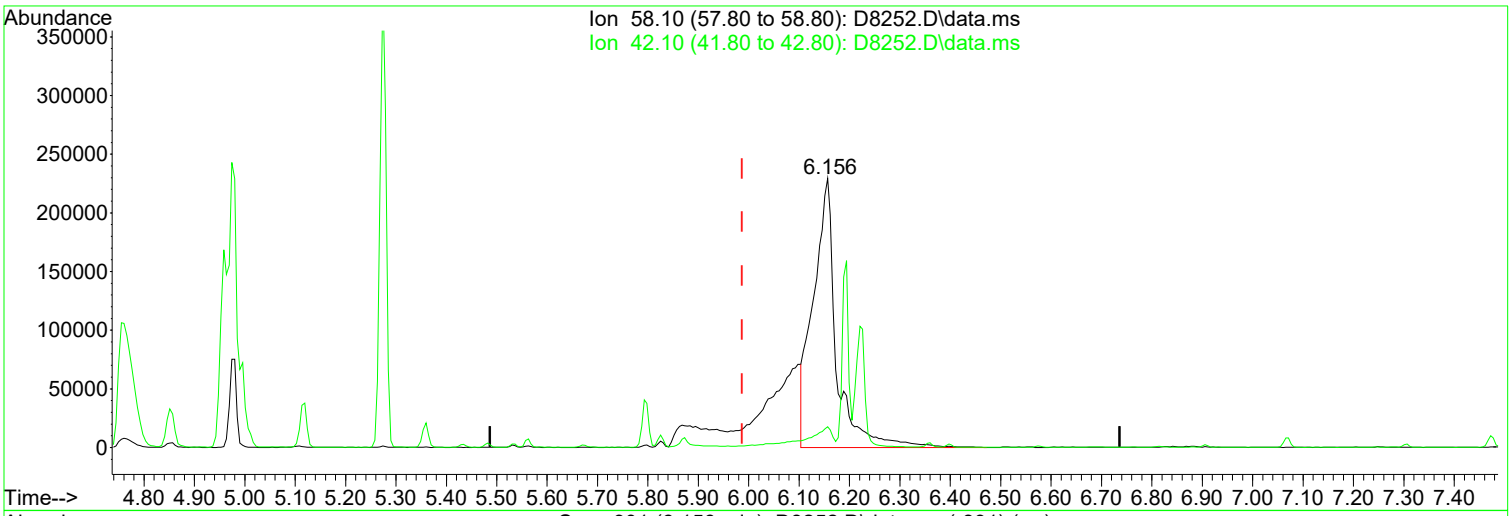

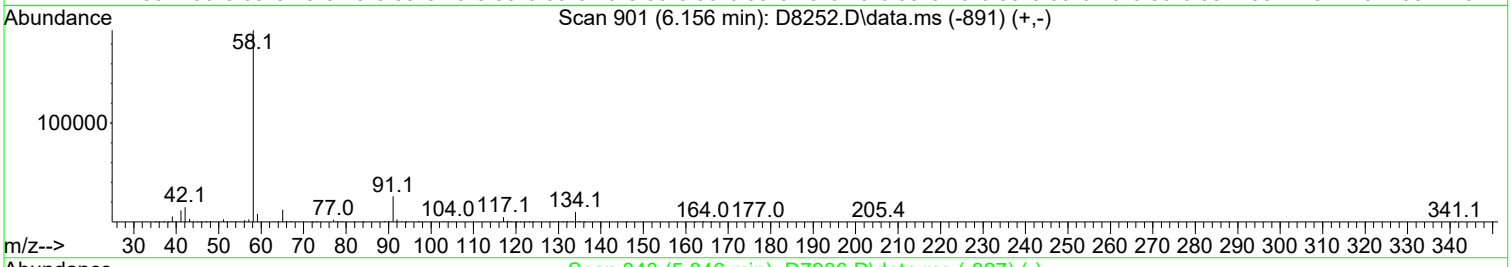

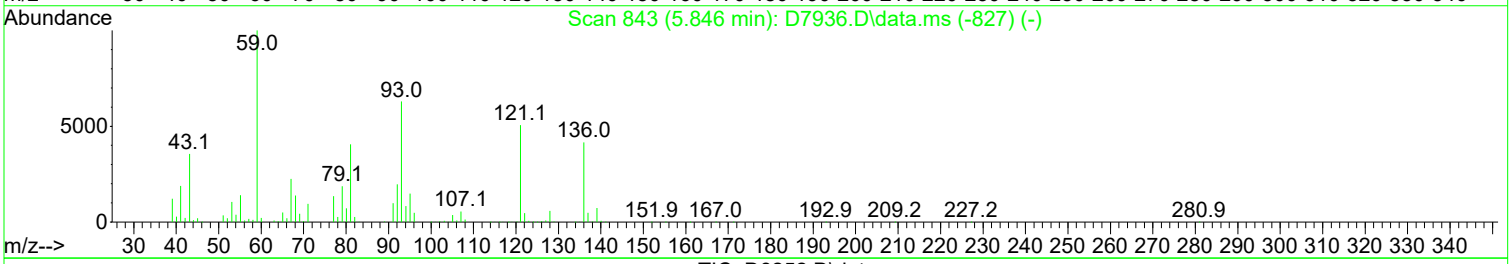

TIC: D8252.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

6.156min (+ 0.170) 24.75 ppm

response 739971

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.40	7.62
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

08/22/24

Quantitation Report (Qedit)

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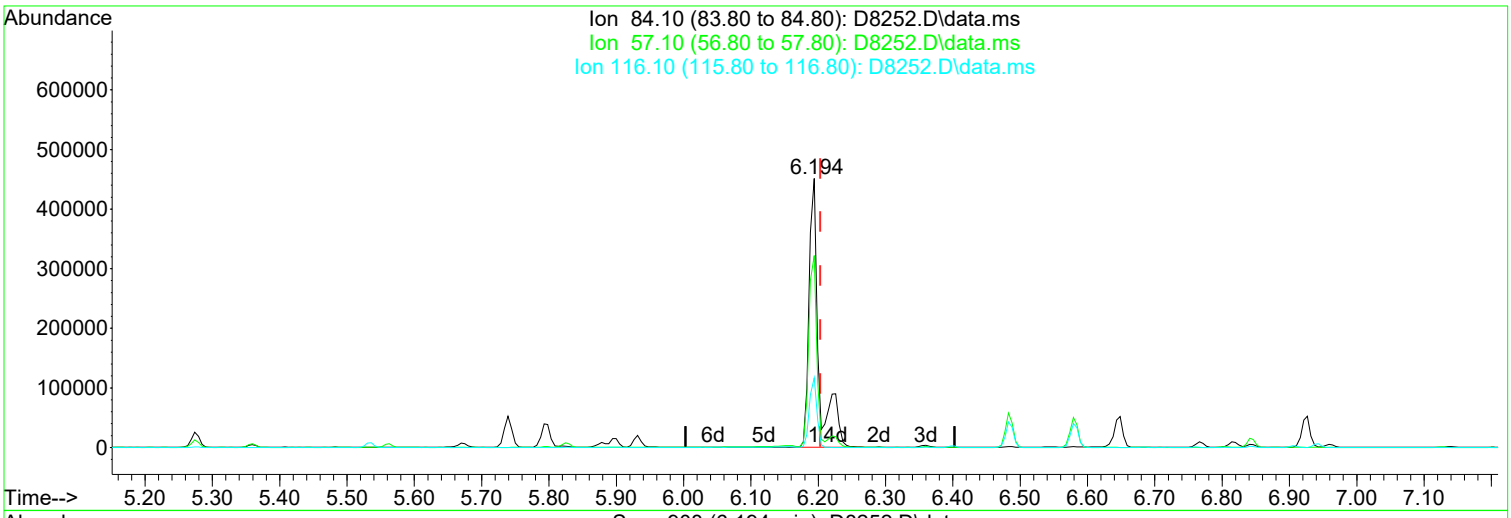
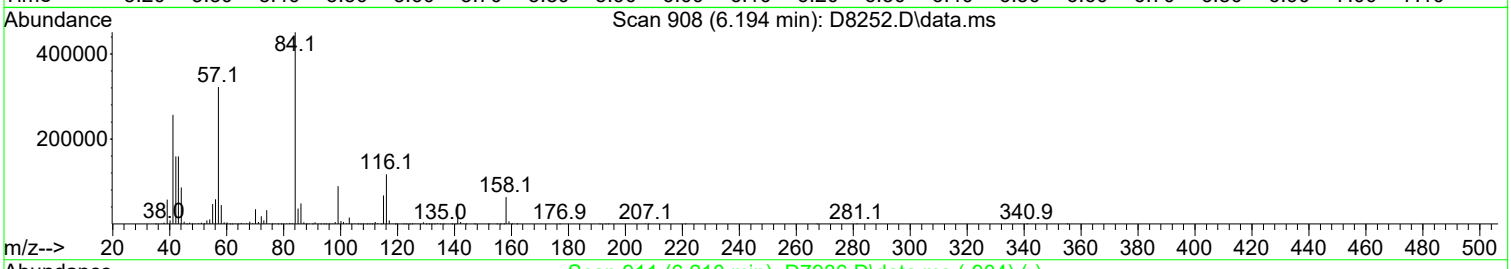
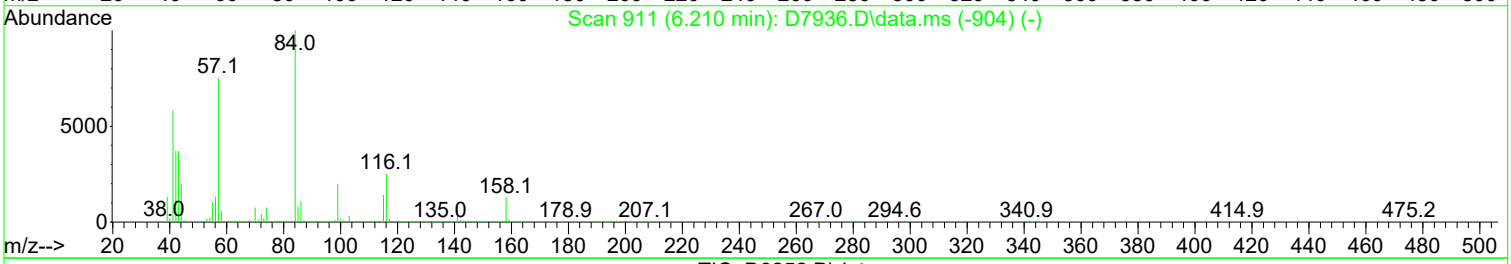
Response via : Initial Calibration







TIC: D8252.D\data.ms

(52) N-N-di-n-butylamine (TM)

6.194min (-0.009) 40.29 ppm m

response 464903

Ion	Exp%	Act%
84.10	100.00	100.00
57.10	67.80	71.38
116.10	22.70	25.93
0.00	0.00	0.00

Manual Integration:

After

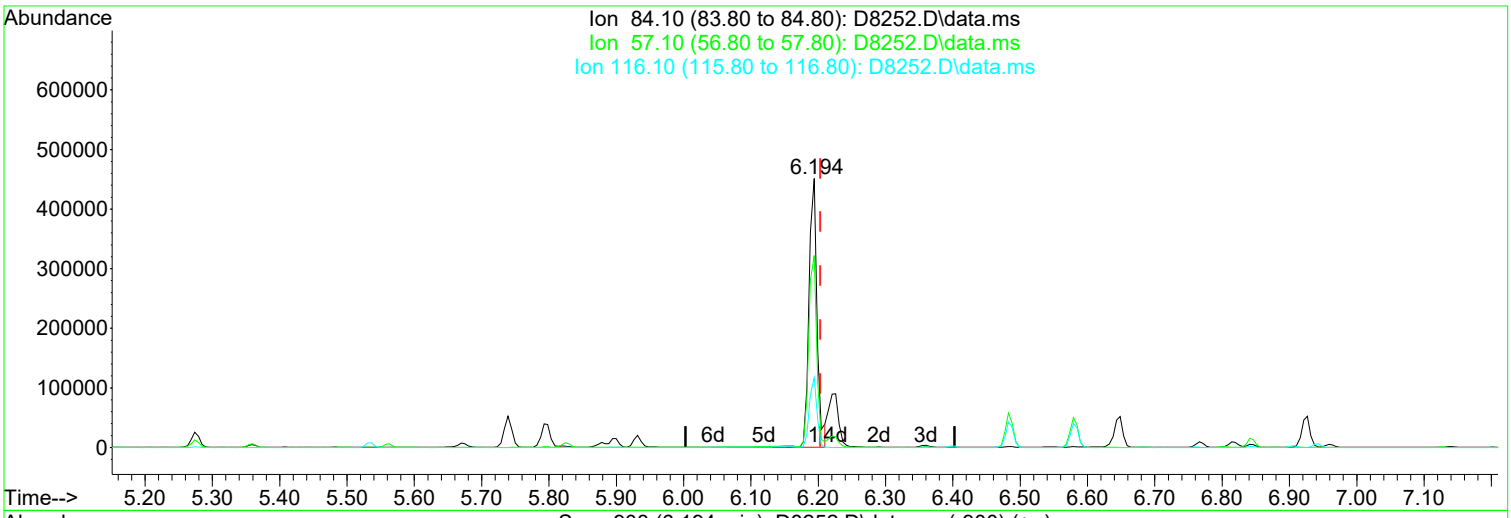
Poor integration.

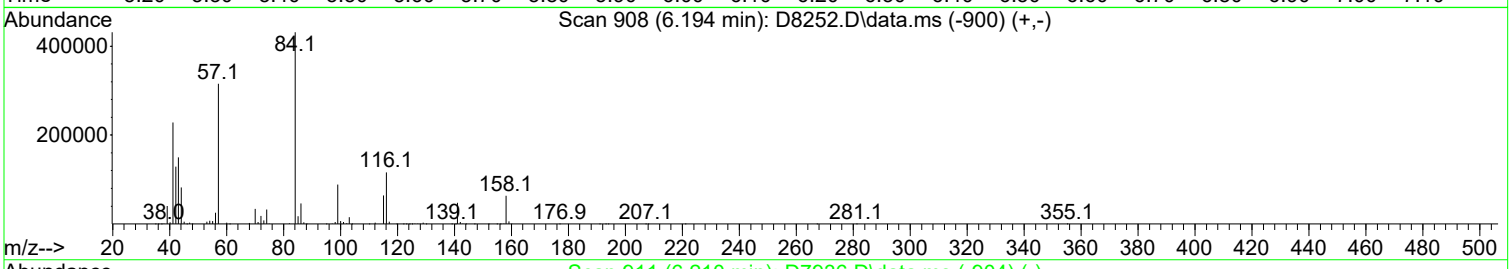
08/22/24

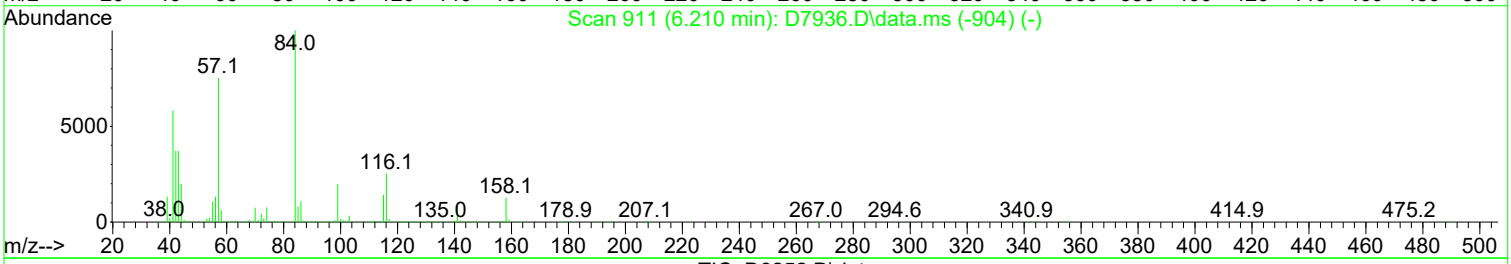
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8252.D
Acq On : 21 Aug 2024 10:43 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 11:28:44 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration







TIC: D8252.D\data.ms

(52) N-N-di-n-butylamine (TM)

6.194min (-0.009) 31.99 ppm

response 369115

Ion	Exp%	Act%
84.10	100.00	100.00
57.10	67.80	73.19
116.10	22.70	26.90
0.00	0.00	0.00

Manual Integration:

Before

08/22/24

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8252.D
Acq On : 21 Aug 2024 10:43 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 11:28:44 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	40.000	40.000	0.0	110	-0.01
2	t	1,4-Dioxane	40.000	37.059	7.4	111	-0.04
3	TM	Pyridine	40.000	40.884	-2.2	117	-0.03
4	TM	N-Nitrosodimethylamine	40.000	39.535	1.2	115	-0.03
5	TM	2-Picoline	40.000	40.492	-1.2	116	-0.02
6	TM	N-Nitrosomethylamine	40.000	39.096	2.3	114	-0.02
7	TM	Methyl Methansulfonate	40.000	39.067	2.3	115	-0.02
8	S	SURR1,2-FLUOROPHENOL	40.000	41.982	-5.0	120	-0.01
9	TM	N-Nitrosodiethylamine	40.000	35.515	11.2	101	-0.01
10	TM	Ethyl Mathanesulfonate	40.000	38.727	3.2	114	-0.01
11	TM	Benzaldehyde	40.000	38.657	3.4	115	-0.02
12	TM	Aniline	40.000	41.502	-3.8	117	-0.01
13	S	SURR2,PHENOL-D6	40.000	42.604	-6.5	119	-0.01
14	TMC	Phenol	40.000	41.499	-3.7	117	-0.01
15	TM	bis(2-Clethyl)Ether	40.000	37.710	5.7	112	-0.01
16	TM	Pentachloroethane	40.000	38.585	3.5	112	-0.02
17	TM	2-Chlorophenol	40.000	42.087	-5.2	119	-0.01
18	TM	1,3-Diclbenzene	40.000	39.484	1.3	115	-0.02
19	TMC	1,4-Dichlorobenzene	40.000	39.341	1.6	115	-0.01
20	TM	1,2-Diclbenzene	40.000	39.182	2.0	114	-0.01
21	TM	Benzyl Alcohol	40.000	42.573	-6.4	118	-0.01
22	T	1-Methyl-2-pyrrolidinone	40.000	41.667	-4.2	117	0.00
23	TM	2,2'-oxybis(1-Chloropropane	40.000	34.934	12.7	103	-0.01
24	TM	2-Methylphenol	40.000	41.346	-3.4	117	0.00
25	TM	3+4-Methylphenol	40.000	41.945	-4.9	115	0.00
26	TM	Acetophenone	40.000	39.227	1.9	113	-0.01
27	TMP	N-Nitroso-Di-n-propylamine	40.000	38.017	5.0	108	0.00
28	TM	N-Nitrosopyrrolidine	40.000	41.461	-3.7	116	-0.01
29	TM	N-Nitrosomorpholine	40.000	38.398	4.0	111	0.00
30	TM	o-Toluidine	40.000	39.020	2.4	105	0.00
31	TM	Hexachloroethane	40.000	38.984	2.5	113	-0.01
32	TM	o,o,o-Triethylphosphorothio	40.000	38.555	3.6	112	0.00
33	TM	Alpha-terpinol	40.000	38.863	2.8	109	-0.01
34	IR	d8-Naphthalene	40.000	40.000	0.0	109	0.00
35	S	SURR4,NITROBENZENE-D5	40.000	41.308	-3.3	115	0.00
36	TM	Nitrobenzene	40.000	40.565	-1.4	113	0.00
37	TM	N-Nitrosopiperidine	40.000	38.054	4.9	109	-0.01
38	TM	Isophorone	40.000	38.301	4.2	109	0.00
39	TCM	2-Nitrophenol	40.000	45.844	-14.6	133	0.00
40	TM	Benzoic Acid	40.000	44.587	-11.5	147	0.00
41	TM	2,4-Dimethylphenol	40.000	40.945	-2.4	113	0.00
42	TM	bis(-2-Chloroethoxy)Methane	40.000	37.312	6.7	107	0.00
43	TCM	2,4-Dichlorophenol	40.000	44.555	-11.4	119	-0.01
44	TM	a,a-Dimethylphenethylamine	40.000	39.435	1.4	109	0.17
45	TM	1,2,4-Trichlorobenzene	40.000	39.190	2.0	114	-0.01
46	TM	Naphthalene	40.000	38.663	3.3	112	-0.01
47	TM	4-Chloroaniline	40.000	39.096	2.3	104	0.00
48	TM	2,6-Dichlorophenol	40.000	43.553	-8.9	117	-0.01
49	TCM	Hexachlorobutadiene	40.000	38.437	3.9	112	-0.01
50	TM	Hexachloropropene	40.000	45.567	-13.9	121	-0.01
51	TMC	4-Chloro-3-methylphenol	40.000	43.278	-8.2	114	0.00

1st AM 08/22/24
2nd BA 08/22/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8252.D
Acq On : 21 Aug 2024 10:43 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 11:28:44 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
52	TM	N-N-di-n-butylamine	40.000	40.285	-0.7	107	0.00
53	TM	Caprolactam	40.000	44.322	-10.8	120	0.00
54	TM	p-Phenylenediamine	40.000	54.352	-35.9#	133	0.00
55	TM	Safrole	40.000	38.652	3.4	108	0.00
56	TM	2-Methylnaphthalene	40.000	39.194	2.0	111	-0.01
57	TM	1-Methylnaphthalene	40.000	39.223	1.9	112	-0.01
58	IR	d10-Acenaphthene	40.000	40.000	0.0	110	-0.01
59	TPM	Hexachlorocyclopentadiene	40.000	39.832	0.4	107	-0.01
60	TM	1,2,4,5-Tetrachlorobenzene	40.000	38.582	3.5	114	0.00
61	TM	1,2,3,4-Tetrachlorobenzene	40.000	39.083	2.3	116	0.00
62	TCM	2,4,6-Trichlorophenol	40.000	47.095	-17.7	122	-0.01
63	TM	2,4,5-Trichlorophenol	40.000	46.874	-17.2	121	0.00
64	S	SURR5,2-FLUOROBIPHENYL	40.000	38.060	4.8	112	0.00
65	TM	Isosafrole	40.000	37.507	6.2	109	-0.01
66	TM	1,1'-Biphenyl	40.000	38.237	4.4	111	0.00
67	TM	2-Chloronaphthalene	40.000	38.576	3.6	113	-0.01
68	TM	2-Nitroaniline	40.000	45.392	-13.5	120	0.00
69	TM	1,4-Naphthoquinone	40.000	40.569	-1.4	106	0.00
70	TM	m-Dinitrobenzene	40.000	46.767	-16.9	136	0.00
71	TM	Acenaphthylene	40.000	38.700	3.2	111	-0.01
72	TM	Dimethyl phthalate	40.000	38.349	4.1	111	0.00
73	TM	2,6-Dinitrotoluene	40.000	46.725	-16.8	119	0.00
74	TMC	Acenaphthene	40.000	38.296	4.3	112	-0.01
75	TM	3-Nitroaniline	40.000	48.841	-22.1#	128	0.00
76	TPM	2,4-Dinitrophenol	40.000	58.734	-46.8#	216	0.00
77	TM	Dibenzofuran	40.000	38.699	3.3	112	0.00
78	TM	2,4-Dinitrotoluene	40.000	43.041	-7.6	122	0.00
79	TMP	4-Nitrophenol	40.000	47.880	-19.7	127	0.00
80	TM	Pentachlorobenzene	40.000	38.449	3.9	116	0.00
81	TM	1-Napthylamine	40.000	43.084	-7.7	121	0.04
82	TM	2-Napthylamine	40.000	49.499	-23.7#	140	-0.01
83	TM	2,3,4,6-Tetrachlorophenol	40.000	45.647	-14.1	132	-0.01
84	TM	Fluorene	40.000	39.063	2.3	111	0.00
85	TM	4-Chlorophenyl-phenylether	40.000	38.678	3.3	111	-0.01
86	TM	Diethylphthalate	40.000	36.100	9.7	105	0.00
87	TM	4-Nitroaniline	40.000	48.656	-21.6#	127	0.00
88	TM	5-Nitro-o-toluidine	40.000	47.473	-18.7	122	0.00
89	S	SURR3,2,4,6-TRIBROMOPHENOL	40.000	51.876	-29.7#	137	0.00
90	TM	Sulfotepp	40.000	39.709	0.7	110	-0.01
91	TM	Octachlorocyclopentene	40.000	44.368	-10.9	127	-0.01
92	IR	d10-Phenanthrene	40.000	40.000	0.0	110	0.00
93	TM	Thionazin	40.000	37.095	7.3	107	-0.01
94	TM	4,6-Dinitro-2-methylphenol	40.000	53.585	-34.0#	169	0.00
95	TM	Diphenylamine	80.000	78.507	1.9	113	0.00
96	TM	1,2 Diphenylhydrazine	40.000	36.613	8.5	104	0.00
97	TCM	N-Nitrosodiphenylamine	80.000	78.524	1.8	113	0.00
98	TM	1,3,5-Trinirobenzene	40.000	48.979	-22.4#	144	0.00
99	TM	Diallate	40.000	34.857	12.9	100	-0.01
100	TM	Phorate	40.000	39.162	2.1	108	0.00
101	TM	Phenacetin	40.000	44.249	-10.6	112	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8252.D
Acq On : 21 Aug 2024 10:43 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 11:28:44 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
102	TM	4-Bromophenyl-phenylether	40.000	39.798	0.5	114	0.00
103	TM	Hexachlorobenzene	40.000	40.143	-0.4	119	0.00
104	TM	Dimethoate	40.000	43.252	-8.1	116	0.00
105	TM	Atrazine	40.000	36.619	8.5	104	0.00
106	TCM	Pentachlorophenol	40.000	49.621	-24.1	152	0.00
107	TM	4-Aminobiphenyl	40.000	47.166	-17.9	116	-0.01
108	TM	Pentachloronitrobenzene	40.000	42.907	-7.3	115	0.00
109	TM	Pronamide	40.000	39.495	1.3	108	0.00
110	TM	Dinoseb	40.000	49.472	-23.7#	151	0.00
111	TM	Disulfoton	40.000	29.094	27.3#	85	0.00
112	TM	Phenanthrene	40.000	38.015	5.0	112	0.00
113	TM	Anthracene	40.000	38.768	3.1	111	0.00
114	TM	Carbazole	40.000	44.926	-12.3	118	0.00
115	TM	Di-n-butylphthalate	40.000	37.131	7.2	102	-0.01
116	TM	4-Nitroquinonline-1-oxide	40.000	44.938	-12.3	124	0.00
117	TCM	Fluoranthene	40.000	41.582	-4.0	115	0.00
118	IR	d12-Chrysene	40.000	40.000	0.0	113	-0.01
119	TM	Methyl Parathion	40.000	46.339	-15.8	123	0.00
120	TM	Ethyl Parathion	40.000	38.694	3.3	112	0.00
121	TM	Methapyrilene	40.000	31.900	20.3#	97	0.00
122	TM	Isodrin	40.000	32.244	19.4	106	-0.01
123	TM	Benzidine	40.000	47.089	-17.7	137	0.00
124	TM	Pyrene	40.000	37.289	6.8	115	-0.01
125	S	SURR6,TERPHENYL-D14	40.000	37.217	7.0	113	-0.01
126	TM	Aramite	40.000	38.041	4.9	108	-0.01
127	TM	p-(Dimethylamino)azobenzene	40.000	37.802	5.5	106	0.00
128	TM	Chlorobenzilate	40.000	37.726	5.7	107	-0.01
129	TM	Butyl benzyl phthalate	40.000	33.751	15.6	98	-0.01
130	TM	3,3-Dimethylbenzidine	40.000	0.000	100.0#	0	-11.26#
131	TM	2-Acetylaminofluorene	40.000	43.212	-8.0	125	0.00
132	TM	3,3'-Dichlorobenzidine	40.000	42.077	-5.2	119	-0.02
133	TM	Benzo(a)anthracene	40.000	38.061	4.8	115	-0.01
134	TM	Chrysene	40.000	38.618	3.5	115	-0.01
135	TM	bis(2-Ethylhexyl)phthalate	40.000	31.574	21.1#	94	-0.02
136	IR	d12-Perylene	40.000	40.000	0.0	118	-0.01
137	TCM	Di-n-octyl phthalate	40.000	30.941	22.6	91	-0.02
138	TM	7,12-Dimethylbenz(a)anthrac	40.000	39.124	2.2	118	-0.01
139	TM	Benzo(b)Fluoranthene	40.000	39.411	1.5	119	-0.01
140	TM	Benzo(k)fluoranthene	40.000	39.369	1.6	117	-0.01
141	TCM	Benzo(a)pyrene	40.000	39.153	2.1	115	-0.01
142	TM	3-Methylcholanthrene	40.000	40.641	-1.6	117	-0.01
143	TM	Indeno(1,2,3-cd)Pyrene	40.000	42.212	-5.5	118	0.00
144	TM	Dibenz(a,h)anthracene	40.000	44.578	-11.4	121	0.00
145	TM	Benzo(g,h,i)perylene	40.000	40.714	-1.8	120	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8252.D
Acq On : 21 Aug 2024 10:43 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 11:28:44 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.605	152	376139	40.00	ppm		-0.01
34) d8-Naphthalene	5.798	136	1484927	40.00	ppm		0.00
58) d10-Acenaphthene	7.504	164	830316	40.00	ppm		-0.01
92) d10-Phenanthrene	8.970	188	1412236	40.00	ppm		0.00
118) d12-Chrysene	12.125	240	1288290	40.00	ppm		-0.01
136) d12-Perylene	14.934	264	1329458	40.00	ppm		-0.01
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.450	112	501820	41.98	ppm		-0.01
Spiked Amount 20.000	Range 10 - 70		Recovery = 209.90%#				
13) SURR2,PHENOL-D6	4.290	99	662964	42.60	ppm		-0.01
Spiked Amount 20.000	Range 10 - 107		Recovery = 213.00%#				
35) SURR4,NITROBENZENE-D5	5.119	82	544535	41.31	ppm		0.00
Spiked Amount 10.000	Range 31 - 110		Recovery = 413.10%#				
64) SURR5,2-FLUOROBIPHENYL	6.846	172	998014	38.06	ppm		0.00
Spiked Amount 10.000	Range 31 - 118		Recovery = 380.60%#				
89) SURR3,2,4,6-TRIBROMOPH...	8.285	330	160381	51.88	ppm		0.00
Spiked Amount 20.000	Range 35 - 141		Recovery = 259.40%#				
125) SURR6,TERPHENYL-D14	10.628	244	1034409	37.22	ppm		-0.01
Spiked Amount 10.000	Range 10 - 165		Recovery = 372.20%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.642	88	199263	37.059	ppm		97
3) Pyridine	2.070	79	559832	40.884	ppm		97
4) N-Nitrosodimethylamine	2.027	74	355474	39.535	ppm		96
5) 2-Picoline	2.872	93	598179	40.492	ppm		99
6) N-Nitrosomethylamine	2.985	42	194457	39.096	ppm		95
7) Methyl Methansulfonate	3.273	80	284693	39.067	ppm		98
9) N-Nitrosodiethylamine	3.637	102	228018	35.515	ppm		91
10) Ethyl Mathanesulfonate	3.910	79	396827	38.727	ppm		96
11) Benzaldehyde	4.209	106	369033	38.657	ppm		99
12) Aniline	4.311	93	813929	41.502	ppm		99
14) Phenol	4.300	94	751995	41.499	ppm		92
15) bis(2-Clethyl)Ether	4.365	93	521407	37.710	ppm		97
16) Pentachloroethane	4.349	117	179396	38.585	ppm		99
17) 2-Chlorophenol	4.423	128	547564	42.087	ppm		97
18) 1,3-Diclbenzene	4.552	146	546705	39.484	ppm		99
19) 1,4-Dichlorobenzene	4.621	146	564507	39.341	ppm		98
20) 1,2-Diclbenzene	4.760	146	528540	39.182	ppm		98
21) Benzyl Alcohol	4.734	79	414370	42.573	ppm		98
22) 1-Methyl-2-pyrrolidinone	4.760	99	354935	41.667	ppm		92
23) 2,2'-oxybis(1-Chloropr...	4.851	45	587813	34.934	ppm	#	68
24) 2-Methylphenol	4.857	108	491725	41.346	ppm		99
25) 3+4-Methylphenol	4.996	108	550929	41.945	ppm		90
26) Acetophenone	4.974	105	748632	39.227	ppm		98
27) N-Nitroso-Di-n-propyla...	4.980	70	408297	38.017	ppm		93
28) N-Nitrosopyrrolidine	4.958	100	291438	41.461	ppm		92
29) N-Nitrosomorpholine	4.996	56	336206	38.398	ppm		92
30) o-Toluidine	5.012	106	817390	39.020	ppm		67
31) Hexachloroethane	5.071	117	225828	38.984	ppm		90
32) o,o,o-Triethylphosphor...	5.536	198	240495	38.555	ppm		97
33) Alpha-terpinol	5.825	121	203031	38.863	ppm		95
36) Nitrobenzene	5.135	77	543735	40.565	ppm		97
37) N-Nitrosopiperidine	5.274	42	336952	38.054	ppm		97
38) Isophorone	5.359	82	991582	38.301	ppm		97

1st AM 08/22/24
2nd BA 08/22/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8252.D
Acq On : 21 Aug 2024 10:43 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 11:28:44 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) 2-Nitrophenol	5.434	139	290350	45.844	ppm		100
40) Benzoic Acid	5.573	105	222170	44.587	ppm		98
41) 2,4-Dimethylphenol	5.482	107	541202	40.945	ppm		97
42) bis(-2-Chloroethoxy)Me...	5.563	93	573210	37.312	ppm		99
43) 2,4-Dichlorophenol	5.670	162	428547	44.555	ppm		99
44) a,a-Dimethylphenethyla...	6.156	58	1178939m	39.435	ppm		
45) 1,2,4-Trichlorobenzene	5.739	180	419289	39.190	ppm		98
46) Naphthalene	5.814	128	1448996	38.663	ppm		99
47) 4-Chloroaniline	5.873	127	576426	39.096	ppm		98
48) 2,6-Dichlorophenol	5.878	162	407970	43.553	ppm		98
49) Hexachlorobutadiene	5.932	225	234062	38.437	ppm		99
50) Hexachloropropene	5.900	213	279402	45.567	ppm		99
51) 4-Chloro-3-methylphenol	6.360	107	468226	43.278	ppm		100
52) N-N-di-n-butylamine	6.194	84	464903m	40.285	ppm		
53) Caprolactam	6.226	113	191931	44.322	ppm		92
54) p-Phenylenediamine	6.226	80	190596	54.352	ppm		93
55) Safrole	6.402	162	343939	38.652	ppm		90
56) 2-Methylnaphthalene	6.483	142	974800	39.194	ppm		100
57) 1-Methylnaphthalene	6.579	142	912501	39.223	ppm		99
59) Hexachlorocyclopentadiene	6.638	237	181902	39.832	ppm		99
60) 1,2,4,5-Tetrachloroben...	6.648	216	402892	38.582	ppm		99
61) 1,2,3,4-Tetrachloroben...	6.927	216	406145	39.083	ppm		98
62) 2,4,6-Trichlorophenol	6.766	196	290474	47.095	ppm		99
63) 2,4,5-Trichlorophenol	6.820	196	304780	46.874	ppm		98
65) Isosafrole	6.905	104	174613	37.507	ppm		99
66) 1,1'-Biphenyl	6.943	154	1181938	38.237	ppm		99
67) 2-Chloronaphthalene	6.959	162	872023	38.576	ppm		99
68) 2-Nitroaniline	7.071	65	310865	45.392	ppm		94
69) 1,4-Naphthoquinone	7.141	158	309753	40.569	ppm		94
70) m-Dinitrobenzene	7.280	168	184816	46.767	ppm		94
71) Acenaphthylene	7.365	152	1296463	38.700	ppm		100
72) Dimethyl phthalate	7.247	163	996607	38.349	ppm		99
73) 2,6-Dinitrotoluene	7.306	165	242750	46.725	ppm		92
74) Acenaphthene	7.536	153	906247	38.296	ppm		99
75) 3-Nitroaniline	7.472	138	302414	48.841	ppm		97
76) 2,4-Dinitrophenol	7.579	184	129635	58.734	ppm		91
77) Dibenzofuran	7.707	168	1243415	38.699	ppm		100
78) 2,4-Dinitrotoluene	7.702	165	319849	43.041	ppm		98
79) 4-Nitrophenol	7.675	65	252677	47.880	ppm		86
80) Pentachlorobenzene	7.670	250	364280	38.449	ppm		99
81) 1-Napthylamine	7.868	143	760688	43.084	ppm		100
82) 2-Napthylamine	7.868	143	761907	49.499	ppm		100
83) 2,3,4,6-Tetrachlorophenol	7.836	232	221841	45.647	ppm		96
84) Fluorene	8.044	166	1045757	39.063	ppm		100
85) 4-Chlorophenyl-phenyle...	8.044	204	481846	38.678	ppm		99
86) Diethylphthalate	7.937	149	948326	36.100	ppm		100
87) 4-Nitroaniline	8.077	138	320674	48.656	ppm		95
88) 5-Nitro-o-toluidine	8.066	152	331275	47.473	ppm		97
90) Sulfotepp	8.323	322	167874	39.709	ppm		96
91) Octachlorocyclopentene	8.290	307	122354	44.368	ppm		99
93) Thionazin	8.018	107	173906	37.095	ppm		94
94) 4,6-Dinitro-2-methylph...	8.103	198	189664	53.585	ppm		95
95) Diphenylamine	8.167	169	1633099	78.507	ppm		100
96) 1,2 Diphenylhydrazine	8.205	77	1110961	36.613	ppm		91
97) N-Nitrosodiphenylamine	8.167	169	1633754	78.524	ppm		100
98) 1,3,5-Trinirobenzene	8.456	213	117201	48.979	ppm	#	1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8252.D
Acq On : 21 Aug 2024 10:43 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 11:28:44 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

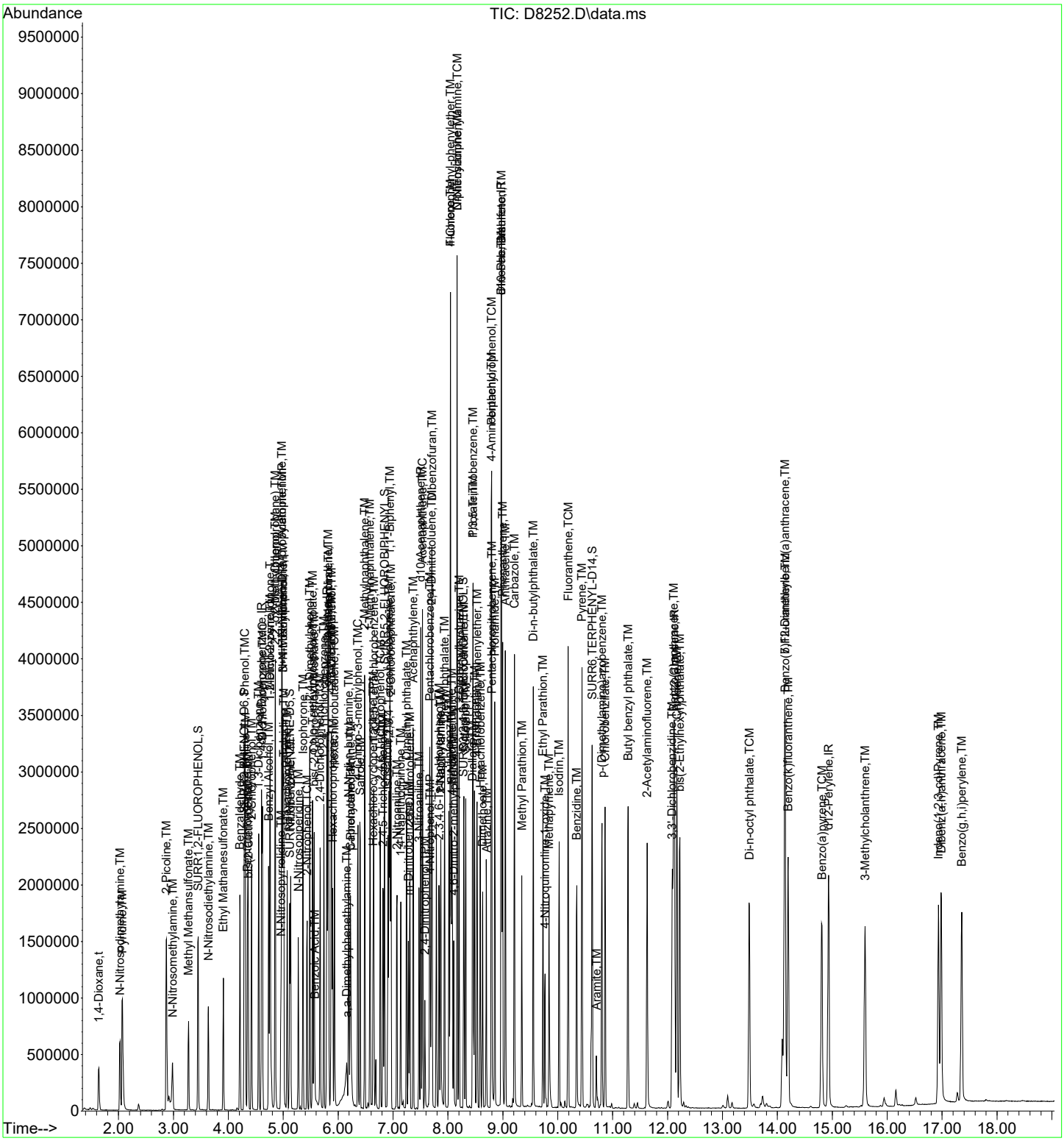
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
99) Diallate	8.446	86	372103	34.857	ppm		99
100) Phorate	8.456	121	214355	39.162	ppm	#	54
101) Phenacetin	8.483	108	571352	44.249	ppm		98
102) 4-Bromophenyl-phenylether	8.531	248	276603	39.798	ppm		94
103) Hexachlorobenzene	8.590	284	318615	40.143	ppm		96
104) Dimethoate	8.633	87	372379	43.252	ppm		98
105) Atrazine	8.702	215	120806	36.619	ppm	#	86
106) Pentachlorophenol	8.793	266	207557	49.621	ppm		97
107) 4-Aminobiphenyl	8.788	169	1021301	47.166	ppm		100
108) Pentachloronitrobenzene	8.799	237	121998	42.907	ppm		97
109) Pronamide	8.852	173	473494	39.495	ppm		99
110) Dinoseb	8.970	211	247635	49.472	ppm		98
111) Disulfoton	8.975	88	546741	29.094	ppm		93
112) Phenanthrene	8.996	178	1396379	38.015	ppm		99
113) Anthracene	9.045	178	1387545	38.768	ppm		99
114) Carbazole	9.210	167	1452229	44.926	ppm		99
115) Di-n-butylphthalate	9.553	149	1613940	37.131	ppm		99
116) 4-Nitroquinonline-1-oxide	9.767	190	110390	44.938	ppm		89
117) Fluoranthene	10.189	202	1539784	41.582	ppm		98
119) Methyl Parathion	9.344	109	303770	46.339	ppm		95
120) Ethyl Parathion	9.729	97	228829	38.694	ppm		94
121) Methapyrilene	9.842	58	537799	31.900	ppm		94
122) Isodrin	10.023	193	142683	32.244	ppm		96
123) Benzidine	10.344	184	795839	47.089	ppm		99
124) Pyrene	10.441	202	1599861	37.289	ppm		99
126) Aramite	10.703	185	90842m	38.041	ppm		
127) p-(Dimethylamino)azobe...	10.804	120	480051	37.802	ppm		92
128) Chlorobenzilate	10.863	139	550563	37.726	ppm		91
129) Butyl benzyl phthalate	11.280	149	718080	33.751	ppm		96
131) 2-Acetylaminofluorene	11.628	181	669311	43.212	ppm		100
132) 3,3'-Dichlorobenzidine	12.083	252	548631	42.077	ppm		99
133) Benzo(a)anthracene	12.109	228	1480365	38.061	ppm		99
134) Chrysene	12.168	228	1390286	38.618	ppm		99
135) bis(2-Ethylhexyl)phtha...	12.222	149	932205	31.574	ppm		97
137) Di-n-octyl phthalate	13.489	149	1460232	30.941	ppm		97
138) 7,12-Dimethylbenz(a)an...	14.137	256	731854	39.124	ppm		100
139) Benzo(b)Fluoranthene	14.142	252	1476326	39.411	ppm		97
140) Benzo(k)fluoranthene	14.195	252	1397762	39.369	ppm		99
141) Benzo(a)pyrene	14.810	252	1206538	39.153	ppm		99
142) 3-Methylcholanthrene	15.597	268	742156	40.641	ppm		98
143) Indeno(1,2,3-cd)Pyrene	16.934	276	1107155	42.212	ppm		96
144) Dibenz(a,h)anthracene	16.987	278	1183362	44.578	ppm		98
145) Benzo(g,h,i)perylene	17.356	276	1159743	40.714	ppm		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8252.D
Acq On : 21 Aug 2024 10:43 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 11:28:44 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration



GC/MS QA-QC Check Report

Tune File : I:\ACQUDATA\5977-MS64\Data\082124\D8252.D
Tune Time : 21 Aug 2024 10:43 am

Daily Calibration File : I:\ACQUDATA\5977-MS64\Data\082124\D8252.D

(2FP)	[PHL]	(NBZ)	(FBP)	(DCB)	(NPT)	(ANT)
				376139	1484930	830316

(TPH)	(PHN)	(CRY)	(PRY)
	1412240	1288290	1329460

File	Sample	Surrogate Recovery %				Internal Standard Responses		
D8253.D								
	RQ2409865-	40	28	56	46	266344	1024893	512334
		66	56			860912	788147	880356
D8254.D								
	RQ2409865-	36	26	52	48	233624	910130	462107
		91	65			781693	708045	807653
D8255.D								
	RQ2409865-	50	36	66	55	262663	1011945	515684
		100	64			897145	874078	960268
D8256.D								
	R2407398-0	37	25	71	66	235554	896772	449523
		69	37			748841	648540	746148
D8257.D								
	R2407398-0	57	41	78	72	240563	928064	467634
		98	55			776315	623437*	687791
D8258.D								
	R2407398-0	49	34	65	60	236086	907623	463947
		78	42			770952	632208*	695653
D8259.D								
	R2407398-0	46	32	64	60	251212	966163	492467
		81	43			825300	706592	763863
D8260.D								
	R2407398-0	49	32	67	69	246860	986325	524465
		81	57			941071	702956	705259
D8261.D								
	R2407398-0	55	40	69	72	271581	1059394	569044
		91	57			1003412	809139	802244
D8262.D								
	R2407398-0	54	37	69	72	259408	1030029	550266
		89	52			1005787	768274	794285
D8263.D								
	R2407398-0	47	34	50	54	243594	963829	514348
		65	47			922753	719888	725227
D8264.D								
	R2407398-0	61	11	75	80	265432	1061781	566096
		94	62			1026864	810678	793010
D8265.D								
	R2407398-0	46	15	56	63	280178	1099858	583863
		72	45			1040419	806676	807588
D8266.D								

1st AM 08/22/24
2nd BA 08/22/24

	R2407398-0	51	20	67	68	259444	1044052	572430
		95	54			1021397	846258	840980
D8267.D								
	R2407398-0	56	14	73	74	268799	1075891	581943
		102	57			1045824	872915	867546
D8268.D								
	R2407398-0	45	33	60	62	260271	1022814	535856
		76	56			935359	743752	736280
D8269.D								
	R2407398-0	40	29	54	54	236976	929861	495655
		65	46			881939	714334	711076
D8270.D								
	R2407398-0	22	18	27*	26*	284995	1120956	601253
		30*	20			1037674	804419	799768
D8273.D								
	RQ2410083-	52	39	71	70	235994	922554	477256
		85	77			825708	662151	660787*
D8274.D								
	RQ2410083-	49	38	78	76	247894	984484	533207
		116	80			930491	777412	797855
D8275.D								
	RQ2410083-	50	39	71	66	255107	1013702	555160
		104	76			979900	821842	843835
D8276.D								
	R2406872-0	44	31	69	72	229505	901567	467158
		84	74			827871	663612	677691
D8277.D								
	R2407173-0	48	33	68	69	234544	918687	479199
		85	46			852859	683968	716439
D8278.D								
	R2407173-0	43	30	63	65	239653	920224	479102
		86	44			843307	699855	714902
D8279.D								
	R2407173-0	41	29	56	57	243398	928949	482635
		77	41			849654	717834	742327

(fails) - fails 12hr time check * - fails criteria

Created: Thu Aug 22 09:12:04 2024 MS64

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8272.D
Acq On : 21 Aug 2024 07:16 pm
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 08:46:53 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	40.000	40.000	0.0	72	-0.01
2	t	1,4-Dioxane	40.000	0.035	99.9#	0	-0.07
3	TM	Pyridine	40.000	0.011	100.0#	0	0.05
4	TM	N-Nitrosodimethylamine	40.000	0.000	100.0#	0	-2.06#
5	TM	2-Picoline	40.000	0.000	100.0#	0	-2.89#
6	TM	N-Nitrosomethylamine	40.000	0.000	100.0#	0	-3.01#
7	TM	Methyl Methansulfonate	40.000	0.000	100.0#	0	-3.29#
8	S	SURR1,2-FLUOROPHENOL	40.000	0.000	100.0#	0	-3.46#
9	TM	N-Nitrosodiethylamine	40.000	0.000	100.0#	0	-3.65#
10	TM	Ethyl Mathanesulfonate	40.000	0.015	100.0#	0	0.16
11	TM	Benzaldehyde	40.000	0.017	100.0#	0	-0.04
12	TM	Aniline	40.000	0.167	99.6#	0	0.00
13	S	SURR2,PHENOL-D6	40.000	0.000	100.0#	0	-4.30#
14	TMC	Phenol	40.000	0.017	100.0#	0	0.00
15	TM	bis(2-Clethyl)Ether	40.000	0.237	99.4#	0	-0.06
16	TM	Pentachloroethane	40.000	0.000	100.0#	0	-4.36#
17	TM	2-Chlorophenol	40.000	0.000	100.0#	0	-4.43#
18	TM	1,3-Diclbenzene	40.000	0.000	100.0#	0	-4.57#
19	TMC	1,4-Dichlorobenzene	40.000	0.000	100.0#	0	-4.63#
20	TM	1,2-Diclbenzene	40.000	0.000	100.0#	0	-4.77#
21	TM	Benzyl Alcohol	40.000	0.023	99.9#	0	-0.09
22	T	1-Methyl-2-pyrrolidinone	40.000	0.000	100.0#	0	-4.77#
23	TM	2,2'-oxybis(1-Chloropropane	40.000	0.060	99.8#	0	0.08
24	TM	2-Methylphenol	40.000	0.000	100.0#	0	-4.86#
25	TM	3+4-Methylphenol	40.000	0.000	100.0#	0	-5.00#
26	TM	Acetophenone	40.000	0.000	100.0#	0	-4.99#
27	TMP	N-Nitroso-Di-n-propylamine	40.000	0.030	99.9#	0	0.00
28	TM	N-Nitrosopyrrolidine	40.000	0.000	100.0#	0	-4.97#
29	TM	N-Nitrosomorpholine	40.000	0.000	100.0#	0	-5.00#
30	TM	o-Toluidine	40.000	0.000	100.0#	0	-5.02#
31	TM	Hexachloroethane	40.000	0.000	100.0#	0	-5.08#
32	TM	o,o,o-Triethylphosphorothio	40.000	0.000	100.0#	0	-5.55#
33	TM	Alpha-terpinol	40.000	0.122	99.7#	0	-0.02
34	IR	d8-Naphthalene	40.000	40.000	0.0	72	-0.01
35	S	SURR4,NITROBENZENE-D5	40.000	0.020	99.9#	0	0.00
36	TM	Nitrobenzene	40.000	0.027	99.9#	0	0.00
37	TM	N-Nitrosopiperidine	40.000	0.000	100.0#	0	-5.28#
38	TM	Isophorone	40.000	0.011	100.0#	0	-0.03
39	TCM	2-Nitrophenol	40.000	0.000	100.0#	0	-5.44#
40	TM	Benzoic Acid	40.000	0.000	100.0#	0	-5.58#
41	TM	2,4-Dimethylphenol	40.000	0.056	99.9#	0	0.04
42	TM	bis(-2-Chloroethoxy)Methane	40.000	0.000	100.0#	0	-5.57#
43	TCM	2,4-Dichlorophenol	40.000	0.000	100.0#	0	-5.68#
44	TM	a,a-Dimethylphenethylamine	40.000	0.000	100.0#	0	-5.99#
45	TM	1,2,4-Trichlorobenzene	40.000	0.000	100.0#	0	-5.75#
46	TM	Naphthalene	40.000	0.017	100.0#	0	-0.02
47	TM	4-Chloroaniline	40.000	0.017	100.0#	0	0.00
48	TM	2,6-Dichlorophenol	40.000	0.000	100.0#	0	-5.89#
49	TCM	Hexachlorobutadiene	40.000	0.000	100.0#	0	-5.94#
50	TM	Hexachloropropene	40.000	0.000	100.0#	0	-5.91#
51	TMC	4-Chloro-3-methylphenol	40.000	0.022	99.9#	0	-0.04

1st AM 08/22/24
2nd BA 08/22/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8272.D
Acq On : 21 Aug 2024 07:16 pm
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 08:46:53 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
52	TM	N-N-di-n-butylamine	40.000	0.000	100.0#	0	-6.20#
53	TM	Caprolactam	40.000	0.248	99.4#	0	-0.03
54	TM	p-Phenylenediamine	40.000	0.000	100.0#	0	-6.23#
55	TM	Safrole	40.000	0.000	100.0#	0	-6.41#
56	TM	2-Methylnaphthalene	40.000	0.000	100.0#	0	-6.50#
57	TM	1-Methylnaphthalene	40.000	0.013	100.0#	0	0.10
58	IR	d10-Acenaphthene	40.000	40.000	0.0	68	-0.01
59	TPM	Hexachlorocyclopentadiene	40.000	0.000	100.0#	0	-6.65#
60	TM	1,2,4,5-Tetrachlorobenzene	40.000	0.000	100.0#	0	-6.66#
61	TM	1,2,3,4-Tetrachlorobenzene	40.000	0.000	100.0#	0	-6.93#
62	TCM	2,4,6-Trichlorophenol	40.000	0.000	100.0#	0	-6.78#
63	TM	2,4,5-Trichlorophenol	40.000	0.000	100.0#	0	-6.82#
64	S	SURR5,2-FLUOROBIPHENYL	40.000	0.012	100.0#	0	0.03
65	TM	Isosafrole	40.000	0.000	100.0#	0	-6.92#
66	TM	1,1'-Biphenyl	40.000	0.010	100.0#	0	-0.01
67	TM	2-Chloronaphthalene	40.000	0.000	100.0#	0	-6.97#
68	TM	2-Nitroaniline	40.000	0.027	99.9#	0	0.05
69	TM	1,4-Naphthoquinone	40.000	0.000	100.0#	0	-7.15#
70	TM	m-Dinitrobenzene	40.000	0.000	100.0#	0	-7.29#
71	TM	Acenaphthylene	40.000	0.008	100.0#	0	-0.01
72	TM	Dimethyl phthalate	40.000	0.010	100.0#	0	-0.01
73	TM	2,6-Dinitrotoluene	40.000	0.000	100.0#	0	-7.31#
74	TMC	Acenaphthene	40.000	0.008	100.0#	0	-0.01
75	TM	3-Nitroaniline	40.000	0.000	100.0#	0	-7.48#
76	TPM	2,4-Dinitrophenol	40.000	0.000	100.0#	0	-7.59#
77	TM	Dibenzofuran	40.000	0.007	100.0#	0	-0.01
78	TM	2,4-Dinitrotoluene	40.000	0.000	100.0#	0	-7.71#
79	TMP	4-Nitrophenol	40.000	0.000	100.0#	0	-7.68#
80	TM	Pentachlorobenzene	40.000	0.000	100.0#	0	-7.68#
81	TM	1-Napthylamine	40.000	0.000	100.0#	0	-7.83#
82	TM	2-Napthylamine	40.000	0.000	100.0#	0	-7.88#
83	TM	2,3,4,6-Tetrachlorophenol	40.000	0.000	100.0#	0	-7.85#
84	TM	Fluorene	40.000	0.008	100.0#	0	0.00
85	TM	4-Chlorophenyl-phenylether	40.000	0.219	99.5#	0	-0.04
86	TM	Diethylphthalate	40.000	0.017	100.0#	0	-0.01
87	TM	4-Nitroaniline	40.000	0.061	99.8#	0	-0.03
88	TM	5-Nitro-o-toluidine	40.000	0.000	100.0#	0	-8.07#
89	S	SURR3,2,4,6-TRIBROMOPHENOL	40.000	0.000	100.0#	0	-8.29#
90	TM	Sulfotepp	40.000	0.000	100.0#	0	-8.34#
91	TM	Octachlorocyclopentene	40.000	0.000	100.0#	0	-8.30#
92	IR	d10-Phenanthrene	40.000	40.000	0.0	73	-0.02
93	TM	Thionazin	40.000	0.000	100.0#	0	-8.03#
94	TM	4,6-Dinitro-2-methylphenol	40.000	0.000	100.0#	0	-8.11#
95	TM	Diphenylamine	80.000	0.028	100.0#	0	-0.02
96	TM	1,2 Diphenylhydrazine	40.000	0.013	100.0#	0	-0.02
97	TCM	N-Nitrosodiphenylamine	80.000	0.028	100.0#	0	-0.02
98	TM	1,3,5-Trinirobenzene	40.000	0.000	100.0#	0	-8.46#
99	TM	Diallate	40.000	0.000	100.0#	0	-8.46#
100	TM	Phorate	40.000	0.000	100.0#	0	-8.47#
101	TM	Phenacetin	40.000	0.000	100.0#	0	-8.49#

1st AM 08/22/24
2nd BA 08/22/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8272.D
Acq On : 21 Aug 2024 07:16 pm
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 08:46:53 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
102	TM	4-Bromophenyl-phenylether	40.000	0.000	100.0#	0	-8.54#
103	TM	Hexachlorobenzene	40.000	0.000	100.0#	0	-8.60#
104	TM	Dimethoate	40.000	0.000	100.0#	0	-8.64#
105	TM	Atrazine	40.000	0.000	100.0#	0	-8.71#
106	TCM	Pentachlorophenol	40.000	0.000	100.0#	0	-8.80#
107	TM	4-Aminobiphenyl	40.000	0.000	100.0#	0	-8.80#
108	TM	Pentachloronitrobenzene	40.000	0.000	100.0#	0	-8.80#
109	TM	Pronamide	40.000	0.105	99.7#	0	0.11
110	TM	Dinoseb	40.000	0.000	100.0#	0	-8.98#
111	TM	Disulfoton	40.000	0.000	100.0#	0	-8.98#
112	TM	Phenanthrene	40.000	0.014	100.0#	0	-0.02
113	TM	Anthracene	40.000	0.010	100.0#	0	-0.02
114	TM	Carbazole	40.000	0.016	100.0#	0	-0.02
115	TM	Di-n-butylphthalate	40.000	0.015	100.0#	0	-0.02
116	TM	4-Nitroquinonline-1-oxide	40.000	0.000	100.0#	0	-9.77#
117	TCM	Fluoranthene	40.000	0.017	100.0#	0	-0.01
118	IR	d12-Chrysene	40.000	40.000	0.0	68	-0.03
119	TM	Methyl Parathion	40.000	0.000	100.0#	0	-9.35#
120	TM	Ethyl Parathion	40.000	0.000	100.0#	0	-9.74#
121	TM	Methapyrilene	40.000	0.000	100.0#	0	-9.85#
122	TM	Isodrin	40.000	0.045	99.9#	0	0.00
123	TM	Benzidine	40.000	0.000	100.0#	0	-10.35#
124	TM	Pyrene	40.000	0.015	100.0#	0	-0.01
125	S	SURR6,TERPHENYL-D14	40.000	0.022	99.9#	0	-0.02
126	TM	Aramite	40.000	0.200	99.5#	0	0.05
127	TM	p-(Dimethylamino)azobenzene	40.000	0.000	100.0#	0	-10.81#
128	TM	Chlorobenzilate	40.000	0.027	99.9#	0	0.00
129	TM	Butyl benzyl phthalate	40.000	0.022	99.9#	0	-0.05
130	TM	3,3-Dimethylbenzidine	40.000	43.616	-9.0	71	-0.02
131	TM	2-Acetylaminofluorene	40.000	0.000	100.0#	0	-11.64#
132	TM	3,3'-Dichlorobenzidine	40.000	0.000	100.0#	0	-12.10#
133	TM	Benzo(a)anthracene	40.000	0.097	99.8#	0	-0.01
134	TM	Chrysene	40.000	0.015	100.0#	0	-0.04
135	TM	bis(2-Ethylhexyl)phthalate	40.000	0.021	99.9#	0	-0.03
136	IR	d12-Perylene	40.000	40.000	0.0	67	-0.03
137	TCM	Di-n-octyl phthalate	40.000	0.007	100.0#	0	0.10
138	TM	7,12-Dimethylbenz(a)anthrac	40.000	0.000	100.0#	0	-14.15#
139	TM	Benzo(b)Fluoranthene	40.000	0.008	100.0#	0	-0.04
140	TM	Benzo(k)fluoranthene	40.000	0.006	100.0#	0	-0.02
141	TCM	Benzo(a)pyrene	40.000	0.148	99.6#	0	0.10
142	TM	3-Methylcholanthrene	40.000	0.014	100.0#	0	0.00
143	TM	Indeno(1,2,3-cd)Pyrene	40.000	0.012	100.0#	0	0.00
144	TM	Dibenz(a,h)anthracene	40.000	0.010	100.0#	0	-0.03
145	TM	Benzo(g,h,i)perylene	40.000	0.016	100.0#	0	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 13

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8272.D
Acq On : 21 Aug 2024 07:16 pm
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 08:46:53 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.605	152	248122	40.00	ppm	-0.01
34) d8-Naphthalene	5.793	136	978286	40.00	ppm	-0.01
58) d10-Acenaphthene	7.504	164	510742	40.00	ppm	-0.01
92) d10-Phenanthrene	8.964	188	933369	40.00	ppm	-0.02
118) d12-Chrysene	12.109	240	775493	40.00	ppm	-0.03
136) d12-Perylene	14.917	264	759140	40.00	ppm	-0.03
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	0.000	112	0	0.00	ppm	
Spiked Amount 20.000	Range 10 - 70		Recovery =	0.00%#		
13) SURR2,PHENOL-D6	0.000	99	0	0.00	ppm	
Spiked Amount 20.000	Range 10 - 107		Recovery =	0.00%#		
35) SURR4,NITROBENZENE-D5	5.124	82	177	0.02	ppm	0.00
Spiked Amount 10.000	Range 31 - 110		Recovery =	0.20%#		
64) SURR5,2-FLUOROBIPHENYL	6.889	172	190	0.01	ppm	0.03
Spiked Amount 10.000	Range 31 - 118		Recovery =	0.10%#		
89) SURR3,2,4,6-TRIBROMOPH...	0.000	330	0	0.00	ppm	
Spiked Amount 20.000	Range 35 - 141		Recovery =	0.00%#		
125) SURR6,TERPHENYL-D14	10.617	244	373	0.02	ppm	-0.02
Spiked Amount 10.000	Range 10 - 165		Recovery =	0.20%#		
Target Compounds						Qvalue
130) 3,3-Dimethylbenzidine	11.243	212	506747	43.616	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st AM 08/22/24
2nd BA 08/22/24

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Data File : D8272.D
Acq On : 21 Aug 2024 07:16 pm
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 08:46:53 2024
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Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
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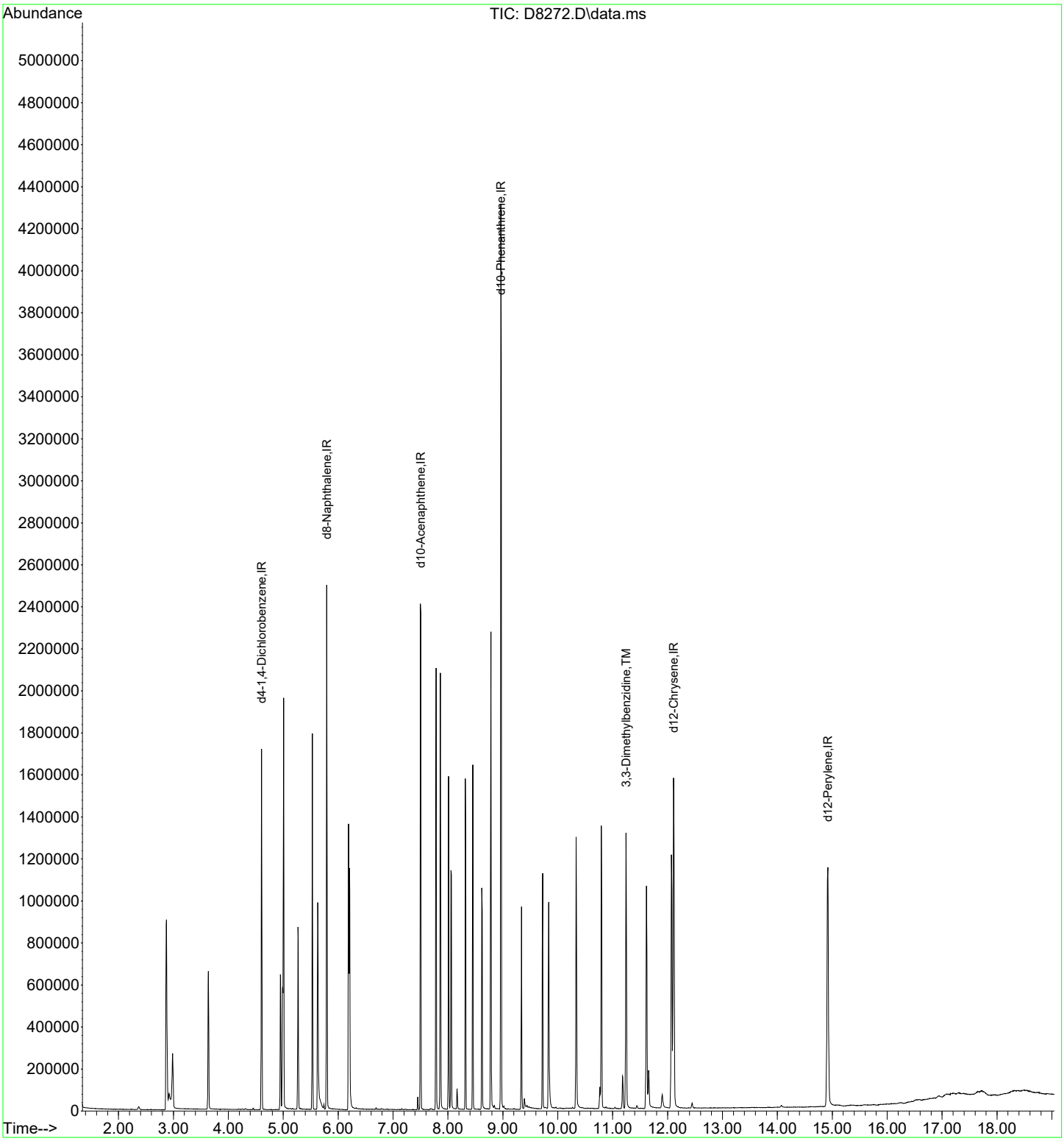
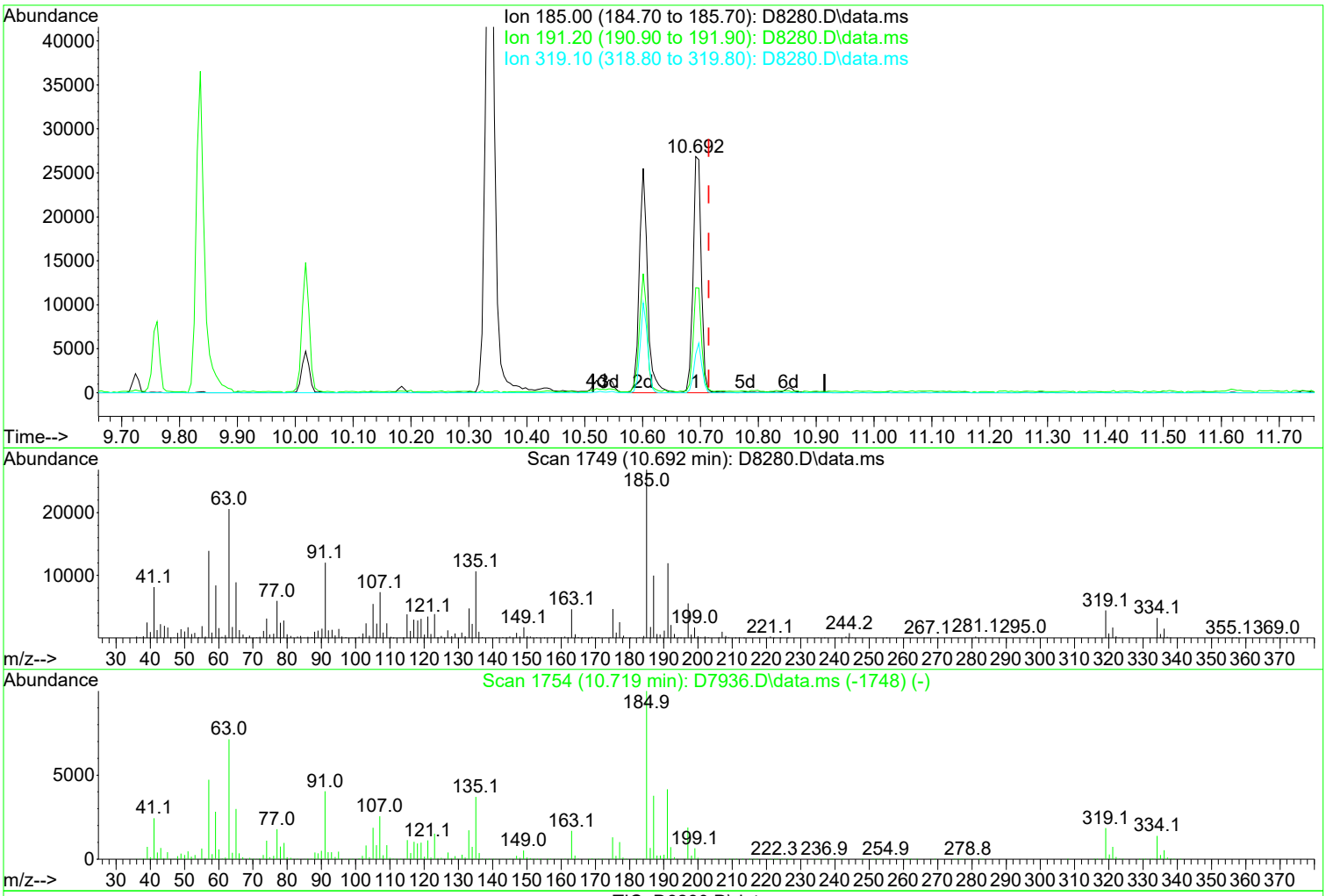


Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8280.D
Acq On : 21 Aug 2024 10:29 pm
Operator : EDeGray
Sample : CCV
Misc : 443361
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 08:47:15 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration



TIC: D8280.D\data.ms

(126) Aramite (TM)

10.692min (-0.023) 32.15 ppm m

response 51973

Ion	Exp%	Act%
185.00	100.00	100.00
191.20	40.80	44.43
319.10	19.60	16.37
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/22/24

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8280.D
Acq On : 21 Aug 2024 10:29 pm
Operator : EDeGray
Sample : CCV
Misc : 443361
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 08:47:15 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	40.000	40.000	0.0	76	-0.01
2	t	1,4-Dioxane	40.000	39.434	1.4	82	-0.04
3	TM	Pyridine	40.000	42.446	-6.1	84	-0.03
4	TM	N-Nitrosodimethylamine	40.000	40.852	-2.1	82	-0.03
5	TM	2-Picoline	40.000	41.183	-3.0	82	-0.02
6	TM	N-Nitrosomethylamine	40.000	40.308	-0.8	81	-0.02
7	TM	Methyl Methansulfonate	40.000	38.940	2.7	79	-0.02
8	S	SURR1,2-FLUOROPHENOL	40.000	42.343	-5.9	84	-0.01
9	TM	N-Nitrosodiethylamine	40.000	35.069	12.3	69	-0.01
10	TM	Ethyl Mathanesulfonate	40.000	38.631	3.4	78	-0.01
11	TM	Benzaldehyde	40.000	36.662	8.3	75	-0.01
12	TM	Aniline	40.000	42.613	-6.5	83	-0.01
13	S	SURR2,PHENOL-D6	40.000	42.862	-7.2	83	-0.01
14	TMC	Phenol	40.000	43.295	-8.2	85	-0.01
15	TM	bis(2-Clethyl)Ether	40.000	38.145	4.6	78	-0.01
16	TM	Pentachloroethane	40.000	40.415	-1.0	81	-0.01
17	TM	2-Chlorophenol	40.000	43.619	-9.0	85	-0.01
18	TM	1,3-Diclbenzene	40.000	41.378	-3.4	83	-0.02
19	TMC	1,4-Dichlorobenzene	40.000	41.119	-2.8	83	-0.01
20	TM	1,2-Diclbenzene	40.000	41.452	-3.6	83	-0.01
21	TM	Benzyl Alcohol	40.000	41.844	-4.6	80	-0.01
22	T	1-Methyl-2-pyrrolidinone	40.000	41.558	-3.9	81	-0.02
23	TM	2,2'-oxybis(1-Chloropropane	40.000	34.300	14.3	70	-0.01
24	TM	2-Methylphenol	40.000	42.597	-6.5	83	-0.01
25	TM	3+4-Methylphenol	40.000	43.307	-8.3	82	-0.01
26	TM	Acetophenone	40.000	39.226	1.9	78	-0.01
27	TMP	N-Nitroso-Di-n-propylamine	40.000	36.843	7.9	72	-0.01
28	TM	N-Nitrosopyrrolidine	40.000	41.503	-3.8	80	-0.01
29	TM	N-Nitrosomorpholine	40.000	38.527	3.7	77	-0.01
30	TM	o-Toluidine	40.000	39.919	0.2	74	-0.01
31	TM	Hexachloroethane	40.000	40.180	-0.4	80	-0.01
32	TM	o,o,o-Triethylphosphorothio	40.000	36.804	8.0	74	-0.02
33	TM	Alpha-terpinol	40.000	36.696	8.3	71	-0.01
34	IR	d8-Naphthalene	40.000	40.000	0.0	76	-0.01
35	S	SURR4,NITROBENZENE-D5	40.000	41.246	-3.1	80	-0.01
36	TM	Nitrobenzene	40.000	41.587	-4.0	81	-0.01
37	TM	N-Nitrosopiperidine	40.000	37.177	7.1	74	-0.01
38	TM	Isophorone	40.000	37.191	7.0	74	0.00
39	TCM	2-Nitrophenol	40.000	45.670	-14.2	93	0.00
40	TM	Benzoic Acid	40.000	46.521	-16.3	111	0.00
41	TM	2,4-Dimethylphenol	40.000	41.017	-2.5	79	-0.01
42	TM	bis(-2-Chloroethoxy)Methane	40.000	36.899	7.8	74	-0.01
43	TCM	2,4-Dichlorophenol	40.000	44.861	-12.2	84	-0.01
44	TM	a,a-Dimethylphenethylamine	40.000	36.925	7.7	71	0.14
45	TM	1,2,4-Trichlorobenzene	40.000	41.189	-3.0	84	-0.01
46	TM	Naphthalene	40.000	40.548	-1.4	82	-0.01
47	TM	4-Chloroaniline	40.000	41.095	-2.7	77	-0.01
48	TM	2,6-Dichlorophenol	40.000	44.893	-12.2	84	-0.01
49	TCM	Hexachlorobutadiene	40.000	39.283	1.8	80	-0.01
50	TM	Hexachloropropene	40.000	45.990	-15.0	85	-0.01
51	TMC	4-Chloro-3-methylphenol	40.000	44.658	-11.6	82	-0.01

1st AM 08/22/24
2nd BA 08/22/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8280.D
Acq On : 21 Aug 2024 10:29 pm
Operator : EDeGray
Sample : CCV
Misc : 443361
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 08:47:15 2024
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Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
52	TM	N-N-di-n-butylamine	40.000	37.657	5.9	70	-0.01
53	TM	Caprolactam	40.000	43.179	-7.9	82	-0.01
54	TM	p-Phenylenediamine	40.000	28.164	29.6#	48	0.00
55	TM	Safrole	40.000	37.790	5.5	74	-0.01
56	TM	2-Methylnaphthalene	40.000	40.315	-0.8	80	-0.01
57	TM	1-Methylnaphthalene	40.000	40.702	-1.8	81	-0.01
58	IR	d10-Acenaphthene	40.000	40.000	0.0	76	-0.01
59	TPM	Hexachlorocyclopentadiene	40.000	37.544	6.1	69	-0.01
60	TM	1,2,4,5-Tetrachlorobenzene	40.000	41.008	-2.5	83	-0.01
61	TM	1,2,3,4-Tetrachlorobenzene	40.000	41.110	-2.8	84	-0.01
62	TCM	2,4,6-Trichlorophenol	40.000	47.864	-19.7	85	-0.01
63	TM	2,4,5-Trichlorophenol	40.000	47.406	-18.5	84	0.00
64	S	SURR5,2-FLUOROBIPHENYL	40.000	38.523	3.7	78	-0.01
65	TM	Isosafrole	40.000	36.897	7.8	73	-0.01
66	TM	1,1'-Biphenyl	40.000	39.380	1.5	79	-0.01
67	TM	2-Chloronaphthalene	40.000	41.070	-2.7	82	-0.01
68	TM	2-Nitroaniline	40.000	44.259	-10.6	80	-0.01
69	TM	1,4-Naphthoquinone	40.000	39.576	1.1	71	-0.01
70	TM	m-Dinitrobenzene	40.000	46.142	-15.4	92	0.00
71	TM	Acenaphthylene	40.000	40.957	-2.4	81	-0.01
72	TM	Dimethyl phthalate	40.000	38.530	3.7	76	-0.02
73	TM	2,6-Dinitrotoluene	40.000	47.614	-19.0	83	-0.01
74	TMC	Acenaphthene	40.000	40.537	-1.3	81	-0.01
75	TM	3-Nitroaniline	40.000	49.457	-23.6#	89	-0.01
76	TPM	2,4-Dinitrophenol	40.000	54.567	-36.4#	131	0.00
77	TM	Dibenzofuran	40.000	41.034	-2.6	82	0.00
78	TM	2,4-Dinitrotoluene	40.000	43.067	-7.7	84	0.00
79	TMP	4-Nitrophenol	40.000	42.136	-5.3	76	0.00
80	TM	Pentachlorobenzene	40.000	40.806	-2.0	84	-0.01
81	TM	1-Napthylamine	40.000	43.757	-9.4	85	0.03
82	TM	2-Napthylamine	40.000	50.210	-25.5#	97	-0.02
83	TM	2,3,4,6-Tetrachlorophenol	40.000	46.560	-16.4	93	-0.01
84	TM	Fluorene	40.000	41.221	-3.1	80	0.00
85	TM	4-Chlorophenyl-phenylether	40.000	39.674	0.8	78	-0.01
86	TM	Diethylphthalate	40.000	35.320	11.7	71	-0.02
87	TM	4-Nitroaniline	40.000	49.819	-24.5#	89	-0.01
88	TM	5-Nitro-o-toluidine	40.000	47.749	-19.4	84	-0.01
89	S	SURR3,2,4,6-TRIBROMOPHENOL	40.000	51.724	-29.3#	94	-0.01
90	TM	Sulfotepp	40.000	37.068	7.3	71	-0.01
91	TM	Octachlorocyclopentene	40.000	45.161	-12.9	89	-0.01
92	IR	d10-Phenanthrene	40.000	40.000	0.0	77	-0.02
93	TM	Thionazin	40.000	33.538	16.2	67	-0.02
94	TM	4,6-Dinitro-2-methylphenol	40.000	50.285	-25.7#	108	-0.01
95	TM	Diphenylamine	80.000	80.099	-0.1	80	-0.02
96	TM	1,2 Diphenylhydrazine	40.000	36.467	8.8	72	-0.01
97	TCM	N-Nitrosodiphenylamine	80.000	80.114	-0.1	80	-0.02
98	TM	1,3,5-Trinirobenzene	40.000	46.961	-17.4	94	0.00
99	TM	Diallate	40.000	33.230	16.9	66	-0.01
100	TM	Phorate	40.000	37.606	6.0	72	-0.02
101	TM	Phenacetin	40.000	41.703	-4.3	73	-0.01

1st AM 08/22/24
2nd BA 08/22/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8280.D
Acq On : 21 Aug 2024 10:29 pm
Operator : EDeGray
Sample : CCV
Misc : 443361
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 08:47:15 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
102	TM	4-Bromophenyl-phenylether	40.000	40.608	-1.5	81	-0.01
103	TM	Hexachlorobenzene	40.000	41.630	-4.1	86	-0.01
104	TM	Dimethoate	40.000	39.654	0.9	74	-0.02
105	TM	Atrazine	40.000	31.941	20.1#	63	-0.02
106	TCM	Pentachlorophenol	40.000	47.949	-19.9	101	-0.01
107	TM	4-Aminobiphenyl	40.000	44.825	-12.1	77	-0.02
108	TM	Pentachloronitrobenzene	40.000	42.840	-7.1	80	0.00
109	TM	Pronamide	40.000	37.163	7.1	71	-0.01
110	TM	Dinoseb	40.000	45.096	-12.7	92	-0.01
111	TM	Disulfoton	40.000	26.672	33.3#	55	-0.02
112	TM	Phenanthrene	40.000	39.798	0.5	82	-0.01
113	TM	Anthracene	40.000	40.208	-0.5	81	-0.01
114	TM	Carbazole	40.000	46.042	-15.1	84	-0.01
115	TM	Di-n-butylphthalate	40.000	34.277	14.3	66	-0.02
116	TM	4-Nitroquinonline-1-oxide	40.000	37.284	6.8	68	-0.01
117	TCM	Fluoranthene	40.000	42.984	-7.5	83	-0.01
118	IR	d12-Chrysene	40.000	40.000	0.0	77	-0.02
119	TM	Methyl Parathion	40.000	42.175	-5.4	76	-0.01
120	TM	Ethyl Parathion	40.000	34.934	12.7	67	-0.02
121	TM	Methapyrilene	40.000	30.716	23.2#	63	-0.01
122	TM	Isodrin	40.000	32.920	17.7	73	-0.02
123	TM	Benzidine	40.000	41.799	-4.5	83	-0.01
124	TM	Pyrene	40.000	39.844	0.4	83	-0.02
125	S	SURR6,TERPHENYL-D14	40.000	37.312	6.7	77	-0.02
126	TM	Aramite	40.000	32.150	19.6	62	-0.02
127	TM	p-(Dimethylamino)azobenzene	40.000	35.124	12.2	67	-0.02
128	TM	Chlorobenzilate	40.000	35.103	12.2	68	-0.02
129	TM	Butyl benzyl phthalate	40.000	31.381	21.5#	62	-0.02
130	TM	3,3-Dimethylbenzidine	40.000	0.000	100.0#	0	-11.26#
131	TM	2-Acetylaminofluorene	40.000	38.298	4.3	73	-0.02
132	TM	3,3'-Dichlorobenzidine	40.000	40.979	-2.4	78	-0.02
133	TM	Benzo(a)anthracene	40.000	39.451	1.4	80	-0.02
134	TM	Chrysene	40.000	40.846	-2.1	82	-0.02
135	TM	bis(2-Ethylhexyl)phthalate	40.000	27.908	30.2#	56	-0.03
136	IR	d12-Perylene	40.000	40.000	0.0	78	-0.03
137	TCM	Di-n-octyl phthalate	40.000	26.908	32.7#	52	-0.04
138	TM	7,12-Dimethylbenz(a)anthrac	40.000	38.381	4.0	77	-0.03
139	TM	Benzo(b)Fluoranthene	40.000	40.562	-1.4	81	-0.03
140	TM	Benzo(k)fluoranthene	40.000	42.055	-5.1	82	-0.03
141	TCM	Benzo(a)pyrene	40.000	40.735	-1.8	79	-0.03
142	TM	3-Methylcholanthrene	40.000	39.690	0.8	76	-0.03
143	TM	Indeno(1,2,3-cd)Pyrene	40.000	44.951	-12.4	83	-0.02
144	TM	Dibenz(a,h)anthracene	40.000	46.111	-15.3	83	-0.02
145	TM	Benzo(g,h,i)perylene	40.000	42.932	-7.3	83	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 1

Quantitation Report (QT Reviewed)

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Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.605	152	260228	40.00	ppm		-0.01
34) d8-Naphthalene	5.792	136	1036641	40.00	ppm		-0.01
58) d10-Acenaphthene	7.504	164	570008	40.00	ppm		-0.01
92) d10-Phenanthrene	8.964	188	985154	40.00	ppm		-0.02
118) d12-Chrysene	12.115	240	872104	40.00	ppm		-0.02
136) d12-Perylene	14.917	264	878486	40.00	ppm		-0.03
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.450	112	350160	42.34	ppm		-0.01
Spiked Amount 20.000	Range 10 - 70		Recovery = 211.70%#				
13) SURR2,PHENOL-D6	4.289	99	461448	42.86	ppm		-0.01
Spiked Amount 20.000	Range 10 - 107		Recovery = 214.30%#				
35) SURR4,NITROBENZENE-D5	5.113	82	379570	41.25	ppm		-0.01
Spiked Amount 10.000	Range 31 - 110		Recovery = 412.50%#				
64) SURR5,2-FLUOROBIPHENYL	6.841	172	693464	38.52	ppm		-0.01
Spiked Amount 10.000	Range 31 - 118		Recovery = 385.20%#				
89) SURR3,2,4,6-TRIBROMOPH...	8.285	330	109778	51.72	ppm		-0.01
Spiked Amount 20.000	Range 35 - 141		Recovery = 258.60%#				
125) SURR6,TERPHENYL-D14	10.617	244	702026	37.31	ppm		-0.02
Spiked Amount 10.000	Range 10 - 165		Recovery = 373.10%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.642	88	146693	39.434	ppm		96
3) Pyridine	2.075	79	402113	42.446	ppm		97
4) N-Nitrosodimethylamine	2.027	74	254122	40.852	ppm		98
5) 2-Picoline	2.872	93	420908	41.183	ppm		99
6) N-Nitrosomethylamine	2.984	42	138702	40.308	ppm		96
7) Methyl Methansulfonate	3.273	80	196321	38.940	ppm		98
9) N-Nitrosodiethylamine	3.637	102	155774	35.069	ppm		93
10) Ethyl Mathanesulfonate	3.910	79	273857	38.631	ppm		96
11) Benzaldehyde	4.215	106	242135	36.662	ppm		95
12) Aniline	4.311	93	578171	42.613	ppm		97
14) Phenol	4.300	94	542782	43.295	ppm		96
15) bis(2-Clethyl)Ether	4.364	93	364890	38.145	ppm		95
16) Pentachloroethane	4.354	117	129999	40.415	ppm		97
17) 2-Chlorophenol	4.423	128	392611	43.619	ppm		96
18) 1,3-Diclbenzene	4.552	146	396380	41.378	ppm		100
19) 1,4-Dichlorobenzene	4.621	146	408204	41.119	ppm		99
20) 1,2-Diclbenzene	4.760	146	386847	41.452	ppm		99
21) Benzyl Alcohol	4.733	79	281770	41.844	ppm		98
22) 1-Methyl-2-pyrrolidinone	4.749	99	244916	41.558	ppm		94
23) 2,2'-oxybis(1-Chloropr...	4.851	45	399291	34.300	ppm	#	57
24) 2-Methylphenol	4.851	108	350488	42.597	ppm		99
25) 3+4-Methylphenol	4.990	108	393531	43.307	ppm		98
26) Acetophenone	4.974	105	517911	39.226	ppm		98
27) N-Nitroso-Di-n-propyla...	4.974	70	273752	36.843	ppm		95
28) N-Nitrosopyrrolidine	4.958	100	201831	41.503	ppm		86
29) N-Nitrosomorpholine	4.990	56	233381	38.527	ppm		95
30) o-Toluidine	5.006	106	578530	39.919	ppm		76
31) Hexachloroethane	5.070	117	161030	40.180	ppm		91
32) o,o,o-Triethylphosphor...	5.530	198	158831	36.804	ppm		89
33) Alpha-terpinol	5.825	121	132633	36.696	ppm		95
36) Nitrobenzene	5.135	77	389148	41.587	ppm		95
37) N-Nitrosopiperidine	5.274	42	229806	37.177	ppm		94
38) Isophorone	5.359	82	672170	37.191	ppm		95

1st AM 08/22/24
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Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) 2-Nitrophenol	5.434	139	201769	45.670	ppm		98
40) Benzoic Acid	5.568	105	167042	46.521	ppm		99
41) 2,4-Dimethylphenol	5.477	107	378479	41.017	ppm		93
42) bis(-2-Chloroethoxy)Me...	5.557	93	395734	36.899	ppm		99
43) 2,4-Dichlorophenol	5.669	162	301230	44.861	ppm		99
44) a,a-Dimethylphenethyla...	6.129	58	770646	36.925	ppm		98
45) 1,2,4-Trichlorobenzene	5.739	180	307645	41.189	ppm		99
46) Naphthalene	5.814	128	1060886	40.548	ppm		100
47) 4-Chloroaniline	5.867	127	422985	41.095	ppm		99
48) 2,6-Dichlorophenol	5.878	162	293571	44.893	ppm		95
49) Hexachlorobutadiene	5.931	225	166995	39.283	ppm		98
50) Hexachloropropene	5.899	213	196863	45.990	ppm		100
51) 4-Chloro-3-methylphenol	6.354	107	337296	44.658	ppm		99
52) N-N-di-n-butylamine	6.188	84	303377	37.657	ppm		92
53) Caprolactam	6.210	113	130534	43.179	ppm		89
54) p-Phenylenediamine	6.226	80	68946	28.164	ppm		87
55) Safrole	6.397	162	234756	37.790	ppm		96
56) 2-Methylnaphthalene	6.482	142	699987	40.315	ppm		99
57) 1-Methylnaphthalene	6.579	142	661044	40.702	ppm		99
59) Hexachlorocyclopentadiene	6.638	237	117252	37.544	ppm		97
60) 1,2,4,5-Tetrachloroben...	6.643	216	293976	41.008	ppm		99
61) 1,2,3,4-Tetrachloroben...	6.921	216	293279	41.110	ppm		99
62) 2,4,6-Trichlorophenol	6.766	196	202664	47.864	ppm		100
63) 2,4,5-Trichlorophenol	6.814	196	211603	47.406	ppm		99
65) Isosafrole	6.905	104	117921	36.897	ppm		91
66) 1,1'-Biphenyl	6.937	154	835646	39.380	ppm		99
67) 2-Chloronaphthalene	6.958	162	637349	41.070	ppm		99
68) 2-Nitroaniline	7.065	65	208082	44.259	ppm		97
69) 1,4-Naphthoquinone	7.135	158	207440	39.576	ppm		82
70) m-Dinitrobenzene	7.279	168	124780	46.142	ppm		73
71) Acenaphthylene	7.365	152	941917	40.957	ppm		100
72) Dimethyl phthalate	7.242	163	687406	38.530	ppm		100
73) 2,6-Dinitrotoluene	7.301	165	169816	47.614	ppm		97
74) Acenaphthene	7.536	153	658543	40.537	ppm		99
75) 3-Nitroaniline	7.472	138	210226	49.457	ppm		91
76) 2,4-Dinitrophenol	7.579	184	78510	54.567	ppm		94
77) Dibenzofuran	7.707	168	905118	41.034	ppm		96
78) 2,4-Dinitrotoluene	7.702	165	219728	43.067	ppm		95
79) 4-Nitrophenol	7.670	65	152652	42.136	ppm		95
80) Pentachlorobenzene	7.664	250	265406	40.806	ppm		99
81) 1-Napthylamine	7.862	143	530365	43.757	ppm		100
82) 2-Napthylamine	7.862	143	530557	50.210	ppm		100
83) 2,3,4,6-Tetrachlorophenol	7.836	232	156037	46.560	ppm		99
84) Fluorene	8.044	166	757570	41.221	ppm		100
85) 4-Chlorophenyl-phenyle...	8.044	204	339298	39.674	ppm		96
86) Diethylphthalate	7.932	149	636959	35.320	ppm		99
87) 4-Nitroaniline	8.071	138	225404	49.819	ppm		94
88) 5-Nitro-o-toluidine	8.060	152	228739	47.749	ppm		97
90) Sulfotepp	8.322	322	107581	37.068	ppm		87
91) Octachlorocyclopentene	8.290	307	85646	45.161	ppm		98
93) Thionazin	8.012	107	109680	33.538	ppm		96
94) 4,6-Dinitro-2-methylph...	8.098	198	120556	50.285	ppm		92
95) Diphenylamine	8.162	169	1162328	80.099	ppm		100
96) 1,2 Diphenylhydrazine	8.199	77	771904	36.467	ppm		95
97) N-Nitrosodiphenylamine	8.162	169	1162760	80.114	ppm		100
98) 1,3,5-Trinirobenzene	8.451	213	76769	46.961	ppm	#	1

Quantitation Report (QT Reviewed)

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Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
99) Diallate	8.445	86	247458	33.230	ppm		92
100) Phorate	8.451	121	143588	37.606	ppm	#	52
101) Phenacetin	8.477	108	375640	41.703	ppm		96
102) 4-Bromophenyl-phenylether	8.526	248	196880	40.608	ppm		95
103) Hexachlorobenzene	8.584	284	230495	41.630	ppm		99
104) Dimethoate	8.622	87	238155	39.654	ppm		98
105) Atrazine	8.691	215	73507	31.941	ppm		96
106) Pentachlorophenol	8.788	266	138607	47.949	ppm		97
107) 4-Aminobiphenyl	8.782	169	677085	44.825	ppm		99
108) Pentachloronitrobenzene	8.793	237	84970	42.840	ppm		96
109) Pronamide	8.847	173	310798	37.163	ppm		99
110) Dinoseb	8.964	211	151232	45.096	ppm		95
111) Disulfoton	8.970	88	349639	26.672	ppm		95
112) Phenanthrene	8.991	178	1019772	39.798	ppm		100
113) Anthracene	9.039	178	1003878	40.208	ppm		100
114) Carbazole	9.205	167	1038202	46.042	ppm		100
115) Di-n-butylphthalate	9.547	149	1039319	34.277	ppm		99
116) 4-Nitroquinonline-1-oxide	9.761	190	60734	37.284	ppm		89
117) Fluoranthene	10.184	202	1110345	42.984	ppm		98
119) Methyl Parathion	9.339	109	187157	42.175	ppm		94
120) Ethyl Parathion	9.724	97	137676	34.934	ppm		96
121) Methapyrilene	9.836	58	350551	30.716	ppm		93
122) Isodrin	10.018	193	98612	32.920	ppm		95
123) Benzidine	10.339	184	484184	41.799	ppm		98
124) Pyrene	10.435	202	1157206	39.844	ppm		100
126) Aramite	10.692	185	51973m	32.150	ppm		
127) p-(Dimethylamino)azobe...	10.793	120	301949	35.124	ppm		96
128) Chlorobenzilate	10.852	139	346785	35.103	ppm		99
129) Butyl benzyl phthalate	11.269	149	451968	31.381	ppm		97
131) 2-Acetylaminofluorene	11.617	181	392505	38.298	ppm		98
132) 3,3'-Dichlorobenzidine	12.077	252	360414	40.979	ppm		98
133) Benzo(a)anthracene	12.098	228	1038723	39.451	ppm		99
134) Chrysene	12.157	228	995438	40.846	ppm		99
135) bis(2-Ethylhexyl)phtha...	12.211	149	557780	27.908	ppm		99
137) Di-n-octyl phthalate	13.473	149	839121	26.908	ppm		98
138) 7,12-Dimethylbenz(a)an...	14.120	256	474422	38.381	ppm		99
139) Benzo(b)Fluoranthene	14.126	252	1004027	40.562	ppm		98
140) Benzo(k)fluoranthene	14.179	252	986632	42.055	ppm		98
141) Benzo(a)pyrene	14.794	252	829475	40.735	ppm		100
142) 3-Methylcholanthrene	15.580	268	478925	39.690	ppm		98
143) Indeno(1,2,3-cd)Pyrene	16.923	276	779062	44.951	ppm		95
144) Dibenz(a,h)anthracene	16.971	278	808843	46.111	ppm		97
145) Benzo(g,h,i)perylene	17.345	276	808080	42.932	ppm		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

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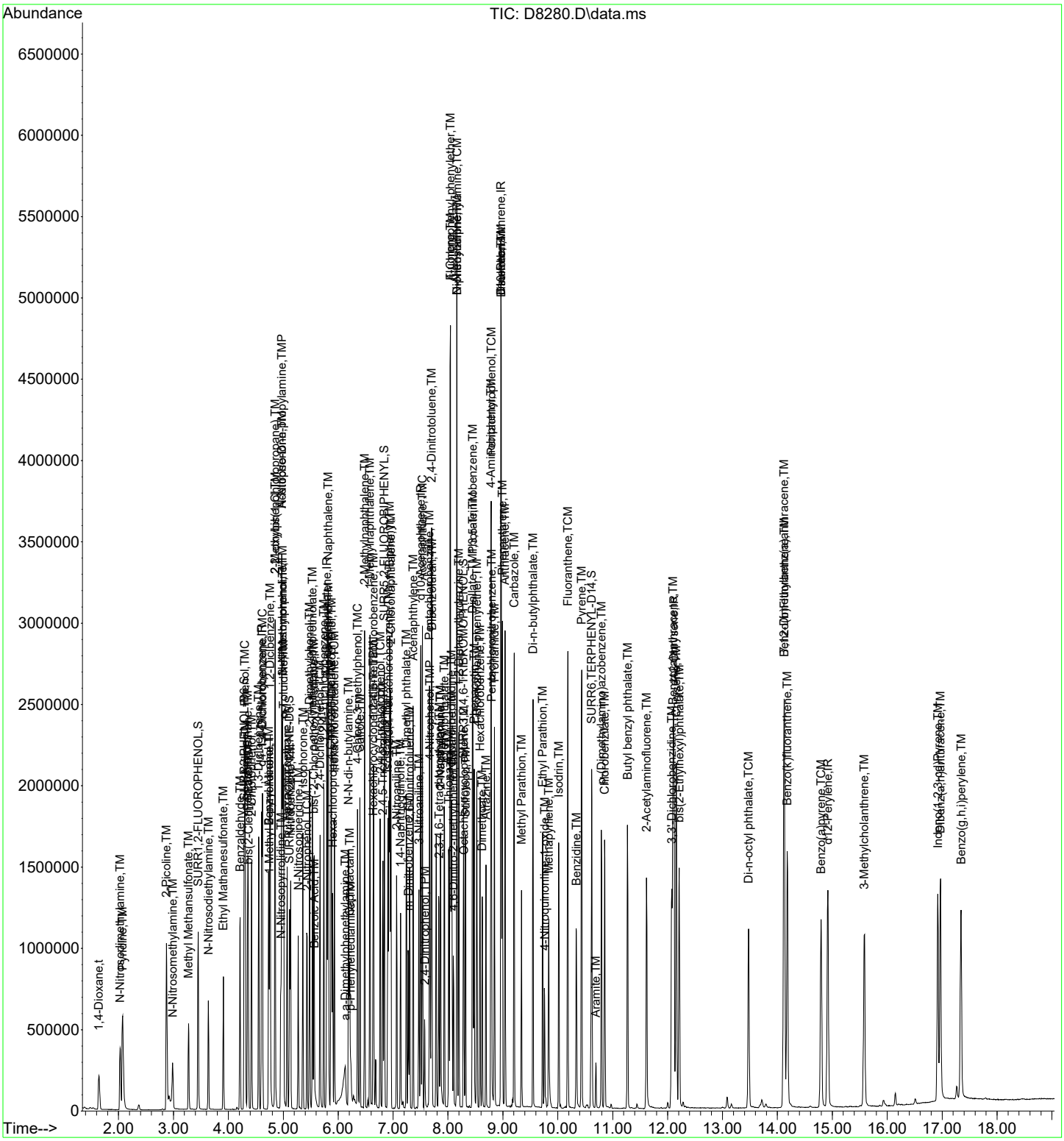


GC/MS QA-QC Check Report

Tune File : I:\ACQUDATA\5977-MS64\Data\082124\D8280.D
Tune Time : 21 Aug 2024 10:29 pm

Daily Calibration File : I:\ACQUDATA\5977-MS64\Data\082124\D8280.D

		(2FP)	[PHL]	(NBZ)	(FBP)	(DCB)	(NPT)	(ANT)
						260228	1036640	570008
		(TPH)				(PHN)	(CRY)	(PRY)
						985154	872104	878486

File	Sample	Surrogate Recovery %				Internal Standard Responses		
D8283.D								
	RQ2410243-	63	45	79	71	229864	896950	478085
		100	87			843946	670283	690925
D8284.D								
	RQ2410243-	56	40	74	67	245125	961911	516613
		99	66			906887	775775	813144
D8285.D								
	RQ2410243-	71*	51	93	85	254401	1000847	542310
		129	90			931102	782943	796126
D8286.D								
	R2407750-0	57	41	71	63	244663	963509	513564
		91	76			922459	737246	736509
D8287.D								
	R2407750-0	66	48	89	79	252252	991905	532966
		121	78			928779	807818	827295
D8288.D								
	R2407750-0	67	48	86	79	242454	964269	523328
		127	82			927069	800063	798611
D8289.D								
	RQ2410237-	59	41	71	62	255119	999202	541710
		89	74			965930	777221	778196
D8290.D								
	R2407547-0	50	36	66	62	250535	968617	503723
		80	41			891345	737710	728014
D8291.D								
	R2407547-0	59	42	78	69	260395	1024936	549620
		105	42			973873	842807	872368
D8292.D								
	R2407547-0	43	32	57	51	239633	950650	521108
		76	28			923512	772515	801793
D8293.D								
	R2407547-0	62	45	80	73	272053	1055129	571287
		102	50			1024537	816978	832443
D8294.D								
	R2407547-0	48	32	64	60	223454	866523	456825
		74	46			801629	672566	670742
D8295.D								
	R2407547-0	53	36	69	68	241329	937745	488930
		88	54			852544	720616	728851
D8296.D								

1st AM 08/22/24
2nd BA 08/22/24

	R2407547-0	57	38	76	76	225121	875509	452532
		97	52			795625	659395	669192
D8297.D								
	R2407547-0	60	40	79	77	236325	922883	493236
		101	67			874809	732937	725114
D8298.D								
	R2407879-0	0*	0*	0*	0*	223357	873323	463713
		0*	0*			802140	681149	695826
D8299.D								
	R2407879-0	0*	0*	0*	0*	231652	899730	474572
		0*	0*			833268	706869	727797

(fails) - fails 12hr time check * - fails criteria

Created: Thu Aug 22 09:10:02 2024 MS64

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8282.D
Acq On : 21 Aug 2024 11:17 pm
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 08:48:07 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	40.000	40.000	0.0	79	-0.01
2	t	1,4-Dioxane	40.000	0.048	99.9#	0	-0.03
3	TM	Pyridine	40.000	0.017	100.0#	0	0.08
4	TM	N-Nitrosodimethylamine	40.000	0.000	100.0#	0	-2.06#
5	TM	2-Picoline	40.000	0.000	100.0#	0	-2.89#
6	TM	N-Nitrosomethylamine	40.000	0.000	100.0#	0	-3.01#
7	TM	Methyl Methansulfonate	40.000	0.000	100.0#	0	-3.29#
8	S	SURR1,2-FLUOROPHENOL	40.000	0.000	100.0#	0	-3.46#
9	TM	N-Nitrosodiethylamine	40.000	0.000	100.0#	0	-3.65#
10	TM	Ethyl Mathanesulfonate	40.000	0.022	99.9#	0	0.03
11	TM	Benzaldehyde	40.000	0.017	100.0#	0	0.00
12	TM	Aniline	40.000	0.204	99.5#	0	-0.01
13	S	SURR2,PHENOL-D6	40.000	0.000	100.0#	0	-4.30#
14	TMC	Phenol	40.000	0.023	99.9#	0	0.00
15	TM	bis(2-Clethyl)Ether	40.000	0.000	100.0#	0	-4.38#
16	TM	Pentachloroethane	40.000	0.000	100.0#	0	-4.36#
17	TM	2-Chlorophenol	40.000	0.000	100.0#	0	-4.43#
18	TM	1,3-Diclbenzene	40.000	0.000	100.0#	0	-4.57#
19	TMC	1,4-Dichlorobenzene	40.000	0.000	100.0#	0	-4.63#
20	TM	1,2-Diclbenzene	40.000	0.000	100.0#	0	-4.77#
21	TM	Benzyl Alcohol	40.000	0.015	100.0#	0	0.01
22	T	1-Methyl-2-pyrrolidinone	40.000	0.000	100.0#	0	-4.77#
23	TM	2,2'-oxybis(1-Chloropropane	40.000	0.010	100.0#	0	-0.11
24	TM	2-Methylphenol	40.000	0.000	100.0#	0	-4.86#
25	TM	3+4-Methylphenol	40.000	0.000	100.0#	0	-5.00#
26	TM	Acetophenone	40.000	0.014	100.0#	0	-0.02
27	TMP	N-Nitroso-Di-n-propylamine	40.000	0.058	99.9#	0	0.00
28	TM	N-Nitrosopyrrolidine	40.000	0.000	100.0#	0	-4.97#
29	TM	N-Nitrosomorpholine	40.000	0.000	100.0#	0	-5.00#
30	TM	o-Toluidine	40.000	0.000	100.0#	0	-5.02#
31	TM	Hexachloroethane	40.000	0.000	100.0#	0	-5.08#
32	TM	o,o,o-Triethylphosphorothio	40.000	0.000	100.0#	0	-5.55#
33	TM	Alpha-terpinol	40.000	0.126	99.7#	0	-0.02
34	IR	d8-Naphthalene	40.000	40.000	0.0	77	-0.01
35	S	SURR4,NITROBENZENE-D5	40.000	0.011	100.0#	0	0.03
36	TM	Nitrobenzene	40.000	0.024	99.9#	0	-0.02
37	TM	N-Nitrosopiperidine	40.000	0.000	100.0#	0	-5.28#
38	TM	Isophorone	40.000	0.000	100.0#	0	-5.37#
39	TCM	2-Nitrophenol	40.000	0.000	100.0#	0	-5.44#
40	TM	Benzoic Acid	40.000	0.000	100.0#	0	-5.58#
41	TM	2,4-Dimethylphenol	40.000	0.056	99.9#	0	0.04
42	TM	bis(-2-Chloroethoxy)Methane	40.000	0.000	100.0#	0	-5.57#
43	TCM	2,4-Dichlorophenol	40.000	0.000	100.0#	0	-5.68#
44	TM	a,a-Dimethylphenethylamine	40.000	0.000	100.0#	0	-5.99#
45	TM	1,2,4-Trichlorobenzene	40.000	0.000	100.0#	0	-5.75#
46	TM	Naphthalene	40.000	0.020	99.9#	0	-0.02
47	TM	4-Chloroaniline	40.000	0.016	100.0#	0	0.00
48	TM	2,6-Dichlorophenol	40.000	0.000	100.0#	0	-5.89#
49	TCM	Hexachlorobutadiene	40.000	0.000	100.0#	0	-5.94#
50	TM	Hexachloropropene	40.000	0.000	100.0#	0	-5.91#
51	TMC	4-Chloro-3-methylphenol	40.000	0.019	100.0#	0	-0.02

1st AM 08/22/24
2nd BA 08/22/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8282.D
Acq On : 21 Aug 2024 11:17 pm
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 08:48:07 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
52	TM	N-N-di-n-butylamine	40.000	0.000	100.0#	0	-6.20#
53	TM	Caprolactam	40.000	0.240	99.4#	0	-0.03
54	TM	p-Phenylenediamine	40.000	0.000	100.0#	0	-6.23#
55	TM	Safrole	40.000	0.000	100.0#	0	-6.41#
56	TM	2-Methylnaphthalene	40.000	0.007	100.0#	0	-0.01
57	TM	1-Methylnaphthalene	40.000	0.016	100.0#	0	0.09
58	IR	d10-Acenaphthene	40.000	40.000	0.0	73	-0.02
59	TPM	Hexachlorocyclopentadiene	40.000	0.000	100.0#	0	-6.65#
60	TM	1,2,4,5-Tetrachlorobenzene	40.000	0.000	100.0#	0	-6.66#
61	TM	1,2,3,4-Tetrachlorobenzene	40.000	0.000	100.0#	0	-6.93#
62	TCM	2,4,6-Trichlorophenol	40.000	0.000	100.0#	0	-6.78#
63	TM	2,4,5-Trichlorophenol	40.000	0.000	100.0#	0	-6.82#
64	S	SURR5,2-FLUOROBIPHENYL	40.000	0.016	100.0#	0	0.03
65	TM	Isosafrole	40.000	0.000	100.0#	0	-6.92#
66	TM	1,1'-Biphenyl	40.000	0.014	100.0#	0	-0.01
67	TM	2-Chloronaphthalene	40.000	0.000	100.0#	0	-6.97#
68	TM	2-Nitroaniline	40.000	0.024	99.9#	0	0.00
69	TM	1,4-Naphthoquinone	40.000	0.000	100.0#	0	-7.15#
70	TM	m-Dinitrobenzene	40.000	0.000	100.0#	0	-7.29#
71	TM	Acenaphthylene	40.000	0.009	100.0#	0	-0.01
72	TM	Dimethyl phthalate	40.000	0.007	100.0#	0	-0.02
73	TM	2,6-Dinitrotoluene	40.000	0.000	100.0#	0	-7.31#
74	TMC	Acenaphthene	40.000	0.012	100.0#	0	-0.02
75	TM	3-Nitroaniline	40.000	0.000	100.0#	0	-7.48#
76	TPM	2,4-Dinitrophenol	40.000	0.000	100.0#	0	-7.59#
77	TM	Dibenzofuran	40.000	0.010	100.0#	0	0.00
78	TM	2,4-Dinitrotoluene	40.000	0.000	100.0#	0	-7.71#
79	TMP	4-Nitrophenol	40.000	0.000	100.0#	0	-7.68#
80	TM	Pentachlorobenzene	40.000	0.000	100.0#	0	-7.68#
81	TM	1-Napthylamine	40.000	0.000	100.0#	0	-7.83#
82	TM	2-Napthylamine	40.000	0.000	100.0#	0	-7.88#
83	TM	2,3,4,6-Tetrachlorophenol	40.000	0.000	100.0#	0	-7.85#
84	TM	Fluorene	40.000	0.013	100.0#	0	-0.01
85	TM	4-Chlorophenyl-phenylether	40.000	0.000	100.0#	0	-8.06#
86	TM	Diethylphthalate	40.000	0.011	100.0#	0	-0.02
87	TM	4-Nitroaniline	40.000	0.060	99.8#	0	-0.03
88	TM	5-Nitro-o-toluidine	40.000	0.000	100.0#	0	-8.07#
89	S	SURR3,2,4,6-TRIBROMOPHENOL	40.000	0.000	100.0#	0	-8.29#
90	TM	Sulfotepp	40.000	0.000	100.0#	0	-8.34#
91	TM	Octachlorocyclopentene	40.000	0.000	100.0#	0	-8.30#
92	IR	d10-Phenanthrene	40.000	40.000	0.0	79	-0.02
93	TM	Thionazin	40.000	0.000	100.0#	0	-8.03#
94	TM	4,6-Dinitro-2-methylphenol	40.000	0.000	100.0#	0	-8.11#
95	TM	Diphenylamine	80.000	0.032	100.0#	0	-0.01
96	TM	1,2 Diphenylhydrazine	40.000	0.013	100.0#	0	-0.02
97	TCM	N-Nitrosodiphenylamine	80.000	0.032	100.0#	0	-0.01
98	TM	1,3,5-Trinirobenzene	40.000	0.000	100.0#	0	-8.46#
99	TM	Diallate	40.000	0.000	100.0#	0	-8.46#
100	TM	Phorate	40.000	0.000	100.0#	0	-8.47#
101	TM	Phenacetin	40.000	0.000	100.0#	0	-8.49#

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8282.D
Acq On : 21 Aug 2024 11:17 pm
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 08:48:07 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
102	TM	4-Bromophenyl-phenylether	40.000	0.000	100.0#	0	-8.54#
103	TM	Hexachlorobenzene	40.000	0.000	100.0#	0	-8.60#
104	TM	Dimethoate	40.000	0.000	100.0#	0	-8.64#
105	TM	Atrazine	40.000	0.000	100.0#	0	-8.71#
106	TCM	Pentachlorophenol	40.000	0.000	100.0#	0	-8.80#
107	TM	4-Aminobiphenyl	40.000	0.000	100.0#	0	-8.80#
108	TM	Pentachloronitrobenzene	40.000	0.000	100.0#	0	-8.80#
109	TM	Pronamide	40.000	0.106	99.7#	0	0.11
110	TM	Dinoseb	40.000	0.000	100.0#	0	-8.98#
111	TM	Disulfoton	40.000	0.000	100.0#	0	-8.98#
112	TM	Phenanthrene	40.000	0.013	100.0#	0	-0.02
113	TM	Anthracene	40.000	0.014	100.0#	0	-0.02
114	TM	Carbazole	40.000	0.015	100.0#	0	-0.01
115	TM	Di-n-butylphthalate	40.000	0.016	100.0#	0	-0.02
116	TM	4-Nitroquinonline-1-oxide	40.000	0.000	100.0#	0	-9.77#
117	TCM	Fluoranthene	40.000	0.014	100.0#	0	-0.02
118	IR	d12-Chrysene	40.000	40.000	0.0	73	-0.03
119	TM	Methyl Parathion	40.000	0.000	100.0#	0	-9.35#
120	TM	Ethyl Parathion	40.000	0.000	100.0#	0	-9.74#
121	TM	Methapyrilene	40.000	0.000	100.0#	0	-9.85#
122	TM	Isodrin	40.000	0.044	99.9#	0	0.00
123	TM	Benzidine	40.000	0.000	100.0#	0	-10.35#
124	TM	Pyrene	40.000	0.016	100.0#	0	-0.02
125	S	SURR6,TERPHENYL-D14	40.000	0.015	100.0#	0	-0.02
126	TM	Aramite	40.000	0.000	100.0#	0	-10.72#
127	TM	p-(Dimethylamino)azobenzene	40.000	0.000	100.0#	0	-10.81#
128	TM	Chlorobenzilate	40.000	0.021	99.9#	0	-0.02
129	TM	Butyl benzyl phthalate	40.000	0.038	99.9#	0	-0.02
130	TM	3,3-Dimethylbenzidine	40.000	48.344	-20.9#	84	-0.02
131	TM	2-Acetylaminofluorene	40.000	0.000	100.0#	0	-11.64#
132	TM	3,3'-Dichlorobenzidine	40.000	0.000	100.0#	0	-12.10#
133	TM	Benzo(a)anthracene	40.000	0.014	100.0#	0	0.03
134	TM	Chrysene	40.000	0.020	99.9#	0	-0.04
135	TM	bis(2-Ethylhexyl)phthalate	40.000	0.060	99.8#	0	-0.17
136	IR	d12-Perylene	40.000	40.000	0.0	73	-0.03
137	TCM	Di-n-octyl phthalate	40.000	0.008	100.0#	0	-0.04
138	TM	7,12-Dimethylbenz(a)anthrac	40.000	0.000	100.0#	0	-14.15#
139	TM	Benzo(b)Fluoranthene	40.000	0.019	100.0#	0	-0.04
140	TM	Benzo(k)fluoranthene	40.000	0.014	100.0#	0	-0.03
141	TCM	Benzo(a)pyrene	40.000	0.009	100.0#	0	-0.04
142	TM	3-Methylcholanthrene	40.000	0.000	100.0#	0	-15.61#
143	TM	Indeno(1,2,3-cd)Pyrene	40.000	0.031	99.9#	0	0.00
144	TM	Dibenz(a,h)anthracene	40.000	0.020	99.9#	0	-0.02
145	TM	Benzo(g,h,i)perylene	40.000	0.028	99.9#	0	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 13

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8282.D
Acq On : 21 Aug 2024 11:17 pm
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 08:48:07 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

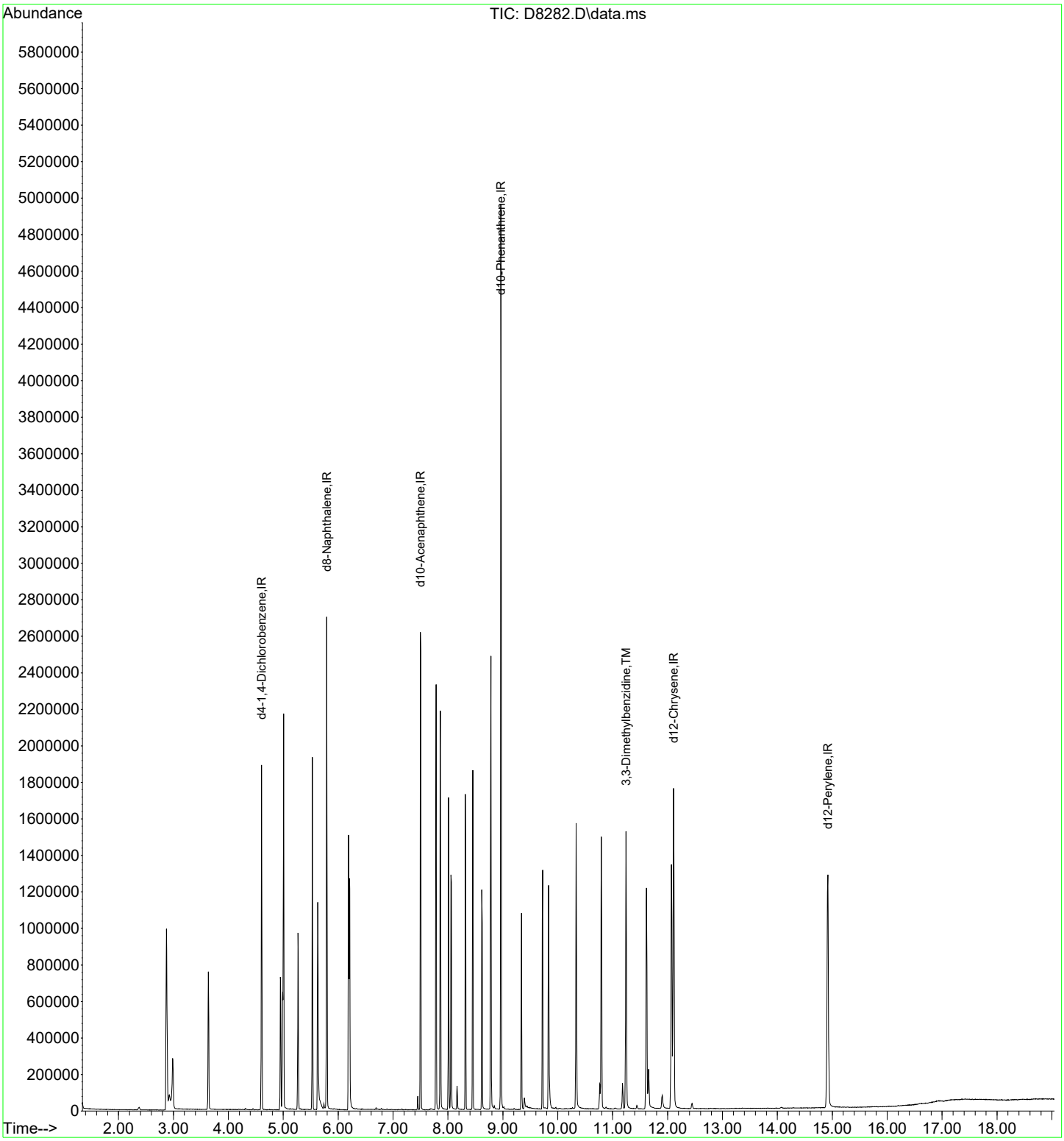
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.605	152	271326	40.00	ppm	-0.01
34) d8-Naphthalene	5.793	136	1052025	40.00	ppm	-0.01
58) d10-Acenaphthene	7.499	164	552139	40.00	ppm	-0.02
92) d10-Phenanthrene	8.964	188	1011425	40.00	ppm	-0.02
118) d12-Chrysene	12.109	240	831027	40.00	ppm	-0.03
136) d12-Perylene	14.917	264	826669	40.00	ppm	-0.03
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	0.000	112	0	0.00	ppm	
Spiked Amount 20.000	Range 10 - 70		Recovery =	0.00%#		
13) SURR2,PHENOL-D6	0.000	99	0	0.00	ppm	
Spiked Amount 20.000	Range 10 - 107		Recovery =	0.00%#		
35) SURR4,NITROBENZENE-D5	5.161	82	100	0.01	ppm	0.03
Spiked Amount 10.000	Range 31 - 110		Recovery =	0.10%#		
64) SURR5,2-FLUOROBIPHENYL	6.889	172	275	0.02	ppm	0.03
Spiked Amount 10.000	Range 31 - 118		Recovery =	0.20%#		
89) SURR3,2,4,6-TRIBROMOPH...	0.000	330	0	0.00	ppm	
Spiked Amount 20.000	Range 35 - 141		Recovery =	0.00%#		
125) SURR6,TERPHENYL-D14	10.617	244	269	0.02	ppm	-0.02
Spiked Amount 10.000	Range 10 - 165		Recovery =	0.20%#		
Target Compounds						Qvalue
130) 3,3-Dimethylbenzidine	11.243	212	601900	48.344	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8282.D
Acq On : 21 Aug 2024 11:17 pm
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

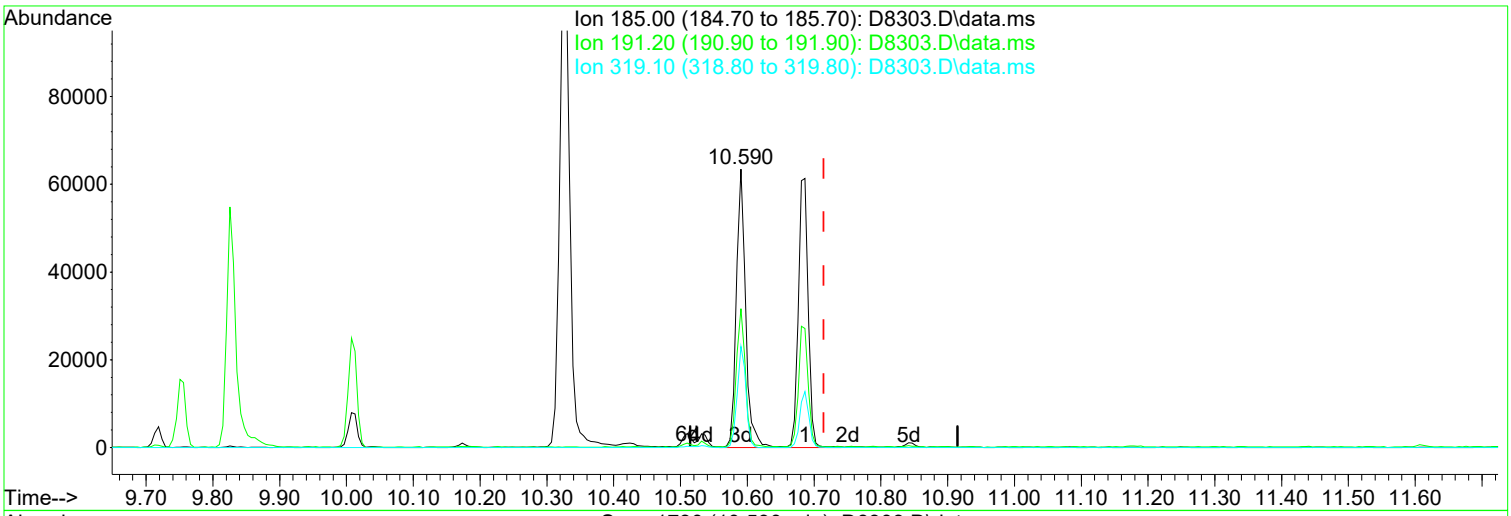
Quant Time: Aug 22 08:48:07 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

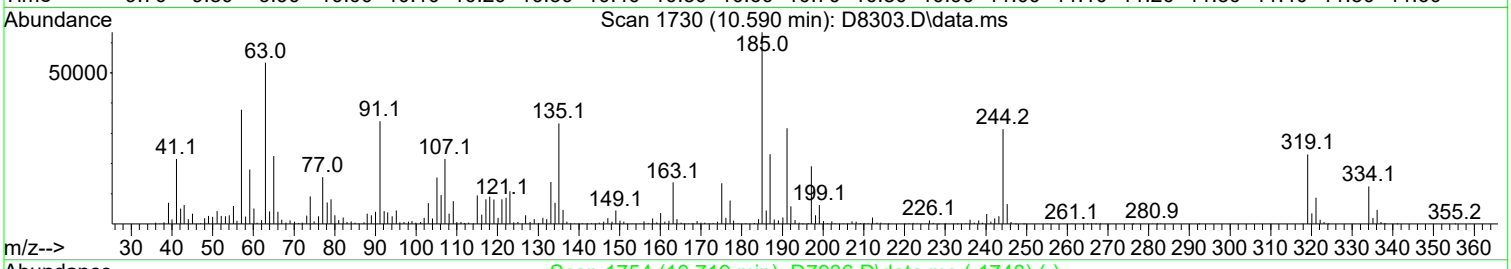


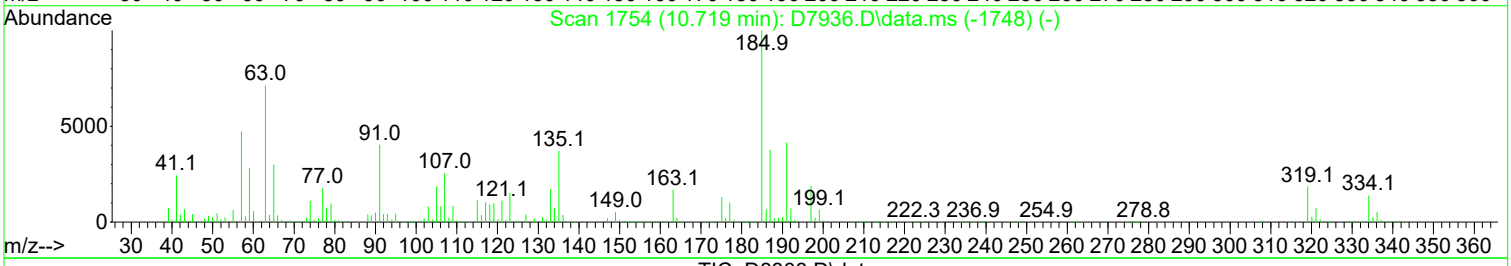
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8303.D
Acq On : 22 Aug 2024 10:49 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 11:26:16 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration







TIC: D8303.D\data.ms

(126) Aramite (TM)

10.590min (-0.125) 50.15 ppm m

response 123347

Ion	Exp%	Act%
185.00	100.00	100.00
191.20	40.80	49.92
319.10	19.60	36.32
0.00	0.00	0.00

Manual Integration:

After

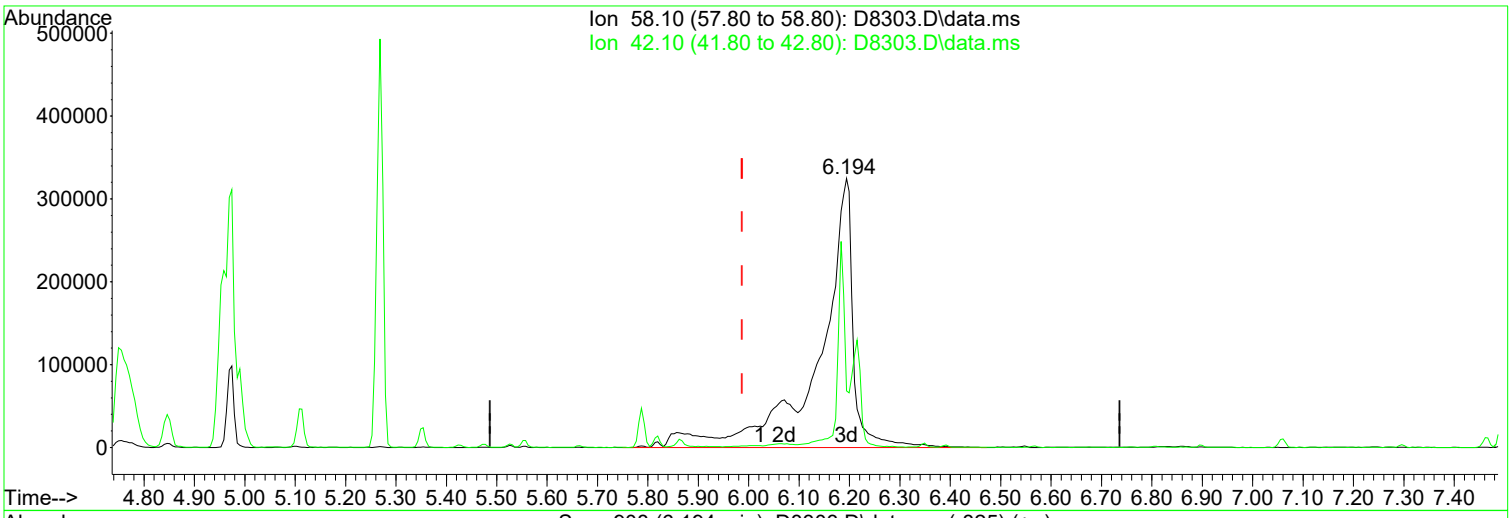
Poor integration.

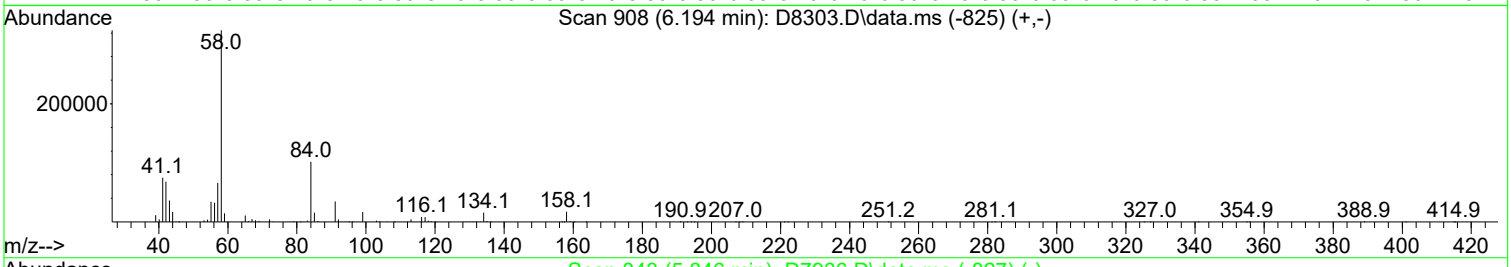
08/22/24

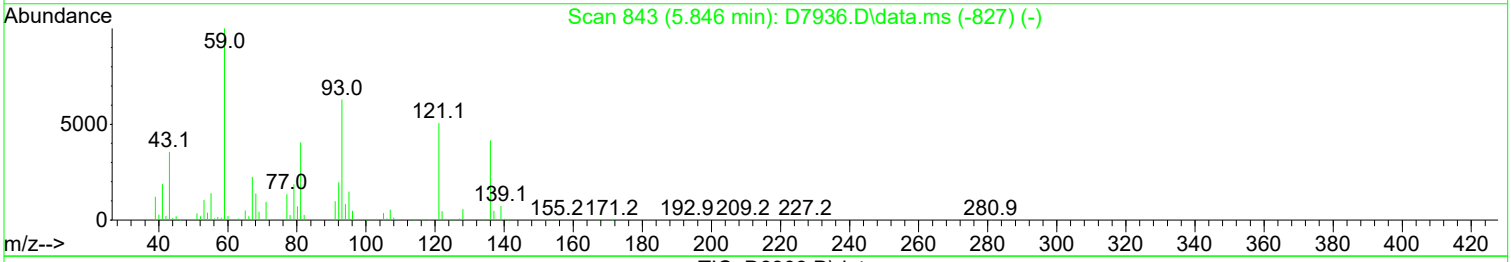
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8303.D
Acq On : 22 Aug 2024 10:49 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 11:26:16 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration







TIC: D8303.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

6.194min (+ 0.207) 51.26 ppm m

response 1539468

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.40	21.07
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/22/24

Quantitation Report (Qedit)

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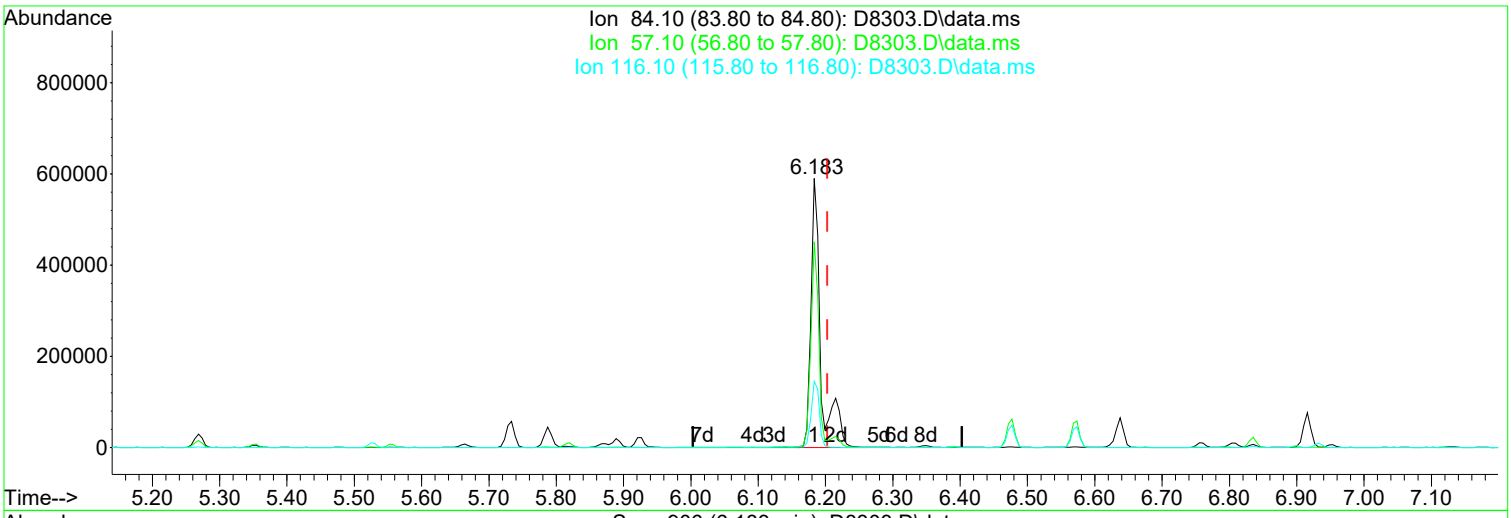
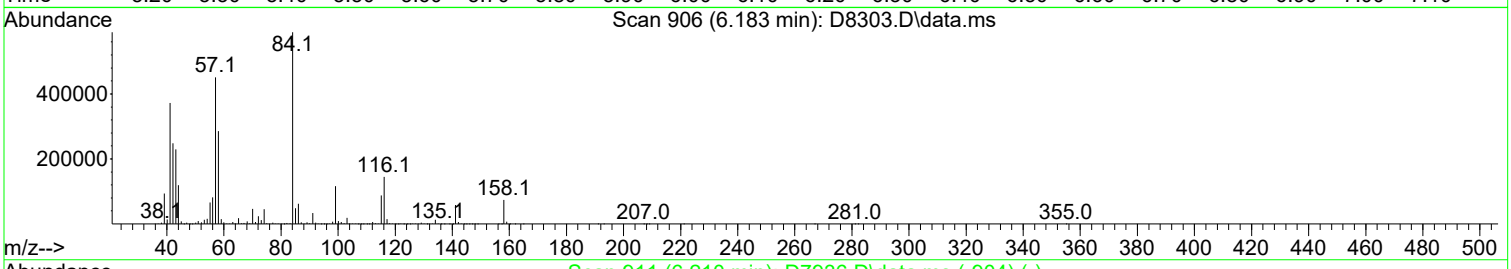
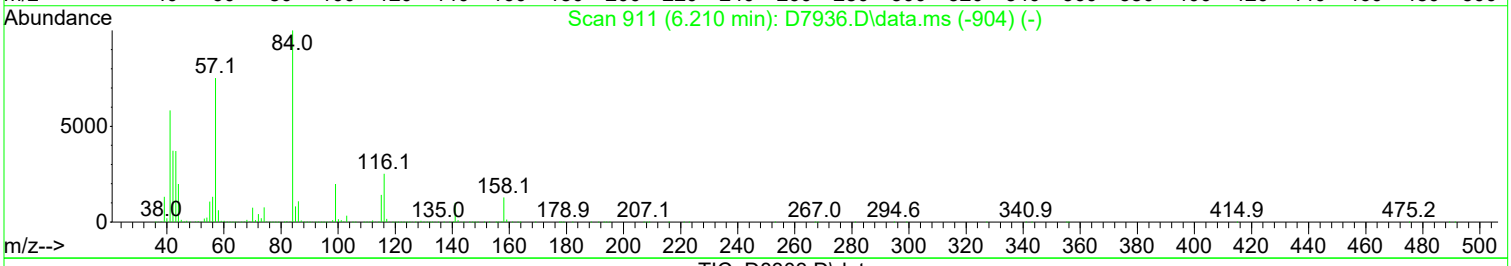
Data File : D8303.D
Acq On : 22 Aug 2024 10:49 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 11:26:16 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration







TIC: D8303.D\data.ms

(52) N-N-di-n-butylamine (TM)

6.183min (-0.020) 51.92 ppm m

response 601940

Ion	Exp%	Act%
84.10	100.00	100.00
57.10	67.80	76.54
116.10	22.70	24.61
0.00	0.00	0.00

Manual Integration:

After

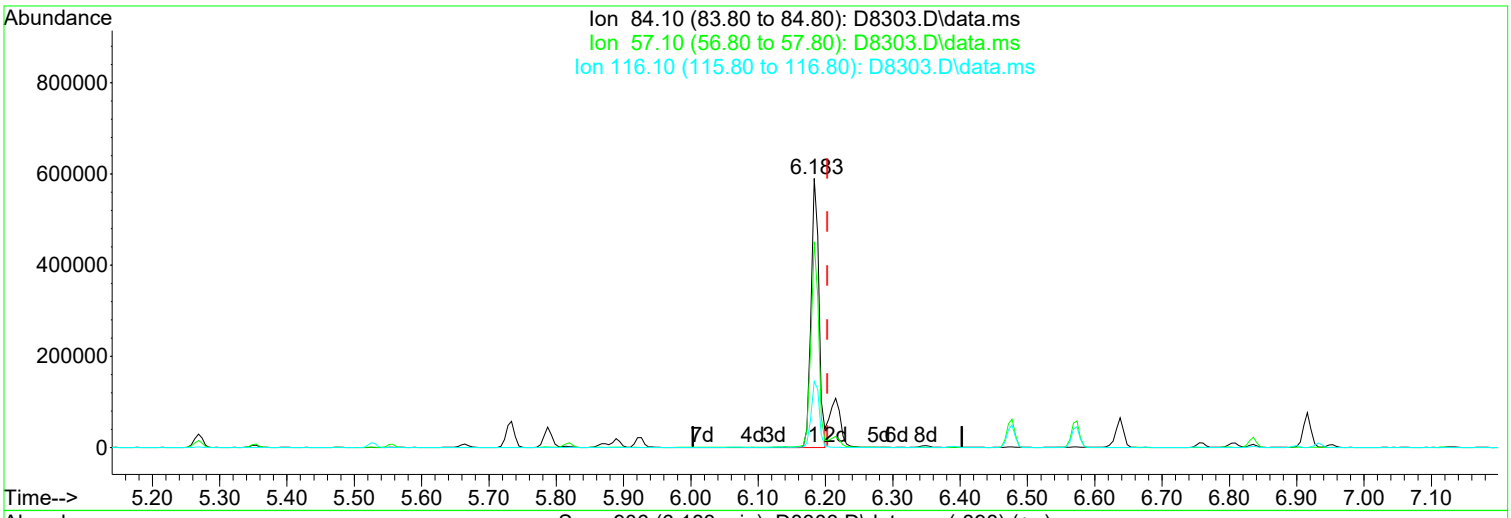
Poor integration.

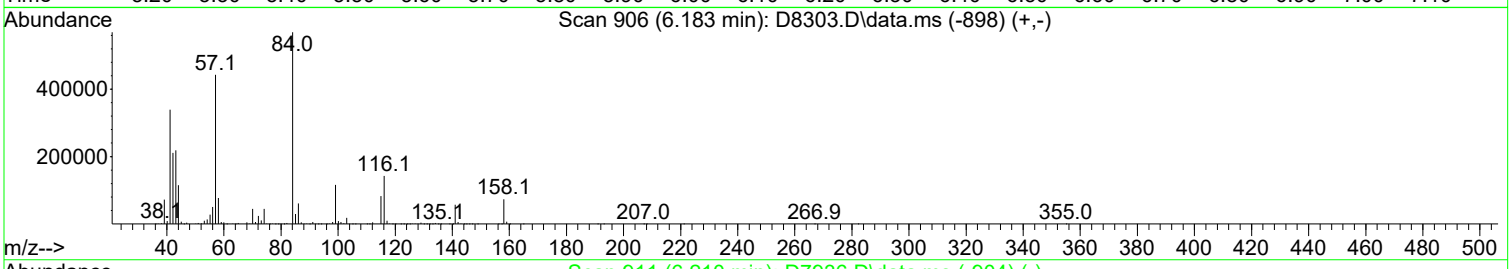
08/22/24

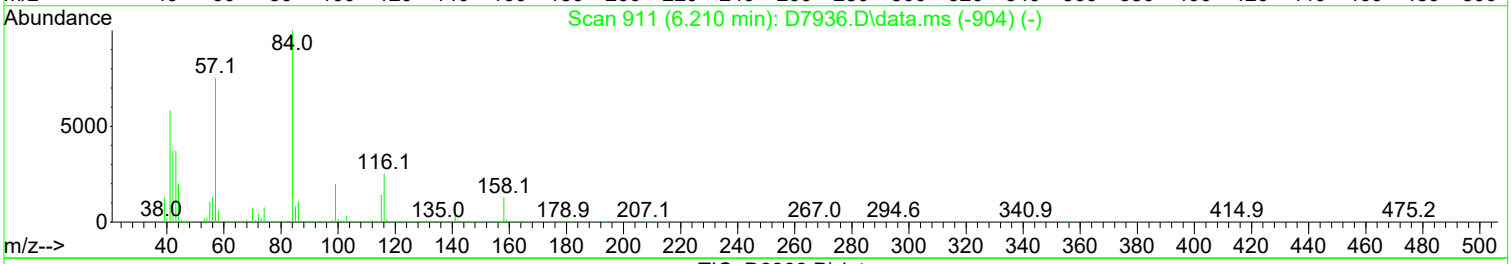
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8303.D
Acq On : 22 Aug 2024 10:49 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 11:26:16 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration







TIC: D8303.D\data.ms

(52) N-N-di-n-butylamine (TM)

6.183min (-0.020) 41.37 ppm

response 479627

Ion	Exp%	Act%
84.10	100.00	100.00
57.10	67.80	77.83
116.10	22.70	25.10
0.00	0.00	0.00

Manual Integration:

Before

08/22/24

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8303.D
Acq On : 22 Aug 2024 10:49 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 11:26:16 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	40.000	40.000	0.0	108	-0.02
2	t	1,4-Dioxane	40.000	38.458	3.9	113	-0.04
3	TM	Pyridine	40.000	50.467	-26.2#	142	-0.04
4	TM	N-Nitrosodimethylamine	40.000	48.740	-21.9#	139	-0.04
5	TM	2-Picoline	40.000	50.728	-26.8#	143	-0.03
6	TM	N-Nitrosomethylamine	40.000	49.247	-23.1#	141	-0.03
7	TM	Methyl Methansulfonate	40.000	48.478	-21.2#	140	-0.03
8	S	SURR1,2-FLUOROPHENOL	40.000	51.921	-29.8#	146	-0.02
9	TM	N-Nitrosodiethylamine	40.000	39.143	2.1	110	-0.02
10	TM	Ethyl Mathanesulfonate	40.000	49.596	-24.0#	143	-0.02
11	TM	Benzaldehyde	40.000	38.475	3.8	112	-0.02
12	TM	Aniline	40.000	52.316	-30.8#	145	-0.02
13	S	SURR2,PHENOL-D6	40.000	52.821	-32.1#	146	-0.02
14	TMC	Phenol	40.000	46.355	-15.9	129	-0.02
15	TM	bis(2-Clethyl)Ether	40.000	43.084	-7.7	125	-0.02
16	TM	Pentachloroethane	40.000	43.807	-9.5	125	-0.02
17	TM	2-Chlorophenol	40.000	46.551	-16.4	129	-0.02
18	TM	1,3-Diclbenzene	40.000	44.446	-11.1	127	-0.02
19	TMC	1,4-Dichlorobenzene	40.000	43.999	-10.0	127	-0.02
20	TM	1,2-Diclbenzene	40.000	44.312	-10.8	127	-0.02
21	TM	Benzyl Alcohol	40.000	46.541	-16.4	126	-0.02
22	T	1-Methyl-2-pyrrolidinone	40.000	51.809	-29.5#	143	-0.02
23	TM	2,2'-oxybis(1-Chloropropane	40.000	41.302	-3.3	120	-0.02
24	TM	2-Methylphenol	40.000	45.953	-14.9	127	-0.01
25	TM	3+4-Methylphenol	40.000	47.434	-18.6	127	-0.01
26	TM	Acetophenone	40.000	49.884	-24.7#	141	-0.02
27	TMP	N-Nitroso-Di-n-propylamine	40.000	49.731	-24.3#	139	-0.01
28	TM	N-Nitrosopyrrolidine	40.000	51.395	-28.5#	141	-0.01
29	TM	N-Nitrosomorpholine	40.000	49.063	-22.7#	140	-0.01
30	TM	o-Toluidine	40.000	49.856	-24.6#	132	-0.02
31	TM	Hexachloroethane	40.000	44.154	-10.4	125	-0.02
32	TM	o,o,o-Triethylphosphorothio	40.000	51.497	-28.7#	147	-0.02
33	TM	Alpha-terpinol	40.000	50.208	-25.5#	138	-0.02
34	IR	d8-Naphthalene	40.000	40.000	0.0	109	-0.02
35	S	SURR4,NITROBENZENE-D5	40.000	48.794	-22.0#	136	-0.01
36	TM	Nitrobenzene	40.000	42.995	-7.5	121	-0.02
37	TM	N-Nitrosopiperidine	40.000	47.577	-18.9	137	-0.02
38	TM	Isophorone	40.000	43.014	-7.5	123	-0.02
39	TCM	2-Nitrophenol	40.000	46.338	-15.8	136	-0.02
40	TM	Benzoic Acid	40.000	44.537	-11.3	148	0.00
41	TM	2,4-Dimethylphenol	40.000	44.599	-11.5	124	-0.01
42	TM	bis(-2-Chloroethoxy)Methane	40.000	42.825	-7.1	124	-0.01
43	TCM	2,4-Dichlorophenol	40.000	48.242	-20.6	129	-0.02
44	TM	a,a-Dimethylphenethylamine	40.000	51.259	-28.1#	142	0.21
45	TM	1,2,4-Trichlorobenzene	40.000	44.391	-11.0	130	-0.02
46	TM	Naphthalene	40.000	43.493	-8.7	127	-0.02
47	TM	4-Chloroaniline	40.000	46.734	-16.8	125	-0.02
48	TM	2,6-Dichlorophenol	40.000	48.238	-20.6#	130	-0.02
49	TCM	Hexachlorobutadiene	40.000	43.922	-9.8	129	-0.02
50	TM	Hexachloropropene	40.000	50.576	-26.4#	135	-0.02
51	TMC	4-Chloro-3-methylphenol	40.000	46.555	-16.4	123	-0.02

1st AM 08/23/24
2nd BA 08/26/24

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Misc :
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Response via : Initial Calibration

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Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
52	TM	N-N-di-n-butylamine	40.000	51.922	-29.8#	139	-0.02
53	TM	Caprolactam	40.000	53.320	-33.3#	145	0.00
54	TM	p-Phenylenediamine	40.000	45.632	-14.1	112	-0.01
55	TM	Safrole	40.000	40.758	-1.9	115	-0.02
56	TM	2-Methylnaphthalene	40.000	44.606	-11.5	127	-0.02
57	TM	1-Methylnaphthalene	40.000	44.437	-11.1	127	-0.02
58	IR	d10-Acenaphthene	40.000	40.000	0.0	112	-0.02
59	TPM	Hexachlorocyclopentadiene	40.000	45.634	-14.1	125	-0.02
60	TM	1,2,4,5-Tetrachlorobenzene	40.000	43.741	-9.4	131	-0.02
61	TM	1,2,3,4-Tetrachlorobenzene	40.000	49.550	-23.9#	149	-0.02
62	TCM	2,4,6-Trichlorophenol	40.000	51.919	-29.8	136	-0.02
63	TM	2,4,5-Trichlorophenol	40.000	51.750	-29.4#	135	-0.02
64	S	SURR5,2-FLUOROBIPHENYL	40.000	49.099	-22.7#	146	-0.02
65	TM	Isosafrole	40.000	48.276	-20.7#	141	-0.02
66	TM	1,1'-Biphenyl	40.000	49.059	-22.6#	145	-0.02
67	TM	2-Chloronaphthalene	40.000	43.370	-8.4	128	-0.02
68	TM	2-Nitroaniline	40.000	53.161	-32.9#	142	-0.02
69	TM	1,4-Naphthoquinone	40.000	49.980	-24.9#	133	-0.02
70	TM	m-Dinitrobenzene	40.000	47.214	-18.0	140	-0.01
71	TM	Acenaphthylene	40.000	43.497	-8.7	126	-0.02
72	TM	Dimethyl phthalate	40.000	43.430	-8.6	127	-0.02
73	TM	2,6-Dinitrotoluene	40.000	48.746	-21.9#	126	-0.02
74	TMC	Acenaphthene	40.000	43.077	-7.7	127	-0.02
75	TM	3-Nitroaniline	40.000	57.830	-44.6#	154	-0.02
76	TPM	2,4-Dinitrophenol	40.000	59.866	-49.7#	226	-0.02
77	TM	Dibenzofuran	40.000	44.176	-10.4	129	-0.02
78	TM	2,4-Dinitrotoluene	40.000	45.209	-13.0	130	-0.01
79	TMP	4-Nitrophenol	40.000	52.232	-30.6#	140	-0.02
80	TM	Pentachlorobenzene	40.000	43.966	-9.9	134	-0.02
81	TM	1-Napthylamine	40.000	54.323	-35.8#	155	0.03
82	TM	2-Napthylamine	40.000	62.550	-56.4#	179	-0.02
83	TM	2,3,4,6-Tetrachlorophenol	40.000	48.985	-22.5#	146	-0.02
84	TM	Fluorene	40.000	45.399	-13.5	131	-0.02
85	TM	4-Chlorophenyl-phenylether	40.000	45.485	-13.7	132	-0.02
86	TM	Diethylphthalate	40.000	42.562	-6.4	125	-0.01
87	TM	4-Nitroaniline	40.000	58.226	-45.6#	154	-0.01
88	TM	5-Nitro-o-toluidine	40.000	57.662	-44.2#	150	-0.02
89	S	SURR3,2,4,6-TRIBROMOPHENOL	40.000	63.097	-57.7#	169	-0.02
90	TM	Sulfotepp	40.000	48.185	-20.5#	135	-0.02
91	TM	Octachlorocyclopentene	40.000	58.392	-46.0#	174	-0.02
92	IR	d10-Phenanthrene	40.000	40.000	0.0	115	-0.02
93	TM	Thionazin	40.000	48.298	-20.7#	146	-0.02
94	TM	4,6-Dinitro-2-methylphenol	40.000	53.552	-33.9#	177	-0.01
95	TM	Diphenylamine	80.000	98.160	-22.7#	148	-0.02
96	TM	1,2 Diphenylhydrazine	40.000	47.044	-17.6	140	-0.02
97	TCM	N-Nitrosodiphenylamine	80.000	98.169	-22.7	148	-0.02
98	TM	1,3,5-Trinirobenzene	40.000	50.702	-26.8#	158	0.00
99	TM	Diallate	40.000	46.422	-16.1	139	-0.02
100	TM	Phorate	40.000	51.630	-29.1#	149	-0.02
101	TM	Phenacetin	40.000	54.055	-35.1#	143	-0.01

Evaluate Continuing Calibration Report

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Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
102	TM	4-Bromophenyl-phenylether	40.000	44.088	-10.2	132	-0.02
103	TM	Hexachlorobenzene	40.000	43.785	-9.5	136	-0.02
104	TM	Dimethoate	40.000	47.973	-19.9	134	-0.02
105	TM	Atrazine	40.000	38.860	2.9	116	-0.02
106	TCM	Pentachlorophenol	40.000	53.140	-32.9#	173	-0.02
107	TM	4-Aminobiphenyl	40.000	58.942	-47.4#	152	-0.02
108	TM	Pentachloronitrobenzene	40.000	46.285	-15.7	130	-0.02
109	TM	Pronamide	40.000	52.310	-30.8#	149	-0.02
110	TM	Dinoseb	40.000	51.541	-28.9#	167	-0.02
111	TM	Disulfoton	40.000	39.769	0.6	122	-0.03
112	TM	Phenanthrene	40.000	41.885	-4.7	129	-0.02
113	TM	Anthracene	40.000	42.608	-6.5	128	-0.02
114	TM	Carbazole	40.000	55.214	-38.0#	151	-0.02
115	TM	Di-n-butylphthalate	40.000	43.792	-9.5	126	-0.02
116	TM	4-Nitroquinonline-1-oxide	40.000	48.290	-20.7#	143	-0.02
117	TCM	Fluoranthene	40.000	45.936	-14.8	133	-0.02
118	IR	d12-Chrysene	40.000	40.000	0.0	116	-0.04
119	TM	Methyl Parathion	40.000	51.230	-28.1#	141	-0.02
120	TM	Ethyl Parathion	40.000	47.229	-18.1	145	-0.02
121	TM	Methapyrilene	40.000	31.508	21.2#	99	-0.02
122	TM	Isodrin	40.000	37.899	5.3	129	-0.03
123	TM	Benzidine	40.000	48.933	-22.3#	146	-0.02
124	TM	Pyrene	40.000	41.301	-3.3	131	-0.03
125	S	SURR6,TERPHENYL-D14	40.000	49.370	-23.4#	155	-0.03
126	TM	Aramite	40.000	50.148	-25.4#	146	-0.12
127	TM	p-(Dimethylamino)azobenzene	40.000	48.691	-21.7#	140	-0.03
128	TM	Chlorobenzilate	40.000	49.384	-23.5#	145	-0.03
129	TM	Butyl benzyl phthalate	40.000	40.582	-1.5	122	-0.03
130	TM	3,3-Dimethylbenzidine	40.000	0.000	100.0#	0	-11.26#
131	TM	2-Acetylaminofluorene	40.000	50.237	-25.6#	154	-0.03
132	TM	3,3'-Dichlorobenzidine	40.000	43.141	-7.9	126	-0.04
133	TM	Benzo(a)anthracene	40.000	42.863	-7.2	133	-0.03
134	TM	Chrysene	40.000	43.972	-9.9	135	-0.04
135	TM	bis(2-Ethylhexyl)phthalate	40.000	39.803	0.5	122	-0.05
136	IR	d12-Perylene	40.000	40.000	0.0	120	-0.04
137	TCM	Di-n-octyl phthalate	40.000	41.070	-2.7	122	-0.05
138	TM	7,12-Dimethylbenz(a)anthrac	40.000	50.534	-26.3#	155	-0.04
139	TM	Benzo(b)Fluoranthene	40.000	45.524	-13.8	139	-0.04
140	TM	Benzo(k)fluoranthene	40.000	45.153	-12.9	136	-0.04
141	TCM	Benzo(a)pyrene	40.000	44.388	-11.0	132	-0.04
142	TM	3-Methylcholanthrene	40.000	53.750	-34.4#	157	-0.04
143	TM	Indeno(1,2,3-cd)Pyrene	40.000	50.659	-26.6#	143	-0.03
144	TM	Dibenz(a,h)anthracene	40.000	55.004	-37.5#	151	-0.04
145	TM	Benzo(g,h,i)perylene	40.000	46.959	-17.4	140	-0.03

(#) = Out of Range SPCC's out = 0 CCC's out = 1

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
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Acq On : 22 Aug 2024 10:49 am
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Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.600	152	369669	40.00	ppm		-0.02
34) d8-Naphthalene	5.787	136	1491746	40.00	ppm		-0.02
58) d10-Acenaphthene	7.493	164	840222	40.00	ppm		-0.02
92) d10-Phenanthrene	8.959	188	1477245	40.00	ppm		-0.02
118) d12-Chrysene	12.104	240	1326942	40.00	ppm		-0.04
136) d12-Perylene	14.901	264	1348291	40.00	ppm		-0.04
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.445	112	609938	51.92	ppm		-0.02
Spiked Amount 20.000	Range 10 - 70		Recovery = 259.60%#				
13) SURR2,PHENOL-D6	4.284	99	807815	52.82	ppm		-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery = 264.10%#				
35) SURR4,NITROBENZENE-D5	5.113	82	646161	48.79	ppm		-0.01
Spiked Amount 10.000	Range 31 - 110		Recovery = 487.90%#				
64) SURR5,2-FLUOROBIPHENYL	6.836	172	1302846	49.10	ppm		-0.02
Spiked Amount 10.000	Range 31 - 118		Recovery = 491.00%#				
89) SURR3,2,4,6-TRIBROMOPH...	8.274	330	197399	63.10	ppm		-0.02
Spiked Amount 20.000	Range 35 - 141		Recovery = 315.50%#				
125) SURR6,TERPHENYL-D14	10.612	244	1413364	49.37	ppm		-0.03
Spiked Amount 10.000	Range 10 - 165		Recovery = 493.70%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.637	88	203226	38.458	ppm		98
3) Pyridine	2.065	79	679167	50.467	ppm		98
4) N-Nitrosodimethylamine	2.022	74	430698	48.740	ppm		100
5) 2-Picoline	2.862	93	736498	50.728	ppm		100
6) N-Nitrosomethylamine	2.979	42	240730	49.247	ppm		99
7) Methyl Methansulfonate	3.268	80	347193	48.478	ppm		99
9) N-Nitrosodiethylamine	3.632	102	246988	39.143	ppm		95
10) Ethyl Mathanesulfonate	3.905	79	499458	49.596	ppm		98
11) Benzaldehyde	4.204	106	360976	38.475	ppm		99
12) Aniline	4.300	93	1008355	52.316	ppm		85
14) Phenol	4.295	94	825541	46.355	ppm		86
15) bis(2-Clethyl)Ether	4.359	93	585471	43.084	ppm		96
16) Pentachloroethane	4.343	117	200173	43.807	ppm		99
17) 2-Chlorophenol	4.418	128	595220	46.551	ppm		96
18) 1,3-Diclbenzene	4.546	146	604831	44.446	ppm		100
19) 1,4-Dichlorobenzene	4.616	146	620490	43.999	ppm		99
20) 1,2-Diclbenzene	4.755	146	587459	44.312	ppm		98
21) Benzyl Alcohol	4.728	79	445201	46.541	ppm		99
22) 1-Methyl-2-pyrrolidinone	4.750	99	433735	51.809	ppm		95
23) 2,2'-oxybis(1-Chloropr...	4.846	45	683009	41.302	ppm	#	78
24) 2-Methylphenol	4.851	108	537114	45.953	ppm		99
25) 3+4-Methylphenol	4.990	108	612300	47.434	ppm		85
26) Acetophenone	4.969	105	935633	49.884	ppm		98
27) N-Nitroso-Di-n-propyla...	4.974	70	524923	49.731	ppm		96
28) N-Nitrosopyrrolidine	4.958	100	355046	51.395	ppm		97
29) N-Nitrosomorpholine	4.990	56	422195	49.063	ppm		95
30) o-Toluidine	5.001	106	1026413	49.856	ppm		86
31) Hexachloroethane	5.065	117	251378	44.154	ppm		88
32) o,o,o-Triethylphosphor...	5.530	198	315704	51.497	ppm		94
33) Alpha-terpinol	5.819	121	257785	50.208	ppm		97
36) Nitrobenzene	5.129	77	578962	42.995	ppm		97
37) N-Nitrosopiperidine	5.268	42	423206	47.577	ppm		98
38) Isophorone	5.354	82	1118699	43.014	ppm		95

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8303.D
Acq On : 22 Aug 2024 10:49 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 11:26:16 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) 2-Nitrophenol	5.424	139	295504	46.338	ppm		93
40) Benzoic Acid	5.568	105	222759	44.537	ppm		99
41) 2,4-Dimethylphenol	5.477	107	592198	44.599	ppm		97
42) bis(-2-Chloroethoxy)Me...	5.557	93	660926	42.825	ppm		99
43) 2,4-Dichlorophenol	5.664	162	466142	48.242	ppm		100
44) a,a-Dimethylphenethyla...	6.194	58	1539468m	51.259	ppm		
45) 1,2,4-Trichlorobenzene	5.734	180	477115	44.391	ppm		100
46) Naphthalene	5.809	128	1637511	43.493	ppm		99
47) 4-Chloroaniline	5.862	127	692203	46.734	ppm		99
48) 2,6-Dichlorophenol	5.873	162	453938	48.238	ppm		96
49) Hexachlorobutadiene	5.926	225	268688	43.922	ppm		100
50) Hexachloropropene	5.889	213	311536	50.576	ppm		99
51) 4-Chloro-3-methylphenol	6.349	107	505992	46.555	ppm		100
52) N-N-di-n-butylamine	6.183	84	601940m	51.922	ppm		
53) Caprolactam	6.215	113	231957	53.320	ppm		96
54) p-Phenylenediamine	6.220	80	160750	45.632	ppm		92
55) Safrole	6.392	162	364348	40.758	ppm		95
56) 2-Methylnaphthalene	6.477	142	1114482	44.606	ppm		99
57) 1-Methylnaphthalene	6.573	142	1038549	44.437	ppm		98
59) Hexachlorocyclopentadiene	6.627	237	212816	45.634	ppm		100
60) 1,2,4,5-Tetrachloroben...	6.638	216	462212	43.741	ppm		99
61) 1,2,3,4-Tetrachloroben...	6.916	216	521059	49.550	ppm		98
62) 2,4,6-Trichlorophenol	6.761	196	324044	51.919	ppm		99
63) 2,4,5-Trichlorophenol	6.809	196	340495	51.750	ppm		99
65) Isosafrole	6.900	104	227432	48.276	ppm		90
66) 1,1'-Biphenyl	6.932	154	1534557	49.059	ppm		98
67) 2-Chloronaphthalene	6.953	162	992086	43.370	ppm		99
68) 2-Nitroaniline	7.060	65	368413	53.161	ppm		99
69) 1,4-Naphthoquinone	7.130	158	386164	49.980	ppm		88
70) m-Dinitrobenzene	7.274	168	189236	47.214	ppm	#	66
71) Acenaphthylene	7.360	152	1474544	43.497	ppm		100
72) Dimethyl phthalate	7.237	163	1142138	43.430	ppm		100
73) 2,6-Dinitrotoluene	7.296	165	256270	48.746	ppm		95
74) Acenaphthene	7.526	153	1031556	43.077	ppm		100
75) 3-Nitroaniline	7.467	138	362345	57.830	ppm		92
76) 2,4-Dinitrophenol	7.568	184	135537	59.866	ppm		83
77) Dibenzofuran	7.697	168	1436339	44.176	ppm		100
78) 2,4-Dinitrotoluene	7.697	165	342722	45.209	ppm		94
79) 4-Nitrophenol	7.659	65	278933	52.232	ppm		92
80) Pentachlorobenzene	7.659	250	421522	43.966	ppm		99
81) 1-Napthylamine	7.857	143	970569	54.323	ppm		98
82) 2-Napthylamine	7.857	143	974285	62.550	ppm		98
83) 2,3,4,6-Tetrachlorophenol	7.825	232	244854	48.985	ppm		95
84) Fluorene	8.034	166	1229881	45.399	ppm		100
85) 4-Chlorophenyl-phenyle...	8.034	204	573403	45.485	ppm		99
86) Diethylphthalate	7.932	149	1131411	42.562	ppm		99
87) 4-Nitroaniline	8.071	138	388324	58.226	ppm		93
88) 5-Nitro-o-toluidine	8.055	152	407175	57.662	ppm		97
90) Sulfotepp	8.312	322	206141	48.185	ppm		98
91) Octachlorocyclopentene	8.280	307	167853	58.392	ppm		98
93) Thionazin	8.012	107	236850	48.298	ppm		98
94) 4,6-Dinitro-2-methylph...	8.098	198	198214	53.552	ppm		94
95) Diphenylamine	8.157	169	2135912	98.160	ppm		100
96) 1,2 Diphenylhydrazine	8.194	77	1493212	47.044	ppm		92
97) N-Nitrosodiphenylamine	8.157	169	2136493	98.169	ppm		100
98) 1,3,5-Trinirobenzene	8.451	213	129142	50.702	ppm	#	1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8303.D
Acq On : 22 Aug 2024 10:49 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 11:26:16 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

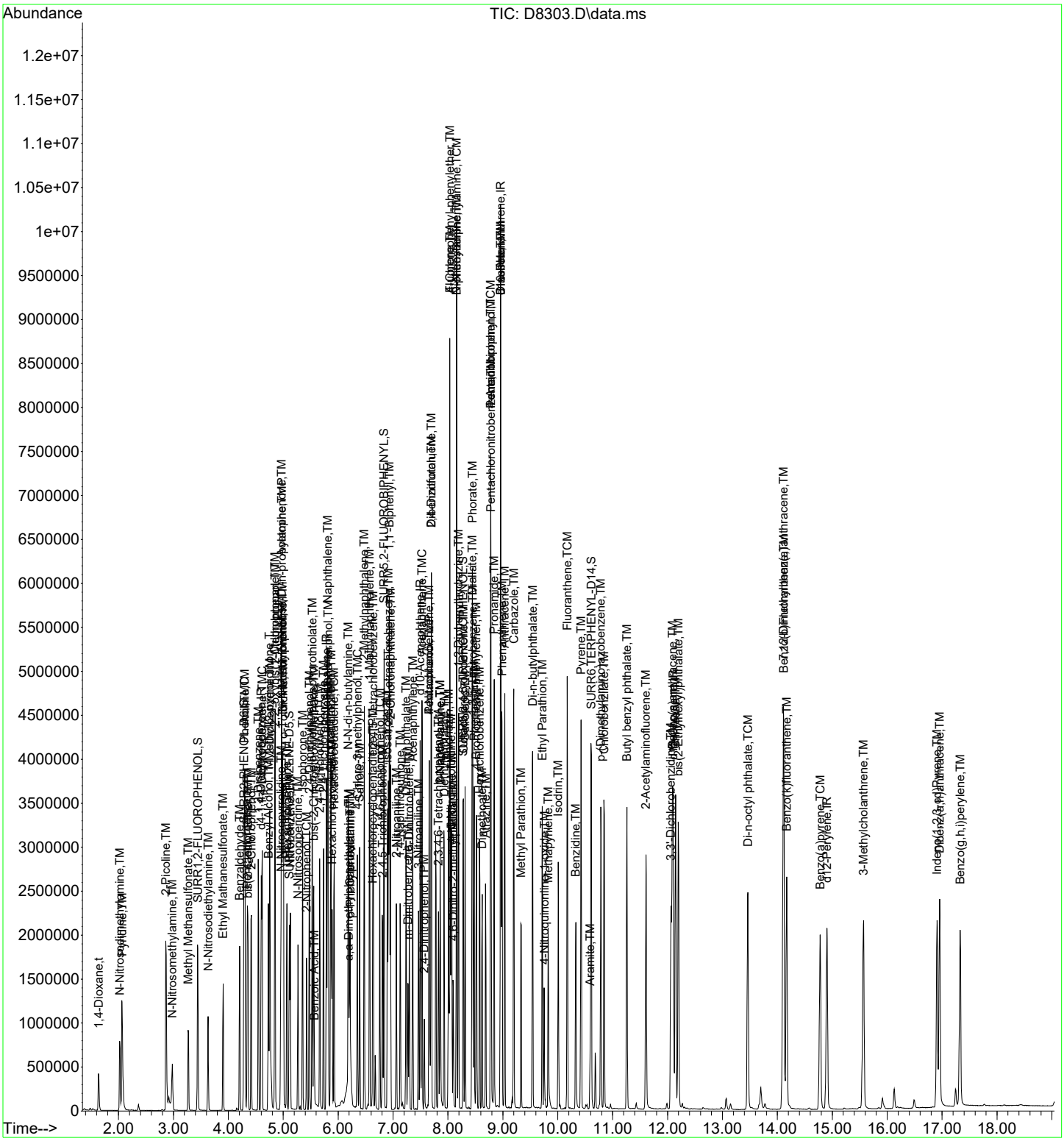
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
99)	Diallate	8.440	86	518370	46.422	ppm		94
100)	Phorate	8.445	121	295605	51.630	ppm	#	67
101)	Phenacetin	8.478	108	730111	54.055	ppm		96
102)	4-Bromophenyl-phenylether	8.515	248	320527	44.088	ppm		98
103)	Hexachlorobenzene	8.574	284	363516	43.785	ppm		93
104)	Dimethoate	8.622	87	432038	47.973	ppm		98
105)	Atrazine	8.686	215	134101	38.860	ppm		95
106)	Pentachlorophenol	8.777	266	237011	53.140	ppm		97
107)	4-Aminobiphenyl	8.777	169	1335034	58.942	ppm		100
108)	Pentachloronitrobenzene	8.782	237	137660	46.285	ppm		97
109)	Pronamide	8.841	173	655994	52.310	ppm		99
110)	Dinoseb	8.959	211	274885	51.541	ppm		97
111)	Disulfoton	8.959	88	781750	39.769	ppm		91
112)	Phenanthrene	8.986	178	1609350	41.885	ppm		99
113)	Anthracene	9.034	178	1595196	42.608	ppm		99
114)	Carbazole	9.200	167	1866935	55.214	ppm		99
115)	Di-n-butylphthalate	9.542	149	1991083	43.792	ppm		99
116)	4-Nitroquinonline-1-oxide	9.756	190	126629	48.290	ppm		83
117)	Fluoranthene	10.173	202	1779322	45.936	ppm		99
119)	Methyl Parathion	9.328	109	345907	51.230	ppm		97
120)	Ethyl Parathion	9.718	97	297514	47.229	ppm		95
121)	Methapyrilene	9.825	58	547135	31.508	ppm		98
122)	Isodrin	10.007	193	172739	37.899	ppm		97
123)	Benzidine	10.328	184	847603	48.933	ppm		99
124)	Pyrene	10.425	202	1825160	41.301	ppm		99
126)	Aramite	10.590	185	123347m	50.148	ppm		
127)	p-(Dimethylamino)azobe...	10.783	120	636885	48.691	ppm		98
128)	Chlorobenzilate	10.842	139	742324	49.384	ppm		98
129)	Butyl benzyl phthalate	11.259	149	889320	40.582	ppm		99
131)	2-Acetylaminofluorene	11.607	181	826659	50.237	ppm		99
132)	3,3'-Dichlorobenzidine	12.061	252	581361	43.141	ppm		99
133)	Benzo(a)anthracene	12.088	228	1717182	42.863	ppm		99
134)	Chrysene	12.147	228	1630511	43.972	ppm		99
135)	bis(2-Ethylhexyl)phtha...	12.195	149	1210439	39.803	ppm		99
137)	Di-n-octyl phthalate	13.463	149	1965742	41.070	ppm		97
138)	7,12-Dimethylbenz(a)an...	14.110	256	958679	50.534	ppm		99
139)	Benzo(b)Fluoranthene	14.115	252	1729480	45.524	ppm		98
140)	Benzo(k)fluoranthene	14.169	252	1625818	45.153	ppm		99
141)	Benzo(a)pyrene	14.778	252	1387223	44.388	ppm		100
142)	3-Methylcholanthrene	15.570	268	995446	53.750	ppm		98
143)	Indeno(1,2,3-cd)Pyrene	16.907	276	1347531	50.659	ppm		98
144)	Dibenz(a,h)anthracene	16.955	278	1480836	55.004	ppm		100
145)	Benzo(g,h,i)perylene	17.330	276	1356571	46.959	ppm		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8303.D
Acq On : 22 Aug 2024 10:49 am
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 11:26:16 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8304.D
Acq On : 22 Aug 2024 11:34 am
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 23 11:20:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	40.000	40.000	0.0	115	-0.02
2	t	1,4-Dioxane	40.000	0.023	99.9#	0	-0.01
3	TM	Pyridine	40.000	0.011	100.0#	0	-0.01
4	TM	N-Nitrosodimethylamine	40.000	0.030	99.9#	0	0.00
5	TM	2-Picoline	40.000	0.000	100.0#	0	-2.89#
6	TM	N-Nitrosomethylamine	40.000	0.000	100.0#	0	-3.01#
7	TM	Methyl Methansulfonate	40.000	0.050	99.9#	0	-0.02
8	S	SURR1,2-FLUOROPHENOL	40.000	0.024	99.9#	0	0.00
9	TM	N-Nitrosodiethylamine	40.000	0.000	100.0#	0	-3.65#
10	TM	Ethyl Mathanesulfonate	40.000	0.057	99.9#	0	-0.02
11	TM	Benzaldehyde	40.000	0.040	99.9#	0	-0.02
12	TM	Aniline	40.000	0.000	100.0#	0	-4.32#
13	S	SURR2,PHENOL-D6	40.000	0.021	99.9#	0	0.00
14	TMC	Phenol	40.000	0.059	99.9#	0	0.00
15	TM	bis(2-Clethyl)Ether	40.000	0.035	99.9#	0	-0.02
16	TM	Pentachloroethane	40.000	0.030	99.9#	0	-0.02
17	TM	2-Chlorophenol	40.000	0.016	100.0#	0	-0.01
18	TM	1,3-Diclbenzene	40.000	0.017	100.0#	0	-0.03
19	TMC	1,4-Dichlorobenzene	40.000	0.016	100.0#	0	-0.09
20	TM	1,2-Diclbenzene	40.000	0.016	100.0#	0	-0.02
21	TM	Benzyl Alcohol	40.000	0.019	100.0#	0	0.00
22	T	1-Methyl-2-pyrrolidinone	40.000	0.035	99.9#	0	-0.03
23	TM	2,2'-oxybis(1-Chloropropane	40.000	0.026	99.9#	0	-0.02
24	TM	2-Methylphenol	40.000	0.022	99.9#	0	-0.02
25	TM	3+4-Methylphenol	40.000	0.000	100.0#	0	-5.00#
26	TM	Acetophenone	40.000	0.034	99.9#	0	-0.02
27	TMP	N-Nitroso-Di-n-propylamine	40.000	0.043	99.9#	0	0.00
28	TM	N-Nitrosopyrrolidine	40.000	0.000	100.0#	0	-4.97#
29	TM	N-Nitrosomorpholine	40.000	0.000	100.0#	0	-5.00#
30	TM	o-Toluidine	40.000	0.000	100.0#	0	-5.02#
31	TM	Hexachloroethane	40.000	0.031	99.9#	0	-0.03
32	TM	o,o,o-Triethylphosphorothio	40.000	0.000	100.0#	0	-5.55#
33	TM	Alpha-terpinol	40.000	0.111	99.7#	0	-0.03
34	IR	d8-Naphthalene	40.000	40.000	0.0	119	-0.02
35	S	SURR4,NITROBENZENE-D5	40.000	0.032	99.9#	0	-0.02
36	TM	Nitrobenzene	40.000	0.036	99.9#	0	-0.02
37	TM	N-Nitrosopiperidine	40.000	0.000	100.0#	0	-5.28#
38	TM	Isophorone	40.000	0.031	99.9#	0	-0.02
39	TCM	2-Nitrophenol	40.000	0.193	99.5#	0	-0.01
40	TM	Benzoic Acid	40.000	0.000	100.0#	0	-5.58#
41	TM	2,4-Dimethylphenol	40.000	0.028	99.9#	0	-0.01
42	TM	bis(-2-Chloroethoxy)Methane	40.000	0.009	100.0#	0	-0.17
43	TCM	2,4-Dichlorophenol	40.000	0.024	99.9#	0	0.00
44	TM	a,a-Dimethylphenethylamine	40.000	0.000	100.0#	0	-5.99#
45	TM	1,2,4-Trichlorobenzene	40.000	0.020	99.9#	0	-0.02
46	TM	Naphthalene	40.000	0.036	99.9#	0	-0.02
47	TM	4-Chloroaniline	40.000	0.037	99.9#	0	-0.02
48	TM	2,6-Dichlorophenol	40.000	0.014	100.0#	0	-0.01
49	TCM	Hexachlorobutadiene	40.000	0.000	100.0#	0	-5.94#
50	TM	Hexachloropropene	40.000	0.000	100.0#	0	-5.91#
51	TMC	4-Chloro-3-methylphenol	40.000	0.032	99.9#	0	0.00

1st AM 08/23/24
2nd BA 08/26/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8304.D
Acq On : 22 Aug 2024 11:34 am
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 23 11:20:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
52	TM	N-N-di-n-butylamine	40.000	0.000	100.0#	0	-6.20#
53	TM	Caprolactam	40.000	0.240	99.4#	1	-0.03
54	TM	p-Phenylenediamine	40.000	0.000	100.0#	0	-6.23#
55	TM	Safrole	40.000	0.017	100.0#	0	-0.02
56	TM	2-Methylnaphthalene	40.000	0.026	99.9#	0	-0.02
57	TM	1-Methylnaphthalene	40.000	0.022	99.9#	0	-0.02
58	IR	d10-Acenaphthene	40.000	40.000	0.0	121	-0.02
59	TPM	Hexachlorocyclopentadiene	40.000	0.000	100.0#	0	-6.65#
60	TM	1,2,4,5-Tetrachlorobenzene	40.000	0.018	100.0#	0	-0.02
61	TM	1,2,3,4-Tetrachlorobenzene	40.000	0.029	99.9#	0	-0.01
62	TCM	2,4,6-Trichlorophenol	40.000	0.029	99.9#	0	-0.02
63	TM	2,4,5-Trichlorophenol	40.000	0.036	99.9#	0	0.00
64	S	SURR5,2-FLUOROBIPHENYL	40.000	0.021	99.9#	0	-0.02
65	TM	Isosafrole	40.000	0.024	99.9#	0	-0.01
66	TM	1,1'-Biphenyl	40.000	0.034	99.9#	0	-0.02
67	TM	2-Chloronaphthalene	40.000	0.023	99.9#	0	-0.02
68	TM	2-Nitroaniline	40.000	0.060	99.8#	0	-0.01
69	TM	1,4-Naphthoquinone	40.000	0.000	100.0#	0	-7.15#
70	TM	m-Dinitrobenzene	40.000	0.000	100.0#	0	-7.29#
71	TM	Acenaphthylene	40.000	0.022	99.9#	0	-0.02
72	TM	Dimethyl phthalate	40.000	0.027	99.9#	0	-0.02
73	TM	2,6-Dinitrotoluene	40.000	0.023	99.9#	0	-0.01
74	TMC	Acenaphthene	40.000	0.025	99.9#	0	-0.02
75	TM	3-Nitroaniline	40.000	0.024	99.9#	0	0.01
76	TPM	2,4-Dinitrophenol	40.000	0.000	100.0#	0	-7.59#
77	TM	Dibenzofuran	40.000	0.027	99.9#	0	-0.02
78	TM	2,4-Dinitrotoluene	40.000	0.000	100.0#	0	-7.71#
79	TMP	4-Nitrophenol	40.000	0.000	100.0#	0	-7.68#
80	TM	Pentachlorobenzene	40.000	0.013	100.0#	0	-0.02
81	TM	1-Napthylamine	40.000	0.000	100.0#	0	-7.83#
82	TM	2-Napthylamine	40.000	0.000	100.0#	0	-7.88#
83	TM	2,3,4,6-Tetrachlorophenol	40.000	0.000	100.0#	0	-7.85#
84	TM	Fluorene	40.000	0.024	99.9#	0	-0.02
85	TM	4-Chlorophenyl-phenylether	40.000	0.033	99.9#	0	-0.02
86	TM	Diethylphthalate	40.000	0.048	99.9#	0	-0.02
87	TM	4-Nitroaniline	40.000	0.064	99.8#	0	-0.02
88	TM	5-Nitro-o-toluidine	40.000	0.000	100.0#	0	-8.07#
89	S	SURR3,2,4,6-TRIBROMOPHENOL	40.000	0.000	100.0#	0	-8.29#
90	TM	Sulfotepp	40.000	0.000	100.0#	0	-8.34#
91	TM	Octachlorocyclopentene	40.000	0.000	100.0#	0	-8.30#
92	IR	d10-Phenanthrene	40.000	40.000	0.0	133	-0.02
93	TM	Thionazin	40.000	0.000	100.0#	0	-8.03#
94	TM	4,6-Dinitro-2-methylphenol	40.000	0.000	100.0#	0	-8.11#
95	TM	Diphenylamine	80.000	0.071	99.9#	0	-0.03
96	TM	1,2 Diphenylhydrazine	40.000	0.040	99.9#	0	-0.02
97	TCM	N-Nitrosodiphenylamine	80.000	0.071	99.9#	0	-0.03
98	TM	1,3,5-Trinirobenzene	40.000	0.000	100.0#	0	-8.46#
99	TM	Diallate	40.000	0.027	99.9#	0	-0.02
100	TM	Phorate	40.000	0.000	100.0#	0	-8.47#
101	TM	Phenacetin	40.000	0.000	100.0#	0	-8.49#

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8304.D
Acq On : 22 Aug 2024 11:34 am
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 23 11:20:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
102	TM	4-Bromophenyl-phenylether	40.000	0.027	99.9#	0	-0.03
103	TM	Hexachlorobenzene	40.000	0.025	99.9#	0	-0.02
104	TM	Dimethoate	40.000	0.000	100.0#	0	-8.64#
105	TM	Atrazine	40.000	0.000	100.0#	0	-8.71#
106	TCM	Pentachlorophenol	40.000	0.000	100.0#	0	-8.80#
107	TM	4-Aminobiphenyl	40.000	0.000	100.0#	0	-8.80#
108	TM	Pentachloronitrobenzene	40.000	0.000	100.0#	0	-8.80#
109	TM	Pronamide	40.000	0.019	100.0#	0	-0.03
110	TM	Dinoseb	40.000	0.000	100.0#	0	-8.98#
111	TM	Disulfoton	40.000	0.000	100.0#	0	-8.98#
112	TM	Phenanthrene	40.000	0.051	99.9#	0	-0.02
113	TM	Anthracene	40.000	0.028	99.9#	0	-0.03
114	TM	Carbazole	40.000	0.048	99.9#	0	-0.02
115	TM	Di-n-butylphthalate	40.000	0.031	99.9#	0	-0.02
116	TM	4-Nitroquinonline-1-oxide	40.000	0.000	100.0#	0	-9.77#
117	TCM	Fluoranthene	40.000	0.035	99.9#	0	-0.03
118	IR	d12-Chrysene	40.000	40.000	0.0	126	-0.04
119	TM	Methyl Parathion	40.000	0.000	100.0#	0	-9.35#
120	TM	Ethyl Parathion	40.000	0.000	100.0#	0	-9.74#
121	TM	Methapyrilene	40.000	0.000	100.0#	0	-9.85#
122	TM	Isodrin	40.000	0.023	99.9#	0	-0.03
123	TM	Benzidine	40.000	0.000	100.0#	0	-10.35#
124	TM	Pyrene	40.000	0.036	99.9#	0	-0.02
125	S	SURR6,TERPHENYL-D14	40.000	0.045	99.9#	0	-0.03
126	TM	Aramite	40.000	0.000	100.0#	0	-10.72#
127	TM	p-(Dimethylamino)azobenzene	40.000	0.000	100.0#	0	-10.81#
128	TM	Chlorobenzilate	40.000	0.024	99.9#	0	-0.04
129	TM	Butyl benzyl phthalate	40.000	0.032	99.9#	0	-0.04
130	TM	3,3-Dimethylbenzidine	40.000	48.206	-20.5#	145	-0.03
131	TM	2-Acetylaminofluorene	40.000	0.000	100.0#	0	-11.64#
132	TM	3,3'-Dichlorobenzidine	40.000	0.000	100.0#	0	-12.10#
133	TM	Benzo(a)anthracene	40.000	0.029	99.9#	0	0.02
134	TM	Chrysene	40.000	0.036	99.9#	0	-0.04
135	TM	bis(2-Ethylhexyl)phthalate	40.000	0.027	99.9#	0	-0.04
136	IR	d12-Perylene	40.000	40.000	0.0	126	-0.04
137	TCM	Di-n-octyl phthalate	40.000	0.017	100.0#	0	-0.06
138	TM	7,12-Dimethylbenz(a)anthrac	40.000	0.017	100.0#	0	-0.05
139	TM	Benzo(b)Fluoranthene	40.000	0.034	99.9#	0	-0.05
140	TM	Benzo(k)fluoranthene	40.000	0.026	99.9#	0	-0.05
141	TCM	Benzo(a)pyrene	40.000	0.028	99.9#	0	-0.05
142	TM	3-Methylcholanthrene	40.000	0.016	100.0#	0	-0.04
143	TM	Indeno(1,2,3-cd)Pyrene	40.000	0.026	99.9#	0	-0.03
144	TM	Dibenz(a,h)anthracene	40.000	0.030	99.9#	0	-0.04
145	TM	Benzo(g,h,i)perylene	40.000	0.031	99.9#	0	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 13

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8304.D
Acq On : 22 Aug 2024 11:34 am
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 23 11:20:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

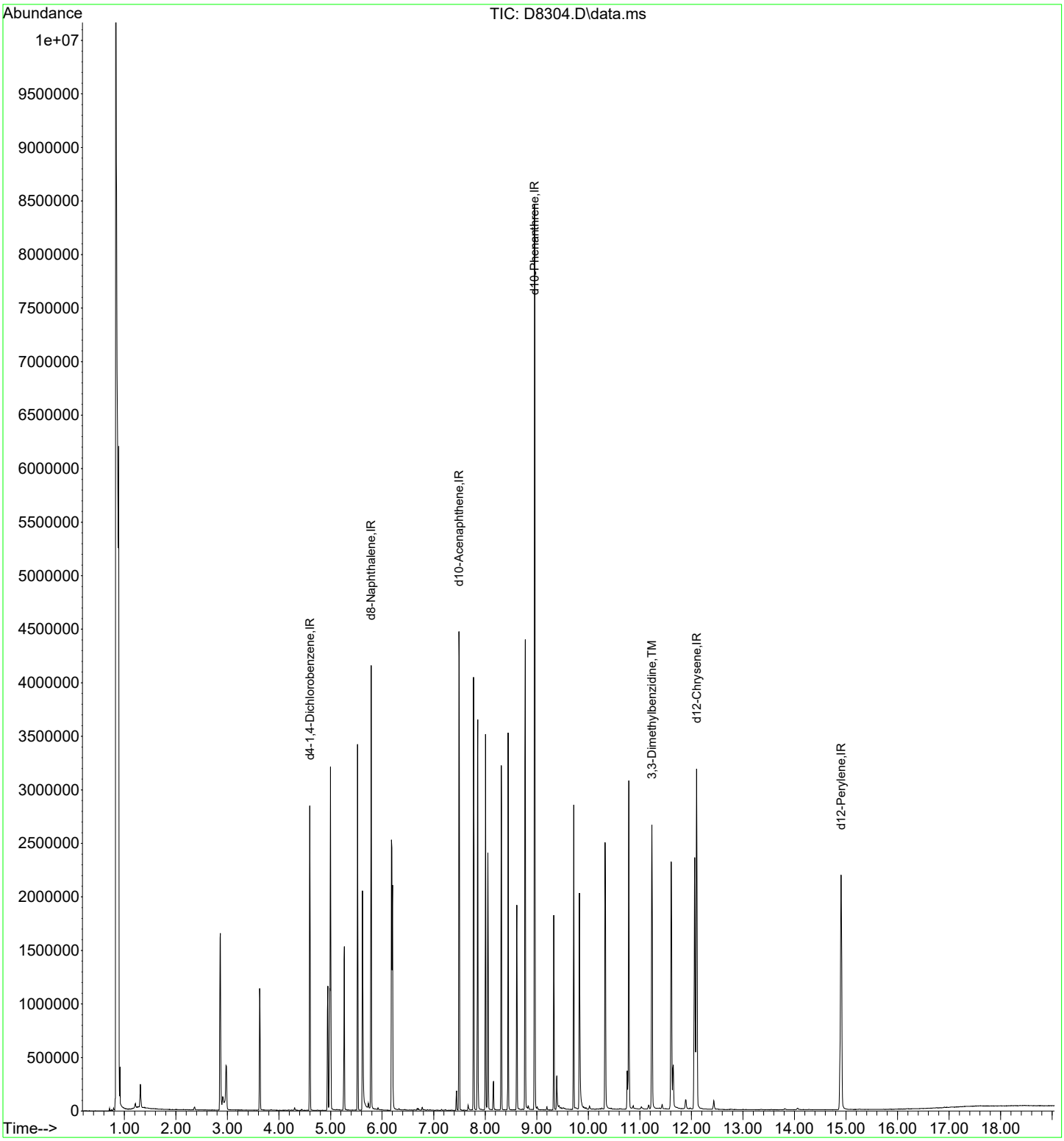
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.599	152	394691	40.00	ppm	-0.02
34) d8-Naphthalene	5.786	136	1621933	40.00	ppm	-0.02
58) d10-Acenaphthene	7.492	164	913081	40.00	ppm	-0.02
92) d10-Phenanthrene	8.958	188	1696824	40.00	ppm	-0.02
118) d12-Chrysene	12.103	240	1433494	40.00	ppm	-0.04
136) d12-Perylene	14.906	264	1416822	40.00	ppm	-0.04
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	3.454	112	296	0.02	ppm	0.00
Spiked Amount 20.000	Range 10 - 70		Recovery =	0.10%#		
13) SURR2,PHENOL-D6	4.294	99	351	0.02	ppm	0.00
Spiked Amount 20.000	Range 10 - 107		Recovery =	0.10%#		
35) SURR4,NITROBENZENE-D5	5.107	82	466	0.03	ppm	-0.02
Spiked Amount 10.000	Range 31 - 110		Recovery =	0.30%#		
64) SURR5,2-FLUOROBIPHENYL	6.834	172	594	0.02	ppm	-0.02
Spiked Amount 10.000	Range 31 - 118		Recovery =	0.20%#		
89) SURR3,2,4,6-TRIBROMOPH...	0.000	330	0	0.00	ppm	
Spiked Amount 20.000	Range 35 - 141		Recovery =	0.00%#		
125) SURR6,TERPHENYL-D14	10.611	244	1385	0.04	ppm	-0.03
Spiked Amount 10.000	Range 10 - 165		Recovery =	0.40%#		
Target Compounds						Qvalue
130) 3,3-Dimethylbenzidine	11.236	212	1035283	48.206	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8304.D
Acq On : 22 Aug 2024 11:34 am
Operator : EDeGray
Sample : 3,3 CCV
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 23 11:20:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8309.D
Acq On : 22 Aug 2024 02:32 pm
Operator : EDeGray
Sample : HEXA CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 14:52:56 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 IR	d4-1,4-Dichlorobenzene	40.000	40.000	0.0	100	0.00
2 IR	d8-Naphthalene	40.000	40.000	0.0	100	0.00
3 IR	d10-Acenaphthene	40.000	40.000	0.0	100	0.00
4 IR	d10-Phenanthrene	40.000	40.000	0.0	100	0.00
5 IR	d12-Chrysene	40.000	40.000	0.0	100	0.00
6 T	Hexachlorophene	500.000	500.000	0.0	100	0.00
7 IR	d12-Perylene	40.000	40.000	0.0	100	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8309.D
Acq On : 22 Aug 2024 02:32 pm
Operator : EDeGray
Sample : HEXA CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 14:52:56 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration

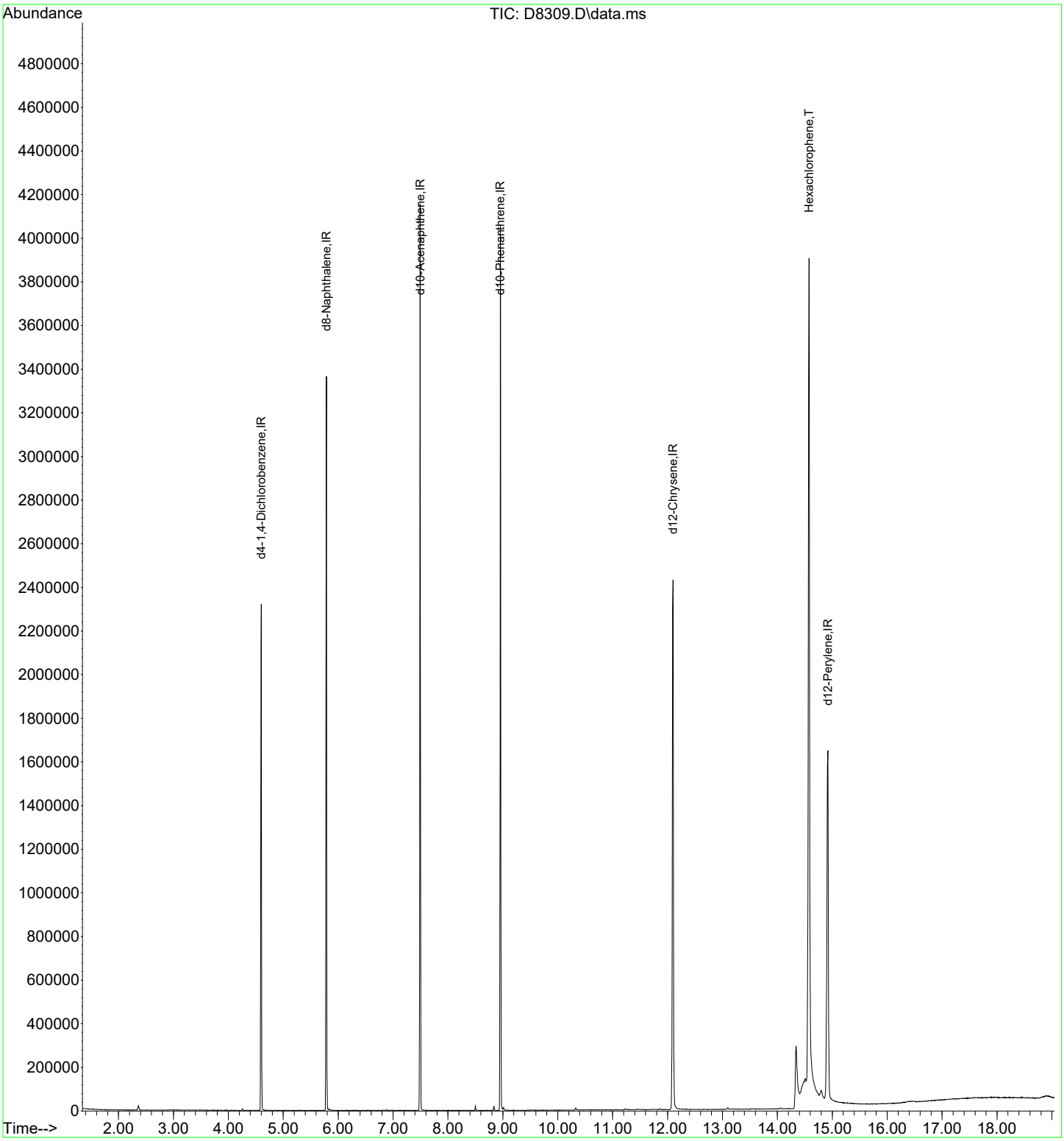
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.600	152	349747	40.00	ppm	0.00
2) d8-Naphthalene	5.787	136	1406375	40.00	ppm	0.00
3) d10-Acenaphthene	7.494	164	766565	40.00	ppm	0.00
4) d10-Phenanthrene	8.954	188	1375379	40.00	ppm	0.00
5) d12-Chrysene	12.099	240	1166226	40.00	ppm	0.00
7) d12-Perylene	14.917	264	1050610	40.00	ppm	0.00
Target Compounds						Qvalue
6) Hexachlorophene	14.575	209	349103	500.000	ppm	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8309.D
Acq On : 22 Aug 2024 02:32 pm
Operator : EDeGray
Sample : HEXA CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

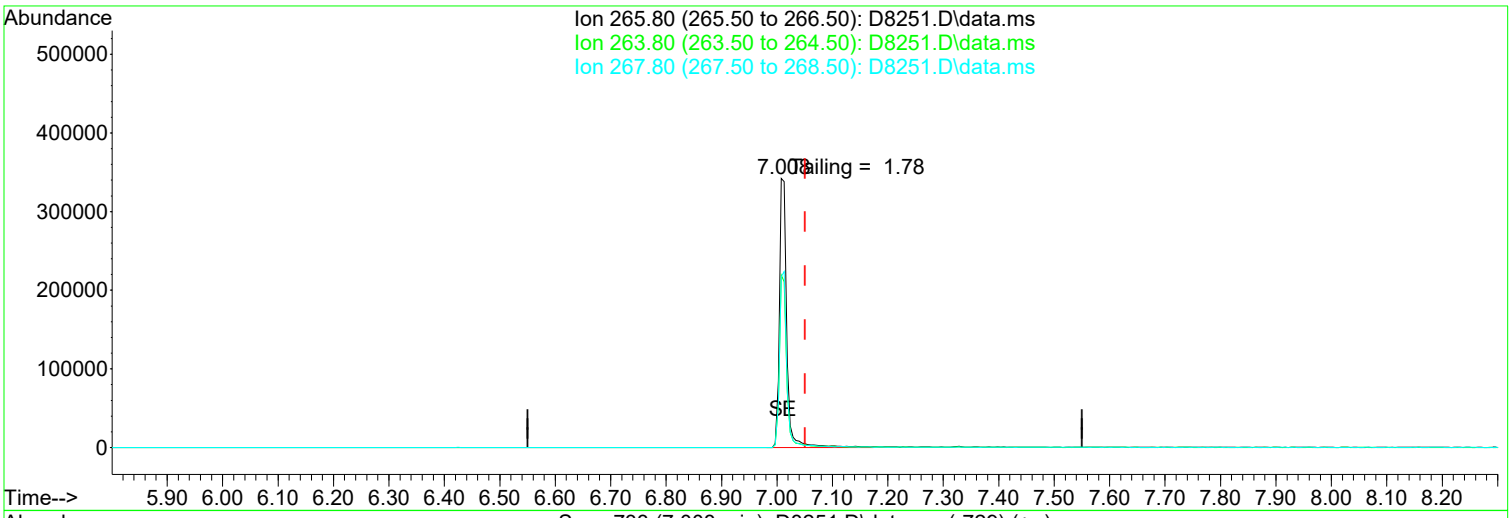
Quant Time: Aug 22 14:52:56 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\HEXA-64.M
Quant Title : 8270 EXP MIX2 ANALYSIS
QLast Update : Thu Aug 22 14:52:49 2024
Response via : Initial Calibration

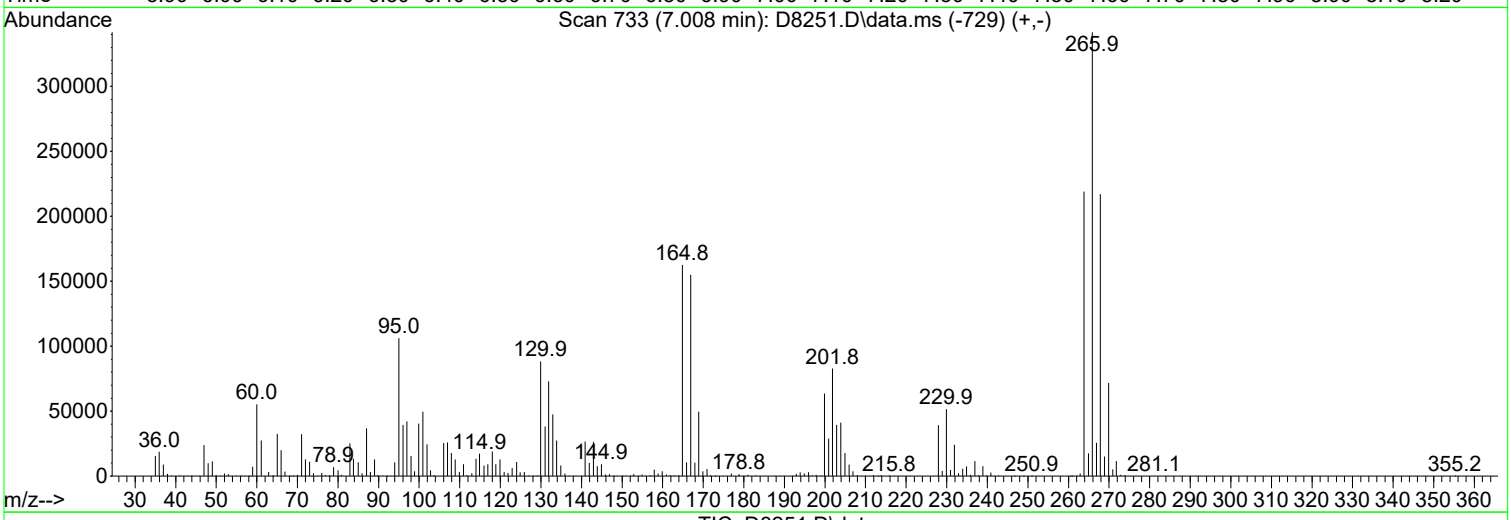


Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8251.D
Acq On : 21 Aug 2024 09:15 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 21 10:34:19 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Sun Aug 11 15:49:48 2024
Response via : Initial Calibration





TIC: D8251.D\data.ms

(5) Pentachlorophenol (TCM)

7.008min (-0.043) 279.92 ppm

response 321077

Ion	Exp%	Act%
265.80	100.00	100.00
263.80	63.50	64.09
267.80	64.20	63.53
0.00	0.00	0.00

Manual Integration:

After

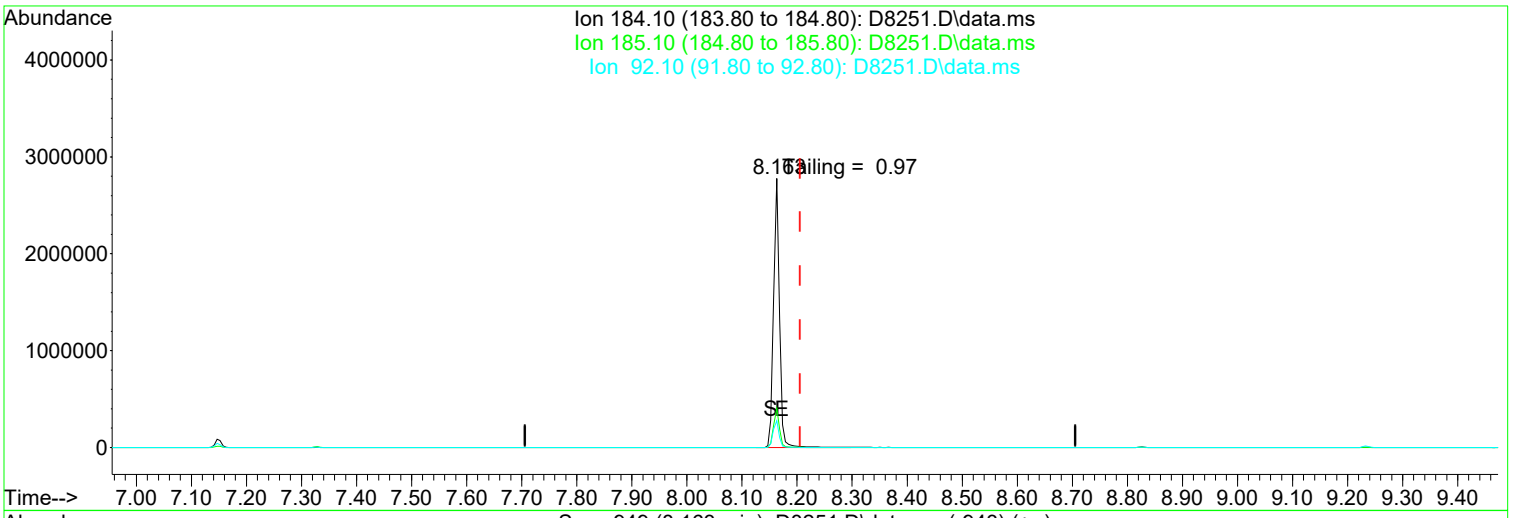
Other - Tailing

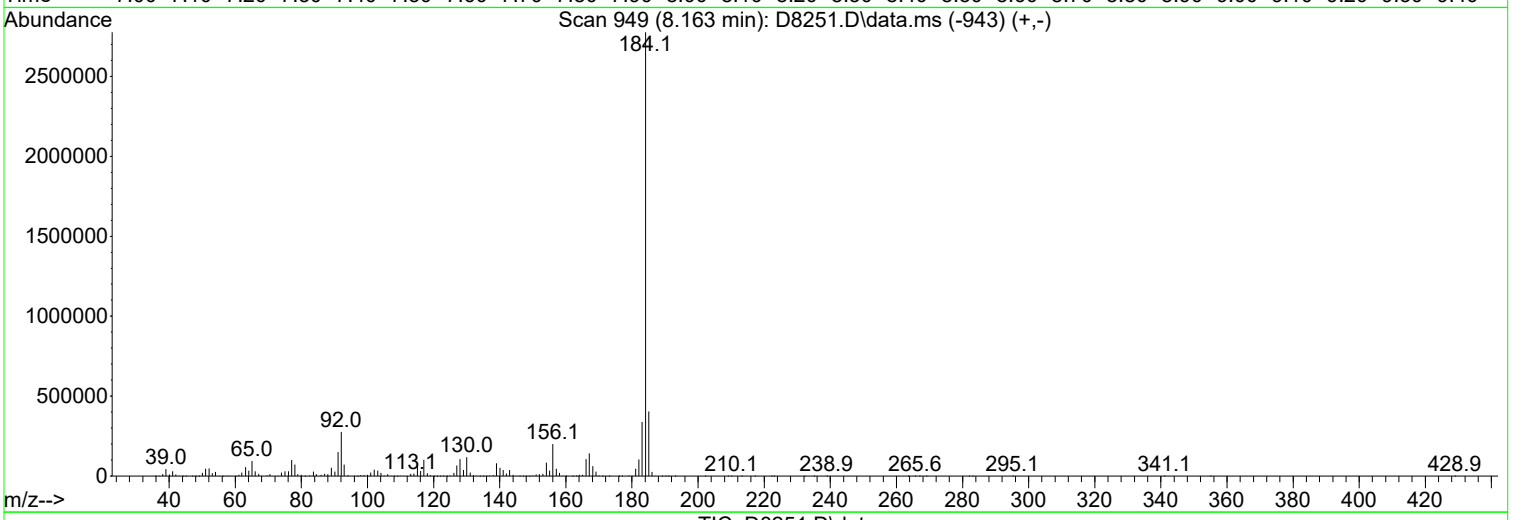
08/21/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8251.D
Acq On : 21 Aug 2024 09:15 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 21 10:34:19 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Sun Aug 11 15:49:48 2024
Response via : Initial Calibration





TIC: D8251.D\data.ms

(8) Benzidine (T)

8.163min (-0.043) 243.74 ppm

response 2069493

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	14.80	14.59
92.10	10.10	9.98
0.00	0.00	0.00

Manual Integration:

After

Other - Tailing

08/21/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8251.D
Acq On : 21 Aug 2024 09:15 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 21 10:34:19 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Sun Aug 11 15:49:48 2024
Response via : Initial Calibration

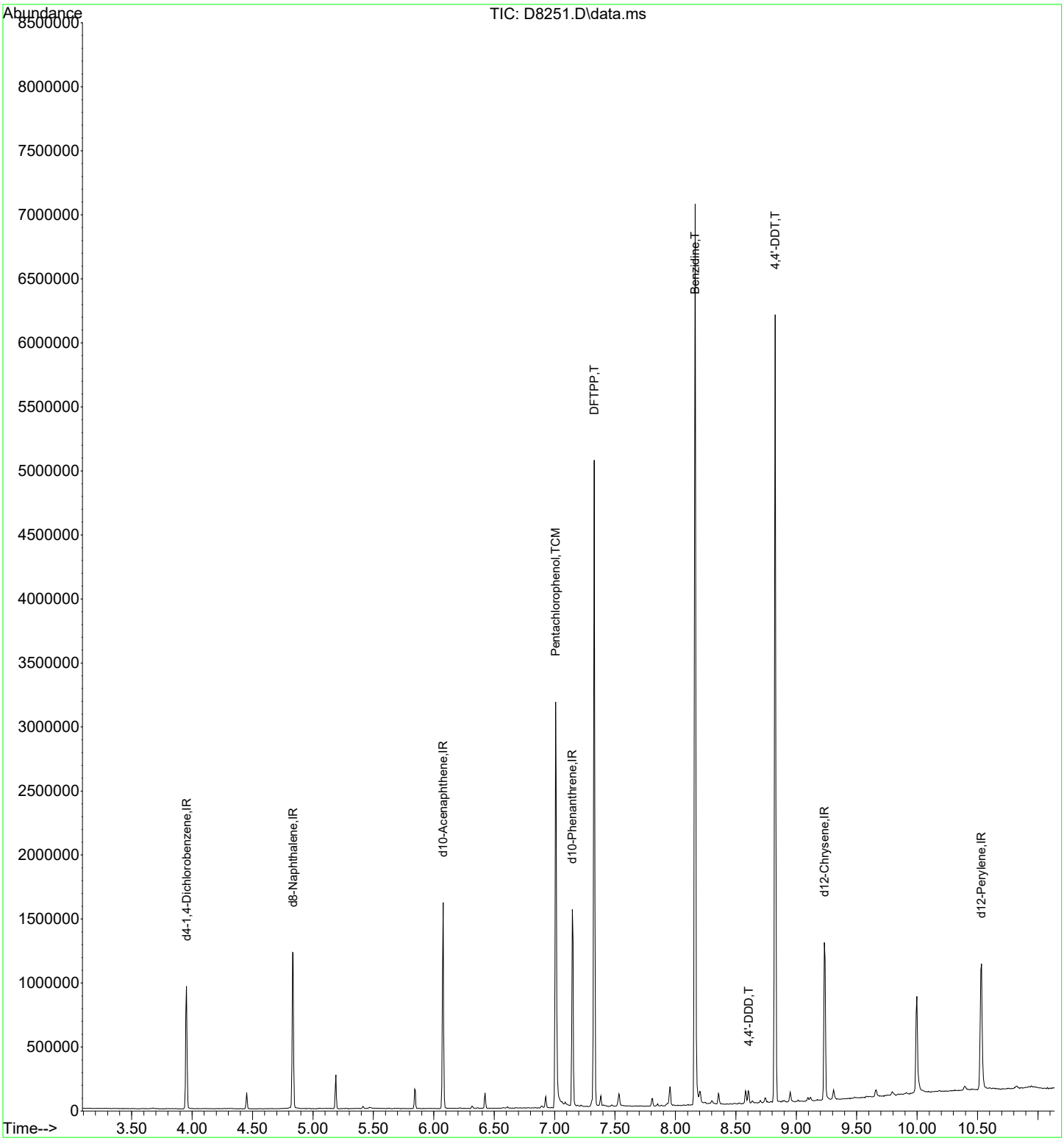
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	3.954	152	123631	40.00	ppm	-0.05
2) d8-Naphthalene	4.836	136	497921	40.00	ppm	-0.04
3) d10-Acenaphthene	6.077	164	263435	40.00	ppm	-0.04
4) d10-Phenanthrene	7.147	188	470693	40.00	ppm	-0.05
7) d12-Chrysene	9.233	240	398540	40.00	ppm	-0.05
12) d12-Perylene	10.532	264	418702	40.00	ppm	-0.06
Target Compounds						Qvalue
5) Pentachlorophenol	7.008	266	321077	279.919	ppm	99
6) DFTPP	7.329	198	368671	172.951	ppm	76
8) Benzidine	8.163	184	2069493	243.736	ppm	100
9) 4,4'-DDE	0.000		0	N.D.		
10) 4,4'-DDD	8.607	235	12146	4.234	ppm	90
11) 4,4'-DDT	8.826	235	861818	300.451	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8251.D
Acq On : 21 Aug 2024 09:15 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 21 10:34:19 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Sun Aug 11 15:49:48 2024
Response via : Initial Calibration

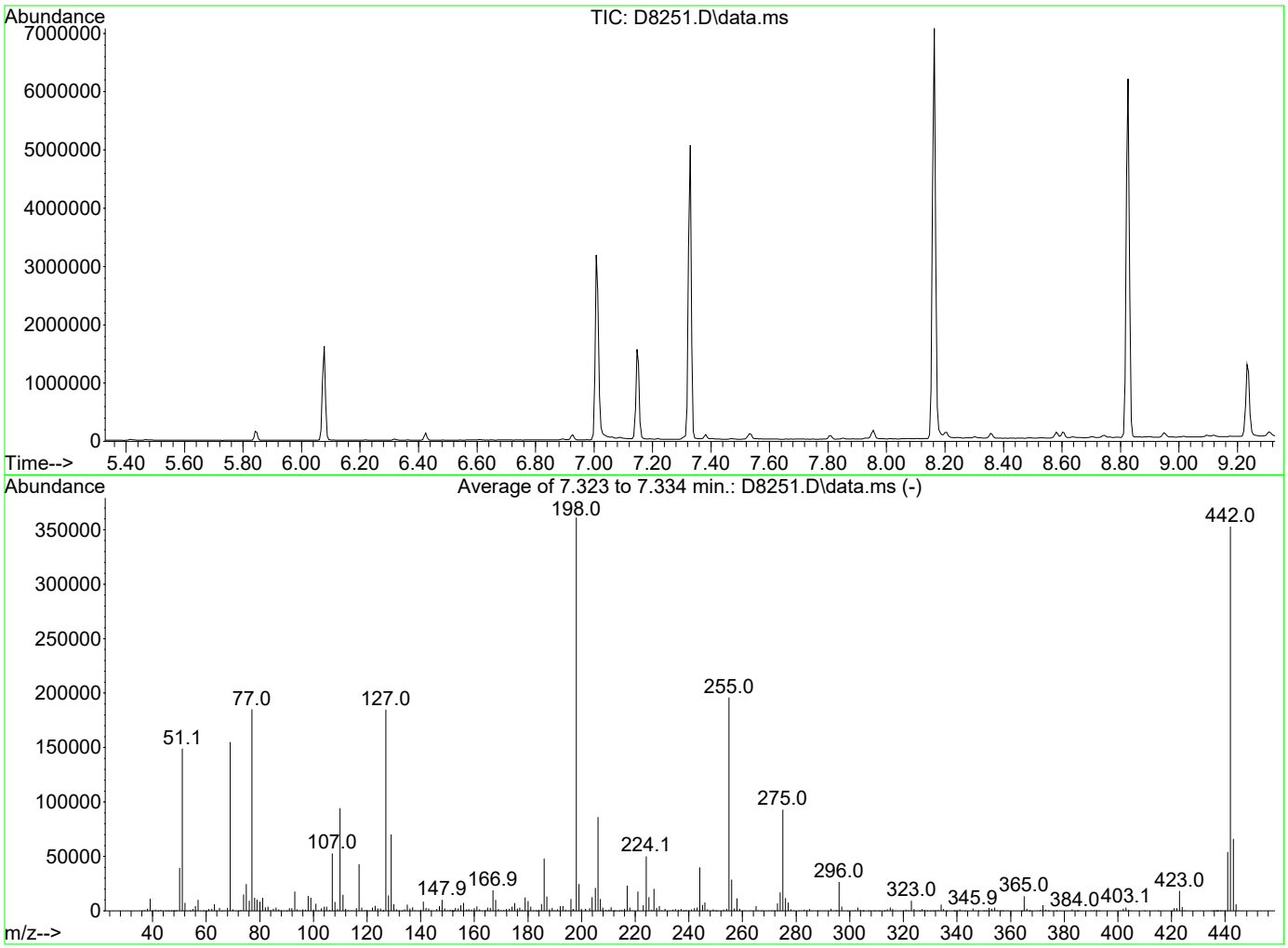


1st AM 08/22/24
2nd BA 08/22/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082124\
Data File : D8251.D
Acq On : 21 Aug 2024 09:15 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Title : TUNE CHECK
Last Update : Sun Aug 11 15:49:48 2024



Spectrum Information: Average of 7.323 to 7.334 min.

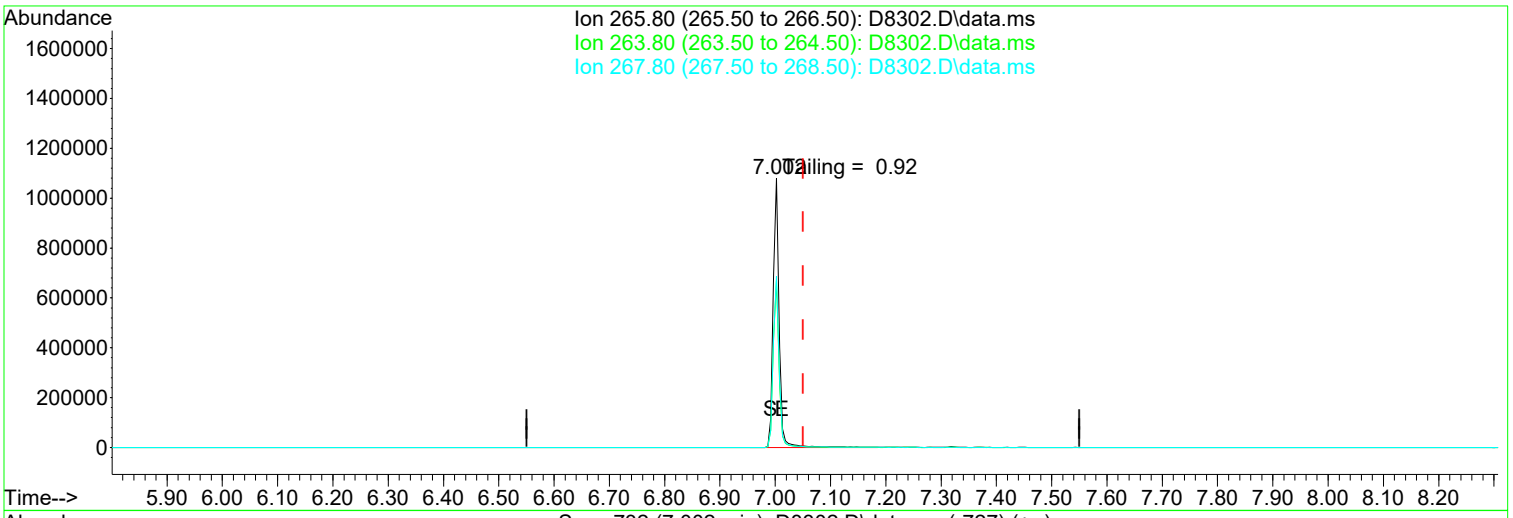
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	1.8	2787	PASS
69	198	0.00	100	42.9	154987	PASS
70	69	0.00	2	0.9	1325	PASS
197	198	0.00	2	0.5	1646	PASS
198	198	100	100	100.0	361131	PASS
199	198	5	9	6.8	24717	PASS
365	198	1	200	3.7	13419	PASS
441	443	0.01	150	81.7	54045	PASS
442	442	100	100	100.0	352896	PASS
443	442	15	24	18.8	66173	PASS

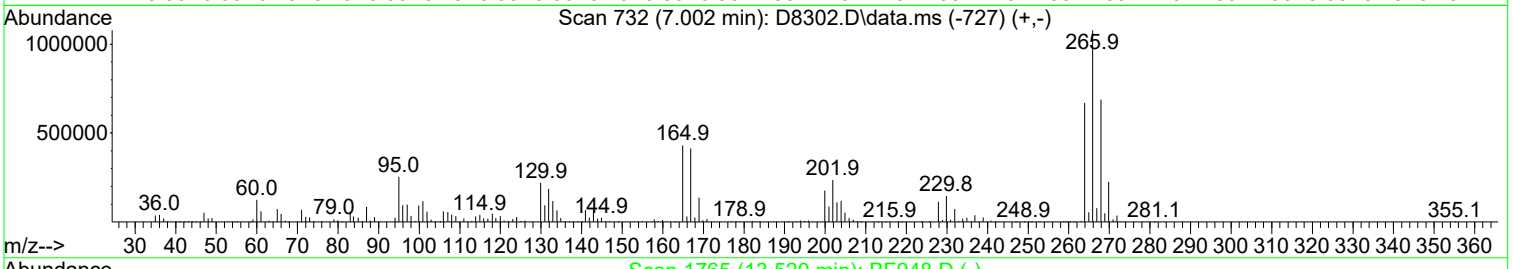
1st AM 08/23/24
2nd BA 08/26/24

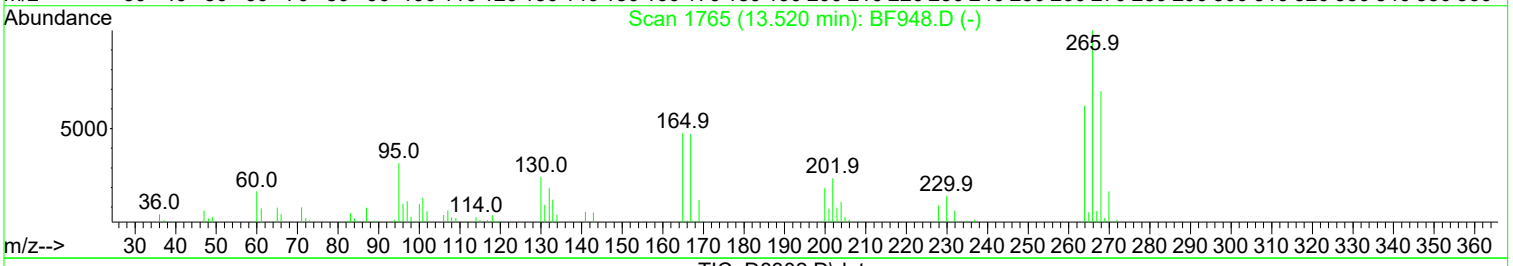
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8302.D
Acq On : 22 Aug 2024 10:33 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 11:29:28 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Sun Aug 11 15:49:48 2024
Response via : Initial Calibration







TIC: D8302.D\data.ms

(5) Pentachlorophenol (TCM)

7.002min (-0.048) 70.38 ppm

response 816267

Ion	Exp%	Act%
265.80	100.00	100.00
263.80	63.50	62.16
267.80	64.20	63.78
0.00	0.00	0.00

Manual Integration:

After

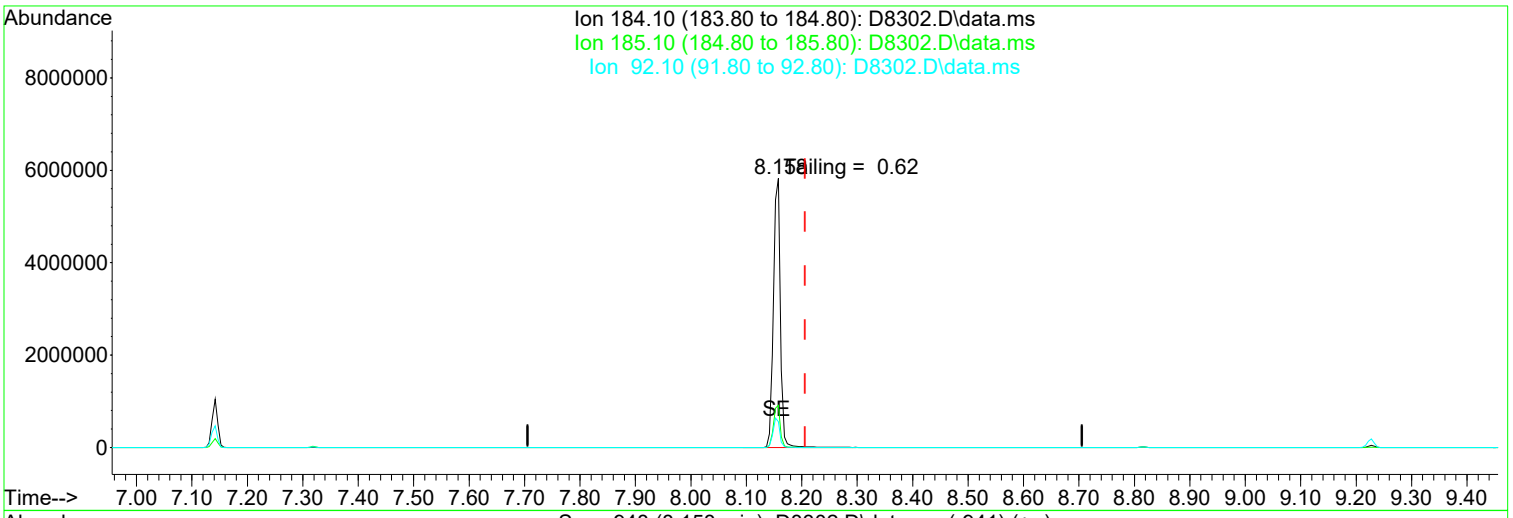
Other - tailing

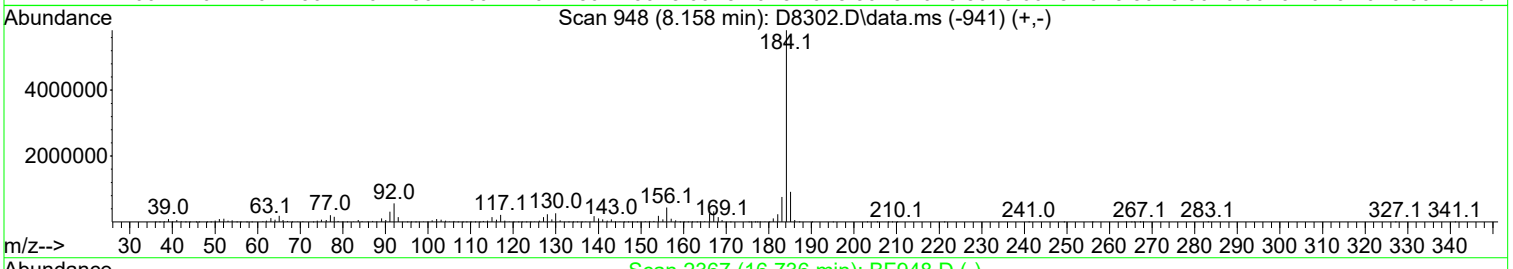
08/22/24

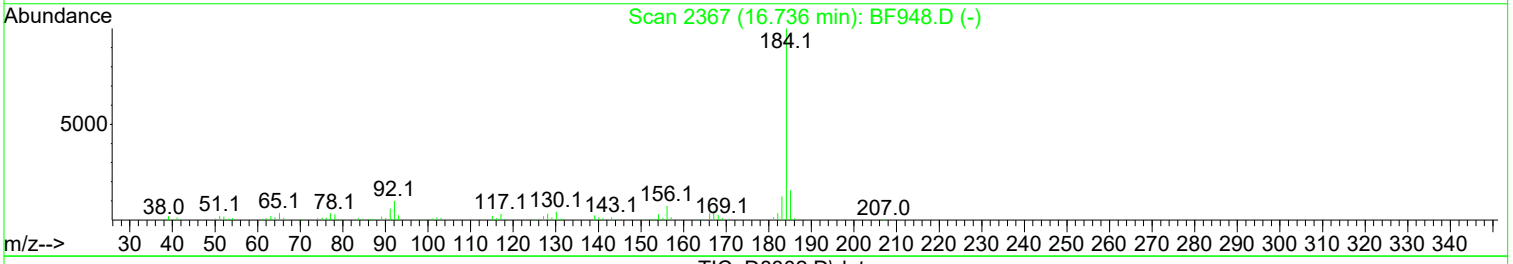
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8302.D
Acq On : 22 Aug 2024 10:33 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 11:29:28 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Sun Aug 11 15:49:48 2024
Response via : Initial Calibration







TIC: D8302.D\data.ms

(8) Benzidine (T)

8.158min (-0.048) 59.63 ppm

response 5079236

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	14.80	15.69
92.10	10.10	9.65
0.00	0.00	0.00

Manual Integration:

After

Other - tailing

08/22/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8302.D
Acq On : 22 Aug 2024 10:33 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 11:29:28 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Sun Aug 11 15:49:48 2024
Response via : Initial Calibration

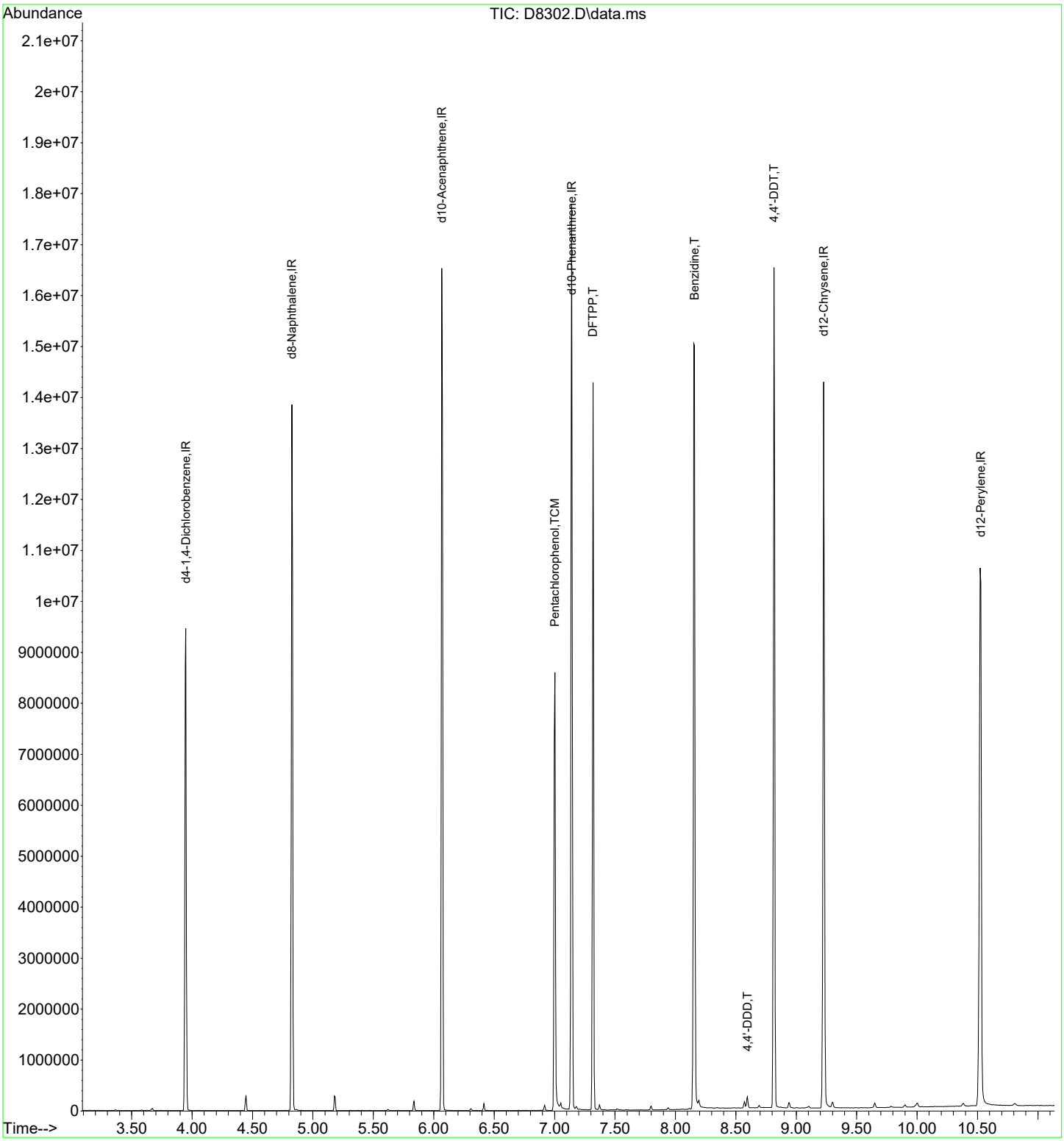
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	3.948	152	1264478	40.00	ppm		-0.05
2) d8-Naphthalene	4.826	136	4841155	40.00	ppm		-0.05
3) d10-Acenaphthene	6.066	164	2792745	40.00	ppm		-0.05
4) d10-Phenanthrene	7.142	188	4758985	40.00	ppm		-0.05
7) d12-Chrysene	9.228	240	3998049	40.00	ppm		-0.06
12) d12-Perylene	10.527	264	4306564	40.00	ppm		-0.07
Target Compounds							Qvalue
5) Pentachlorophenol	7.002	266	816267	70.385	ppm		99
6) DFTPP	7.318	198	981364	45.534	ppm	#	64
8) Benzidine	8.158	184	5079236	59.632	ppm		98
9) 4,4'-DDE	0.000		0	N.D.			
10) 4,4'-DDD	8.596	235	30023	1.043	ppm		89
11) 4,4'-DDT	8.816	235	2260532	78.558	ppm		93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8302.D
Acq On : 22 Aug 2024 10:33 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 22 11:29:28 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Sun Aug 11 15:49:48 2024
Response via : Initial Calibration

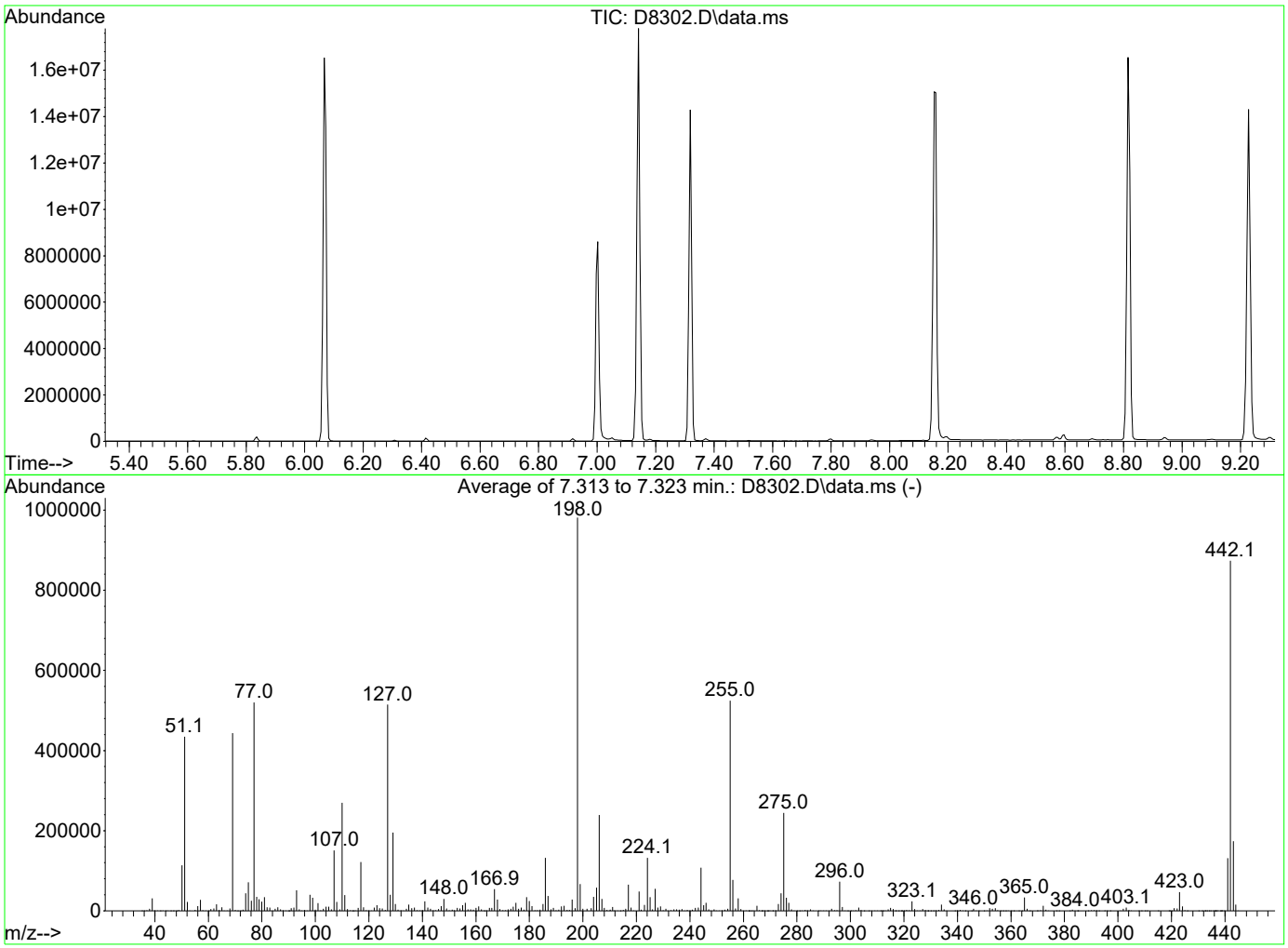


1st AM 08/23/24
2nd BA 08/26/24

Data Path : I:\ACQUDATA\5977-MS64\Data\082224\
Data File : D8302.D
Acq On : 22 Aug 2024 10:33 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Title : TUNE CHECK
Last Update : Sun Aug 11 15:49:48 2024



AutoFind: Scans 790, 791, 792; Background Corrected with Scan 785

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	1.4	6134	PASS
69	198	0.00	100	45.2	443383	PASS
70	69	0.00	2	0.6	2596	PASS
197	198	0.00	2	0.7	6511	PASS
198	198	100	100	100.0	981227	PASS
199	198	5	9	6.8	66944	PASS
365	198	1	200	3.4	33683	PASS
441	443	0.01	150	75.9	131757	PASS
442	442	100	100	100.0	873685	PASS
443	442	15	24	19.9	173499	PASS

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.621	152	302322	40.00	ppm	0.00
34) d8-Naphthalene	5.809	136	1201504	40.00	ppm	0.00
58) d10-Acenaphthene	7.515	164	647190	40.00	ppm	0.00
92) d10-Phenanthrene	8.980	188	1103431	40.00	ppm	0.00
118) d12-Chrysene	12.136	240	954197	40.00	ppm	0.00
136) d12-Perylene	14.944	264	932734	40.00	ppm	0.00
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	0.000	112	0d	0.00	ppm	
Spiked Amount 20.000	Range 10 - 70		Recovery =	0.00%#		
13) SURR2,PHENOL-D6	4.300	99	319	0.03	ppm	0.00
Spiked Amount 20.000	Range 10 - 107		Recovery =	0.15%#		
35) SURR4,NITROBENZENE-D5	0.000	82	0d	0.00	ppm	
Spiked Amount 10.000	Range 31 - 110		Recovery =	0.00%#		
64) SURR5,2-FLUOROBIPHENYL	0.000	172	0d	0.00	ppm	
Spiked Amount 10.000	Range 31 - 118		Recovery =	0.00%#		
89) SURR3,2,4,6-TRIBROMOPH...	0.000	330	0d	0.00	ppm	
Spiked Amount 20.000	Range 35 - 141		Recovery =	0.00%#		
125) SURR6,TERPHENYL-D14	10.633	244	542	0.03	ppm	0.00
Spiked Amount 10.000	Range 10 - 165		Recovery =	0.30%#		
Target Compounds						Qvalue
2) 1,4-Dioxane	1.679	88	183500	42.461	ppm	100
3) Pyridine	2.102	79	398684	36.225	ppm	98
4) N-Nitrosodimethylamine	2.059	74	296757	41.063	ppm	96
5) 2-Picoline	2.894	93	548026	46.155	ppm	100
6) N-Nitrosomethylamine	3.006	42	189935	47.511	ppm	97
7) Methyl Methansulfonate	3.295	80	258439	44.124	ppm	99
9) N-Nitrosodiethylamine	3.653	102	256017	49.612	ppm	94
10) Ethyl Mathanesulfonate	3.926	79	344629	41.845	ppm	96
11) Benzaldehyde	4.225	106	315924	41.174	ppm	99
12) Aniline	4.322	93	600221	38.078	ppm	81
14) Phenol	4.316	94	601206	41.278	ppm	85
15) bis(2-Clethyl)Ether	4.375	93	466948	42.017	ppm	100
16) Pentachloroethane	4.364	117	162429	43.466	ppm	99
17) 2-Chlorophenol	4.439	128	449585	42.994	ppm	98
18) 1,3-Diclbenzene	4.568	146	477728	42.927	ppm	100
19) 1,4-Dichlorobenzene	4.637	146	485453	42.092	ppm	98
20) 1,2-Diclbenzene	4.771	146	461255	42.543	ppm	100
21) Benzyl Alcohol	4.744	79	352022	44.998	ppm	98
22) 1-Methyl-2-pyrrolidinone	4.766	99	306847	44.817	ppm	95
23) 2,2'-oxybis(1-Chloropr...	4.862	45	576017	42.591	ppm	88
24) 2-Methylphenol	4.867	108	408269	42.711	ppm	98
25) 3+4-Methylphenol	5.006	108	483391	45.790	ppm	94
26) Acetophenone	4.985	105	619295	40.373	ppm	99
27) N-Nitroso-Di-n-propyla...	4.990	70	355806	41.218	ppm	97
28) N-Nitrosopyrrolidine	4.969	100	276497	48.940	ppm	91
29) N-Nitrosomorpholine	5.006	56	312820	44.451	ppm	97
30) o-Toluidine	5.022	106	770665	45.772	ppm	78
31) Hexachloroethane	5.086	117	194724	41.822	ppm	87
32) o,o,o-Triethylphosphor...	5.546	198	228531	45.582	ppm	94
33) Alpha-terpinol	5.835	121	179394	42.723	ppm	99
36) Nitrobenzene	5.145	77	474056	43.709	ppm	99
37) N-Nitrosopiperidine	5.284	42	327132	45.660	ppm	98
38) Isophorone	5.370	82	890005	42.487	ppm	98

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) 2-Nitrophenol	5.445	139	223716	44.025	ppm		97
40) Benzoic Acid	5.589	105	189872	46.005	ppm		99
41) 2,4-Dimethylphenol	5.493	107	369146	34.516	ppm		99
42) bis(-2-Chloroethoxy)Me...	5.573	93	538485	43.320	ppm		99
43) 2,4-Dichlorophenol	5.686	162	342647	44.027	ppm		99
44) a,a-Dimethylphenethyla...	6.162	58	1331118m	55.028	ppm		
45) 1,2,4-Trichlorobenzene	5.750	180	361318	41.738	ppm		99
46) Naphthalene	5.830	128	1261459	41.599	ppm		99
47) 4-Chloroaniline	5.883	127	507406	42.533	ppm		99
48) 2,6-Dichlorophenol	5.889	162	332125	43.820	ppm		94
49) Hexachlorobutadiene	5.942	225	194209	39.416	ppm		99
50) Hexachloropropene	5.910	213	223481	45.045	ppm		100
51) 4-Chloro-3-methylphenol	6.365	107	379159	43.312	ppm	#	56
52) N-N-di-n-butylamine	6.204	84	374302	40.086	ppm		90
53) Caprolactam	6.231	113	150635	42.991	ppm		98
54) p-Phenylenediamine	6.242	80	120696	42.538	ppm		99
55) Safrole	6.413	162	324023	45.003	ppm		93
56) 2-Methylnaphthalene	6.493	142	859589	42.715	ppm		99
57) 1-Methylnaphthalene	6.589	142	784802	41.692	ppm		99
59) Hexachlorocyclopentadiene	6.648	237	141136	39.661	ppm		98
60) 1,2,4,5-Tetrachloroben...	6.659	216	354529	43.557	ppm		99
61) 1,2,3,4-Tetrachloroben...	6.937	216	329109	40.631	ppm		99
62) 2,4,6-Trichlorophenol	6.777	196	230186	47.881	ppm		100
63) 2,4,5-Trichlorophenol	6.825	196	251544	49.633	ppm		99
65) Isosafrole	6.916	104	157171	43.313	ppm		97
66) 1,1'-Biphenyl	6.953	154	977989	40.591	ppm		99
67) 2-Chloronaphthalene	6.975	162	848648	48.164	ppm		98
68) 2-Nitroaniline	7.076	65	303318	56.822	ppm		97
69) 1,4-Naphthoquinone	7.146	158	276116	46.396	ppm		87
70) m-Dinitrobenzene	7.290	168	135749	44.569	ppm	#	62
71) Acenaphthylene	7.376	152	1229584	47.090	ppm		100
72) Dimethyl phthalate	7.258	163	864487	42.677	ppm		100
73) 2,6-Dinitrotoluene	7.317	165	204414	50.479	ppm		87
74) Acenaphthene	7.547	153	781935	42.393	ppm		99
75) 3-Nitroaniline	7.483	138	219741	45.531	ppm		99
76) 2,4-Dinitrophenol	7.590	184	71620	47.911	ppm		98
77) Dibenzofuran	7.718	168	1078473	43.063	ppm		97
78) 2,4-Dinitrotoluene	7.713	165	268112	45.813	ppm		98
79) 4-Nitrophenol	7.681	65	190136	46.224	ppm		93
80) Pentachlorobenzene	7.675	250	300109	40.639	ppm		99
81) 1-Napthylamine	7.798	143	840336	61.062	ppm		98
82) 2-Napthylamine	7.878	143	677299	56.453	ppm		100
83) 2,3,4,6-Tetrachlorophenol	7.846	232	178702	46.889	ppm		95
84) Fluorene	8.055	166	884957	42.410	ppm		99
85) 4-Chlorophenyl-phenyle...	8.055	204	411488	42.377	ppm		96
86) Diethylphthalate	7.948	149	865257	42.258	ppm		99
87) 4-Nitroaniline	8.087	138	226295	44.051	ppm		93
88) 5-Nitro-o-toluidine	8.076	152	294726	54.187	ppm		96
90) Sulfotepp	8.338	322	164060	49.787	ppm		88
91) Octachlorocyclopentene	8.301	307	109396	50.252	ppm		99
93) Thionazin	8.028	107	171949	46.942	ppm		94
94) 4,6-Dinitro-2-methylph...	8.114	198	120336	46.440	ppm		96
95) Diphenylamine	8.178	169	740421	45.555	ppm		99
96) 1,2 Diphenylhydrazine	8.210	77	1000501	42.200	ppm		99
97) N-Nitrosodiphenylamine	8.178	169	740421	45.547	ppm		99
98) 1,3,5-Trinirobenzene	8.456	213	86394	47.110	ppm	#	73

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

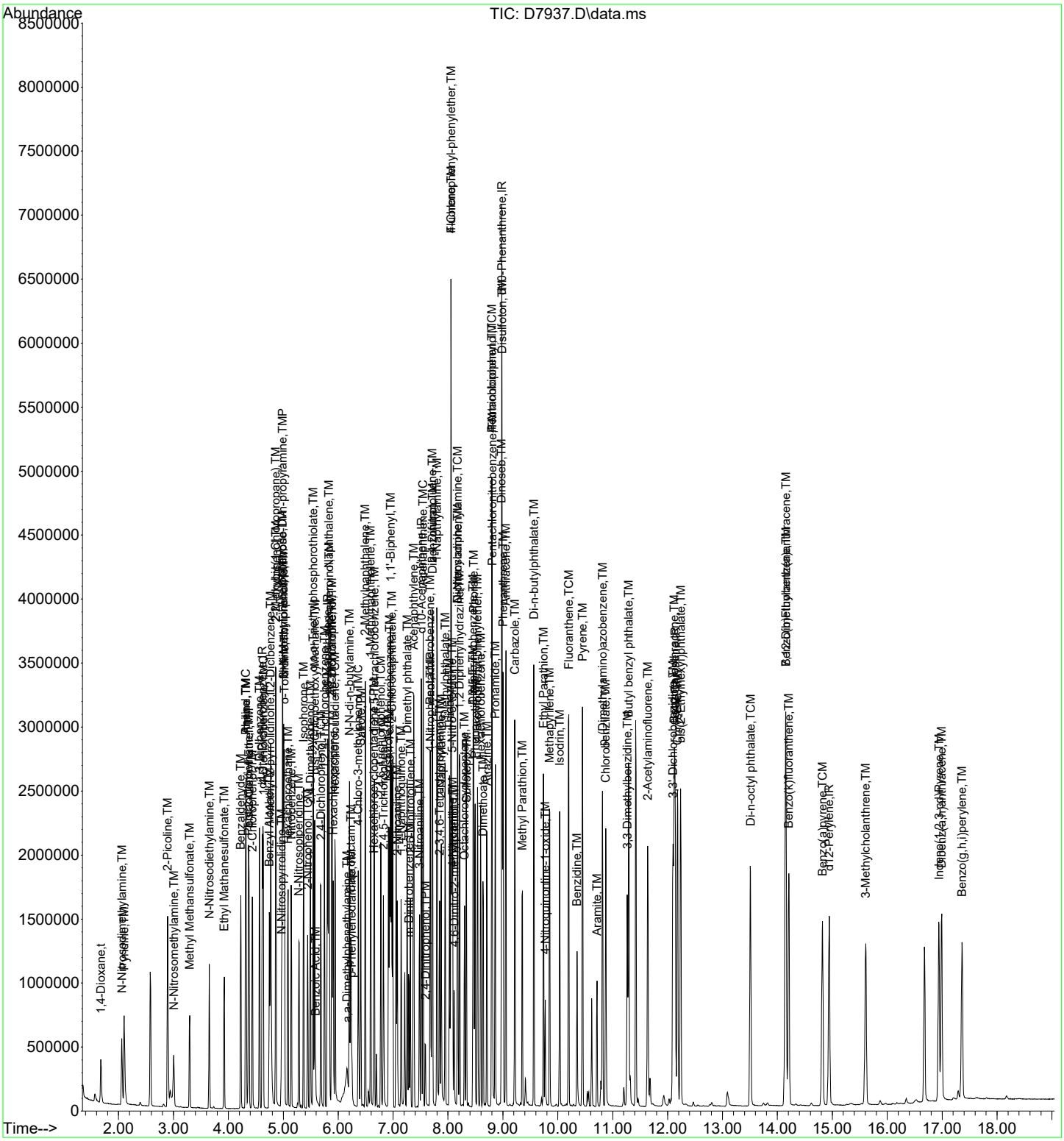
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
99) Diallate	8.456	86	300292	36.002	ppm	92
100) Phorate	8.467	121	210337	49.183	ppm	92
101) Phenacetin	8.494	108	462366	45.829	ppm	96
102) 4-Bromophenyl-phenylether	8.536	248	232191	42.757	ppm	96
103) Hexachlorobenzene	8.595	284	259458m	41.838	ppm	
104) Dimethoate	8.638	87	339293	50.438	ppm	99
105) Atrazine	8.707	215	106814	41.439	ppm	97
106) Pentachlorophenol	8.798	266	125786	40.582	ppm	97
107) 4-Aminobiphenyl	8.798	169	914916	54.078	ppm	99
108) Pentachloronitrobenzene	8.804	237	102131	45.972	ppm	96
109) Pronamide	8.863	173	386728	41.286	ppm	98
110) Dinoseb	8.975	211	167196	44.686	ppm	98
111) Disulfoton	8.986	88	606039	41.275	ppm	97
112) Phenanthrene	9.002	178	1175451	40.956	ppm	99
113) Anthracene	9.055	178	1205652	43.113	ppm	100
114) Carbazole	9.216	167	1163969	46.086	ppm	99
115) Di-n-butylphthalate	9.563	149	1507476	44.388	ppm	99
116) 4-Nitroquinonline-1-oxide	9.772	190	78055	41.554	ppm	92
117) Fluoranthene	10.200	202	1247724	43.125	ppm	98
119) Methyl Parathion	9.349	109	270264	55.663	ppm	95
120) Ethyl Parathion	9.740	97	217618	47.915	ppm	93
121) Methapyrilene	9.847	58	658136	52.705	ppm	99
122) Isodrin	10.034	193	134782	41.123	ppm	99
123) Benzidine	10.350	184	497437	39.046	ppm	100
124) Pyrene	10.451	202	1310453	41.238	ppm	100
126) Aramite	10.713	185	154346m	87.264	ppm	
127) p-(Dimethylamino)azobe...	10.815	120	459227	48.823	ppm	96
128) Chlorobenzilate	10.874	139	469208	43.409	ppm	97
129) Butyl benzyl phthalate	11.291	149	684959	43.466	ppm	99
130) 3,3-Dimethylbenzidine	11.264	212	673732	47.129	ppm	98
131) 2-Acetylaminofluorene	11.639	181	582454	49.401	ppm	99
132) 3,3'-Dichlorobenzidine	12.099	252	494339	49.936	ppm	99
133) Benzo(a)anthracene	12.120	228	1222853	42.448	ppm	99
134) Chrysene	12.179	228	1135373	42.580	ppm	99
135) bis(2-Ethylhexyl)phtha...	12.238	149	918102	41.984	ppm	99
137) Di-n-octyl phthalate	13.511	149	1491372	45.042	ppm	98
138) 7,12-Dimethylbenz(a)an...	14.152	256	560886	42.737	ppm	99
139) Benzo(b)Fluoranthene	14.152	252	1209203	46.010	ppm	98
140) Benzo(k)fluoranthene	14.206	252	1116636	44.828	ppm	99
141) Benzo(a)pyrene	14.821	252	982384	45.438	ppm	100
142) 3-Methylcholanthrene	15.607	268	556148	43.409	ppm	99
143) Indeno(1,2,3-cd)Pyrene	16.944	276	886828	48.193	ppm	97
144) Dibenz(a,h)anthracene	16.993	278	861965	46.281	ppm	99
145) Benzo(g,h,i)perylene	17.362	276	819125	40.988	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	40.000	40.000	0.0	88	0.00
2	t	1,4-Dioxane	40.000	42.461	-6.2	102	0.00
3	TM	Pyridine	40.000	36.225	9.4	83	0.00
4	TM	N-Nitrosodimethylamine	40.000	41.063	-2.7	96	0.00
5	TM	2-Picoline	40.000	46.155	-15.4	106	0.00
6	TM	N-Nitrosomethylamine	40.000	47.511	-18.8	111	0.00
7	TM	Methyl Methansulfonate	40.000	44.124	-10.3	104	0.00
8	S	SURR1,2-FLUOROPHENOL	40.000	0.000	100.0#	0	-3.46#
9	TM	N-Nitrosodiethylamine	40.000	49.612	-24.0#	114	0.00
10	TM	Ethyl Mathanesulfonate	40.000	41.845	-4.6	99	0.00
11	TM	Benzaldehyde	40.000	41.174	-2.9	98	0.00
12	TM	Aniline	40.000	38.078	4.8	86	0.00
13	S	SURR2,PHENOL-D6	40.000	0.026	99.9#	0	0.00
14	TMC	Phenol	40.000	41.278	-3.2	94	0.00
15	TM	bis(2-Clethyl)Ether	40.000	42.017	-5.0	100	0.00
16	TM	Pentachloroethane	40.000	43.466	-8.7	102	0.00
17	TM	2-Chlorophenol	40.000	42.994	-7.5	97	0.00
18	TM	1,3-Diclbenzene	40.000	42.927	-7.3	100	0.00
19	TMC	1,4-Dichlorobenzene	40.000	42.092	-5.2	99	0.00
20	TM	1,2-Diclbenzene	40.000	42.543	-6.4	99	0.00
21	TM	Benzyl Alcohol	40.000	44.998	-12.5	100	0.00
22	T	1-Methyl-2-pyrrolidinone	40.000	44.817	-12.0	101	0.00
23	TM	2,2'-oxybis(1-Chloropropane	40.000	42.591	-6.5	101	0.00
24	TM	2-Methylphenol	40.000	42.711	-6.8	97	0.00
25	TM	3+4-Methylphenol	40.000	45.790	-14.5	101	0.00
26	TM	Acetophenone	40.000	40.373	-0.9	94	0.00
27	TMP	N-Nitroso-Di-n-propylamine	40.000	41.218	-3.0	94	0.00
28	TM	N-Nitrosopyrrolidine	40.000	48.940	-22.3#	110	0.00
29	TM	N-Nitrosomorpholine	40.000	44.451	-11.1	103	0.00
30	TM	o-Toluidine	40.000	45.772	-14.4	99	0.00
31	TM	Hexachloroethane	40.000	41.822	-4.6	97	0.00
32	TM	o,o,o-Triethylphosphorothio	40.000	45.582	-14.0	106	0.00
33	TM	Alpha-terpinol	40.000	42.723	-6.8	96	0.00
34	IR	d8-Naphthalene	40.000	40.000	0.0	88	0.00
35	S	SURR4,NITROBENZENE-D5	40.000	0.000	100.0#	0	-5.13#
36	TM	Nitrobenzene	40.000	43.709	-9.3	99	0.00
37	TM	N-Nitrosopiperidine	40.000	45.660	-14.1	106	0.00
38	TM	Isophorone	40.000	42.487	-6.2	98	0.00
39	TCM	2-Nitrophenol	40.000	44.025	-10.1	103	0.00
40	TM	Benzoic Acid	40.000	46.005	-15.0	126	0.01
41	TM	2,4-Dimethylphenol	40.000	34.516	13.7	77	0.00
42	TM	bis(-2-Chloroethoxy)Methane	40.000	43.320	-8.3	101	0.00
43	TCM	2,4-Dichlorophenol	40.000	44.027	-10.1	95	0.00
44	TM	a,a-Dimethylphenethylamine	40.000	55.028	-37.6#	123	0.17
45	TM	1,2,4-Trichlorobenzene	40.000	41.738	-4.3	99	0.00
46	TM	Naphthalene	40.000	41.599	-4.0	98	0.00
47	TM	4-Chloroaniline	40.000	42.533	-6.3	92	0.00
48	TM	2,6-Dichlorophenol	40.000	43.820	-9.6	95	0.00
49	TCM	Hexachlorobutadiene	40.000	39.416	1.5	93	0.00
50	TM	Hexachloropropene	40.000	45.045	-12.6	97	0.00
51	TMC	4-Chloro-3-methylphenol	40.000	43.312	-8.3	92	0.00

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
52	TM	N-N-di-n-butylamine	40.000	40.086	-0.2	86	0.00
53	TM	Caprolactam	40.000	42.991	-7.5	94	0.01
54	TM	p-Phenylenediamine	40.000	42.538	-6.3	84	0.00
55	TM	Safrole	40.000	45.003	-12.5	102	0.00
56	TM	2-Methylnaphthalene	40.000	42.715	-6.8	98	0.00
57	TM	1-Methylnaphthalene	40.000	41.692	-4.2	96	0.00
58	IR	d10-Acenaphthene	40.000	40.000	0.0	86	0.00
59	TPM	Hexachlorocyclopentadiene	40.000	39.661	0.8	83	0.00
60	TM	1,2,4,5-Tetrachlorobenzene	40.000	43.557	-8.9	100	0.00
61	TM	1,2,3,4-Tetrachlorobenzene	40.000	40.631	-1.6	94	0.00
62	TCM	2,4,6-Trichlorophenol	40.000	47.881	-19.7	97	0.00
63	TM	2,4,5-Trichlorophenol	40.000	49.633	-24.1#	100	0.00
64	S	SURR5,2-FLUOROBIPHENYL	40.000	0.000	100.0#	0	-6.86#
65	TM	Isosafrole	40.000	43.313	-8.3	98	0.00
66	TM	1,1'-Biphenyl	40.000	40.591	-1.5	92	0.00
67	TM	2-Chloronaphthalene	40.000	48.164	-20.4#	110	0.00
68	TM	2-Nitroaniline	40.000	56.822	-42.1#	117	0.00
69	TM	1,4-Naphthoquinone	40.000	46.396	-16.0	95	0.00
70	TM	m-Dinitrobenzene	40.000	44.569	-11.4	100	0.00
71	TM	Acenaphthylene	40.000	47.090	-17.7	105	0.00
72	TM	Dimethyl phthalate	40.000	42.677	-6.7	96	0.00
73	TM	2,6-Dinitrotoluene	40.000	50.479	-26.2#	100	0.00
74	TMC	Acenaphthene	40.000	42.393	-6.0	96	0.00
75	TM	3-Nitroaniline	40.000	45.531	-13.8	93	0.00
76	TPM	2,4-Dinitrophenol	40.000	47.911	-19.8	120	0.00
77	TM	Dibenzofuran	40.000	43.063	-7.7	97	0.00
78	TM	2,4-Dinitrotoluene	40.000	45.813	-14.5	102	0.00
79	TMP	4-Nitrophenol	40.000	46.224	-15.6	95	0.00
80	TM	Pentachlorobenzene	40.000	40.639	-1.6	95	0.00
81	TM	1-Napthylamine	40.000	61.062	-52.7#	134	-0.03
82	TM	2-Napthylamine	40.000	56.453	-41.1#	124	0.00
83	TM	2,3,4,6-Tetrachlorophenol	40.000	46.889	-17.2	107	0.00
84	TM	Fluorene	40.000	42.410	-6.0	94	0.00
85	TM	4-Chlorophenyl-phenylether	40.000	42.377	-5.9	95	0.00
86	TM	Diethylphthalate	40.000	42.258	-5.6	96	0.00
87	TM	4-Nitroaniline	40.000	44.051	-10.1	90	0.00
88	TM	5-Nitro-o-toluidine	40.000	54.187	-35.5#	108	0.00
89	S	SURR3,2,4,6-TRIBROMOPHENOL	40.000	0.000	100.0#	0	-8.29#
90	TM	Sulfotepp	40.000	49.787	-24.5#	108	0.00
91	TM	Octachlorocyclopentene	40.000	50.252	-25.6#	113	0.00
92	IR	d10-Phenanthrene	40.000	40.000	0.0	86	0.00
93	TM	Thionazin	40.000	46.942	-17.4	106	0.00
94	TM	4,6-Dinitro-2-methylphenol	40.000	46.440	-16.1	108	0.00
95	TM	Diphenylamine	80.000	45.555	43.1#	51	0.00
96	TM	1,2 Diphenylhydrazine	40.000	42.200	-5.5	93	0.00
97	TCM	N-Nitrosodiphenylamine	80.000	45.547	43.1#	51	0.00
98	TM	1,3,5-Trinirobenzene	40.000	47.110	-17.8	106	0.00
99	TM	Diallate	40.000	36.002	10.0	81	0.00
100	TM	Phorate	40.000	49.183	-23.0#	106	0.00
101	TM	Phenacetin	40.000	45.829	-14.6	90	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

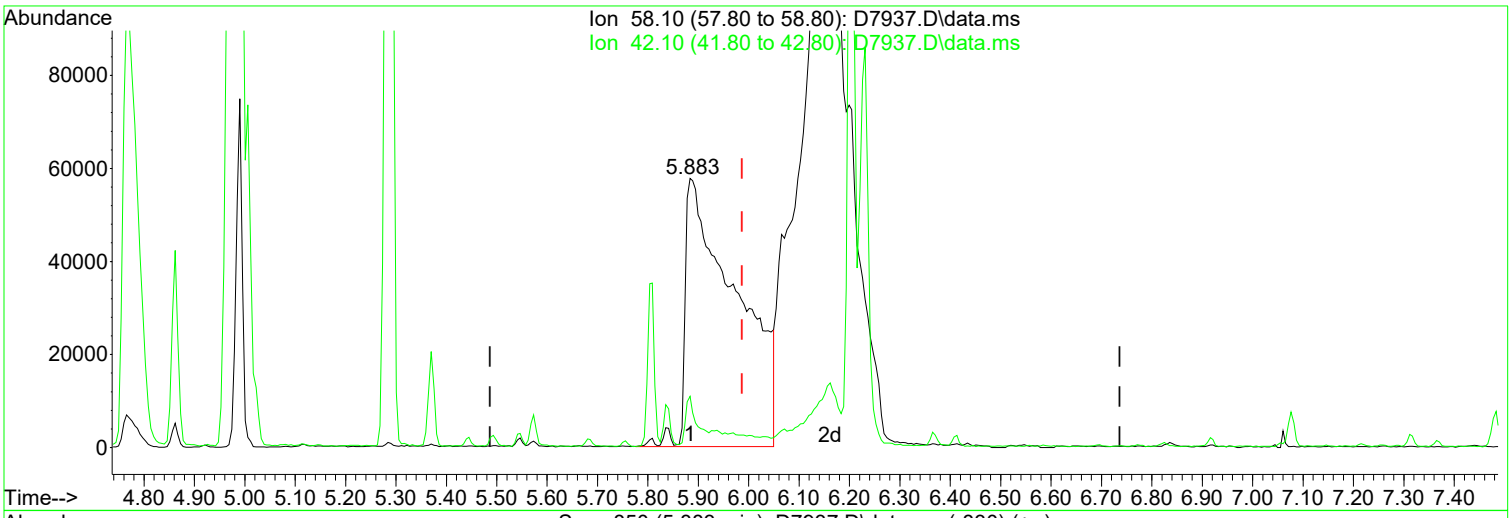
		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
102	TM	4-Bromophenyl-phenylether	40.000	42.757	-6.9	96	0.00
103	TM	Hexachlorobenzene	40.000	41.838	-4.6	97	0.00
104	TM	Dimethoate	40.000	50.438	-26.1#	106	0.00
105	TM	Atrazine	40.000	41.439	-3.6	92	0.00
106	TCM	Pentachlorophenol	40.000	40.582	-1.5	92	0.00
107	TM	4-Aminobiphenyl	40.000	54.078	-35.2#	104	0.00
108	TM	Pentachloronitrobenzene	40.000	45.972	-14.9	96	0.00
109	TM	Pronamide	40.000	41.286	-3.2	88	0.00
110	TM	Dinoseb	40.000	44.686	-11.7	102	0.00
111	TM	Disulfoton	40.000	41.275	-3.2	95	0.00
112	TM	Phenanthrene	40.000	40.956	-2.4	94	0.00
113	TM	Anthracene	40.000	43.113	-7.8	97	0.00
114	TM	Carbazole	40.000	46.086	-15.2	94	0.00
115	TM	Di-n-butylphthalate	40.000	44.388	-11.0	95	0.00
116	TM	4-Nitroquinonline-1-oxide	40.000	41.554	-3.9	88	0.00
117	TCM	Fluoranthene	40.000	43.125	-7.8	93	0.00
118	IR	d12-Chrysene	40.000	40.000	0.0	84	0.00
119	TM	Methyl Parathion	40.000	55.663	-39.2#	110	0.00
120	TM	Ethyl Parathion	40.000	47.915	-19.8	106	0.00
121	TM	Methapyrilene	40.000	52.705	-31.8#	119	0.00
122	TM	Isodrin	40.000	41.123	-2.8	100	0.00
123	TM	Benzidine	40.000	39.046	2.4	86	0.00
124	TM	Pyrene	40.000	41.238	-3.1	94	0.00
125	S	SURR6,TERPHENYL-D14	40.000	0.026	99.9#	0	0.00
126	TM	Aramite	40.000	87.264	-118.2#	183	0.00
127	TM	p-(Dimethylamino)azobenzene	40.000	48.823	-22.1#	101	0.00
128	TM	Chlorobenzilate	40.000	43.409	-8.5	92	0.00
129	TM	Butyl benzyl phthalate	40.000	43.466	-8.7	94	0.00
130	TM	3,3-Dimethylbenzidine	40.000	47.129	-17.8	94	0.00
131	TM	2-Acetylaminofluorene	40.000	49.401	-23.5#	109	0.00
132	TM	3,3'-Dichlorobenzidine	40.000	49.936	-24.8#	107	0.00
133	TM	Benzo(a)anthracene	40.000	42.448	-6.1	95	0.00
134	TM	Chrysene	40.000	42.580	-6.4	94	0.00
135	TM	bis(2-Ethylhexyl)phthalate	40.000	41.984	-5.0	93	0.00
136	IR	d12-Perylene	40.000	40.000	0.0	83	0.00
137	TCM	Di-n-octyl phthalate	40.000	45.042	-12.6	93	0.00
138	TM	7,12-Dimethylbenz(a)anthrac	40.000	42.737	-6.8	91	0.00
139	TM	Benzo(b)Fluoranthene	40.000	46.010	-15.0	97	0.00
140	TM	Benzo(k)fluoranthene	40.000	44.828	-12.1	93	0.00
141	TCM	Benzo(a)pyrene	40.000	45.438	-13.6	94	0.00
142	TM	3-Methylcholanthrene	40.000	43.409	-8.5	88	0.00
143	TM	Indeno(1,2,3-cd)Pyrene	40.000	48.193	-20.5#	94	0.00
144	TM	Dibenz(a,h)anthracene	40.000	46.281	-15.7	88	0.00
145	TM	Benzo(g,h,i)perylene	40.000	40.988	-2.5	85	0.00

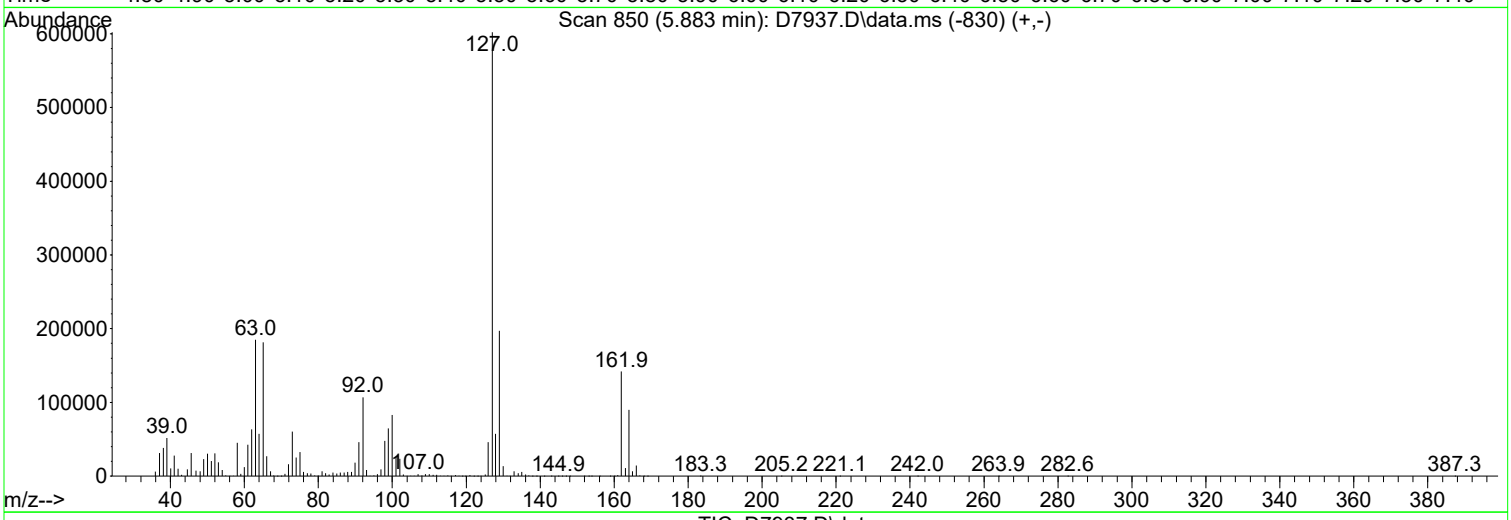
(#) = Out of Range SPCC's out = 0 CCC's out = 1

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration





TIC: D7937.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

5.883min (-0.103) 16.73 ppm

response 404732

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.40	21.82
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

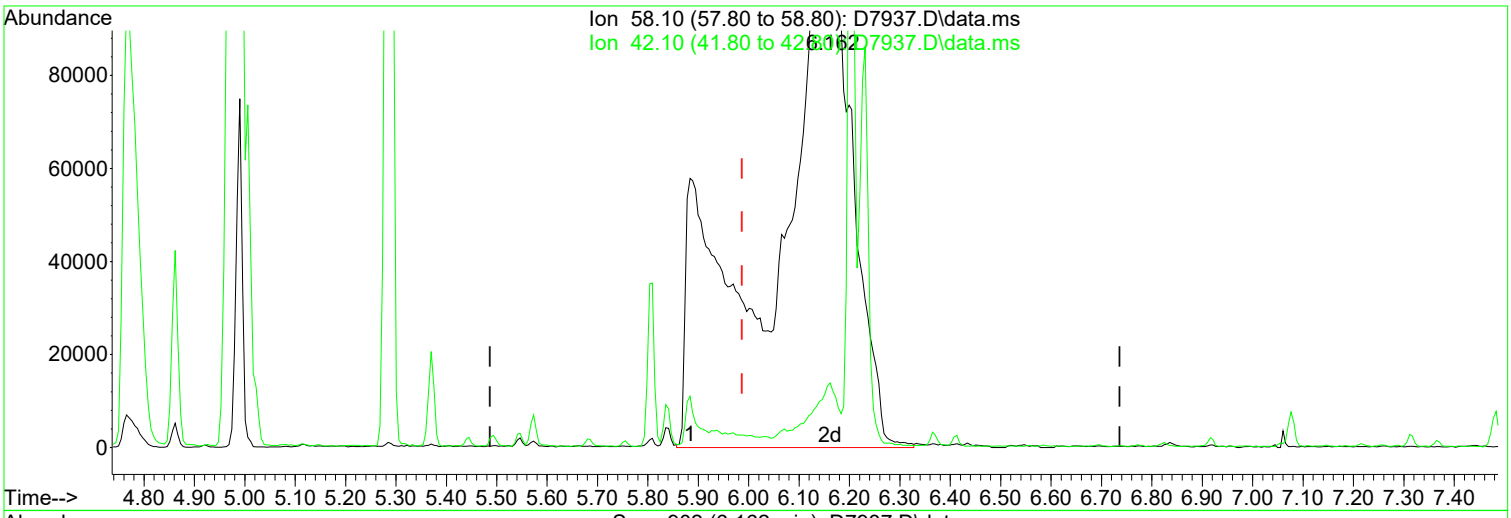
Before

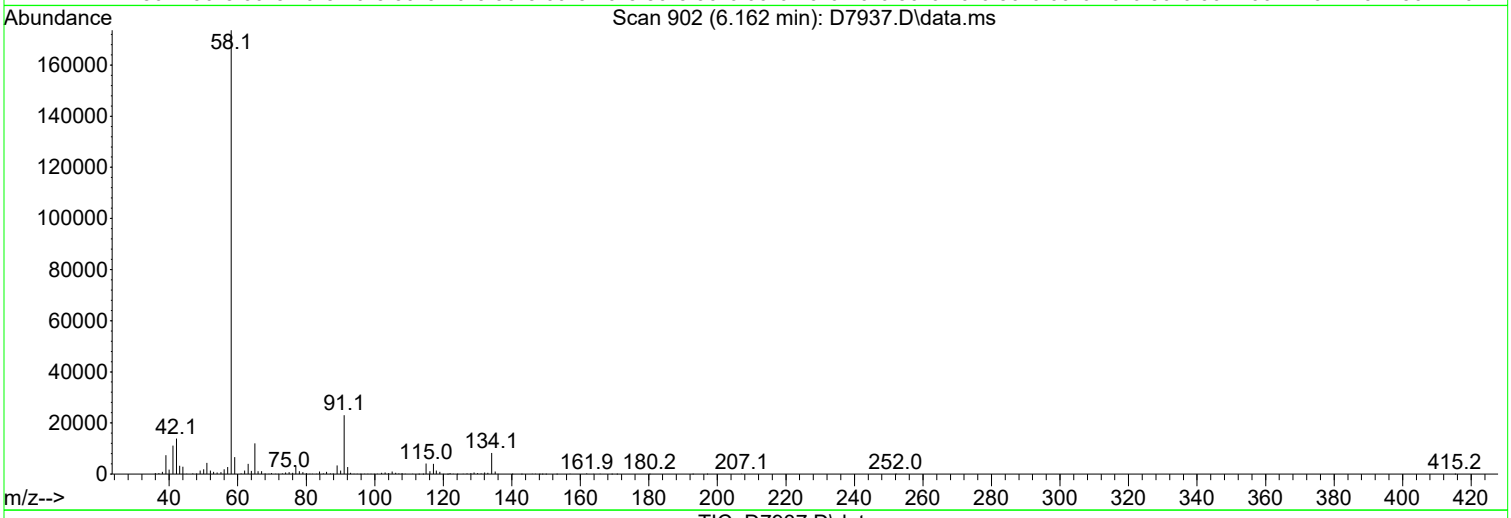
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration





TIC: D7937.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

6.162min (+ 0.175) 55.03 ppm m

response 1331118

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.40	8.00
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
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ALS Vial : 13 Sample Multiplier: 1

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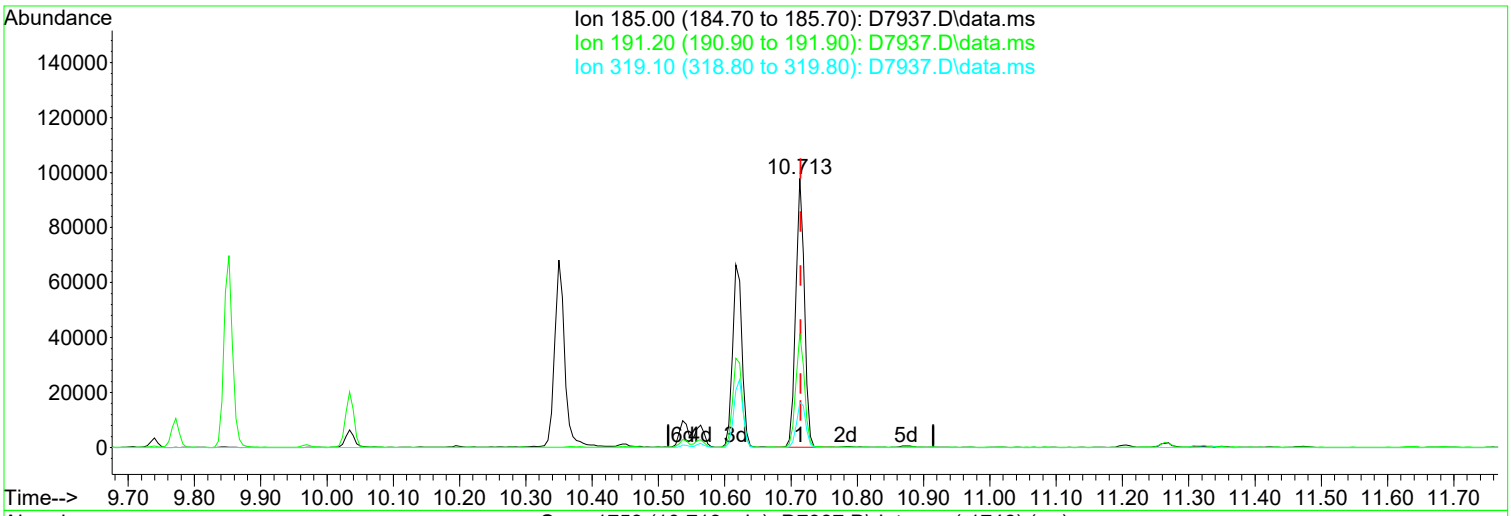

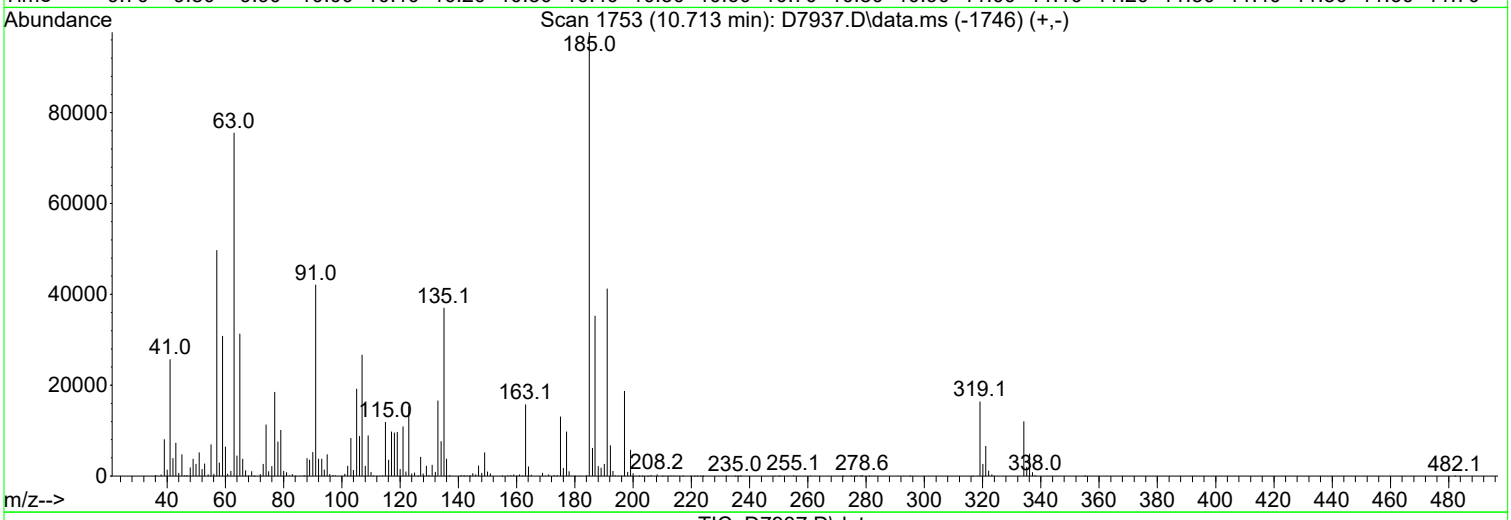

TIC: D7937.D\data.ms

(126) Aramite (TM)

10.713min (-0.002) 50.33 ppm

response 89029

Ion	Exp%	Act%
185.00	100.00	100.00
191.20	40.80	42.25
319.10	19.60	16.80
0.00	0.00	0.00

Manual Integration:

Before

08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
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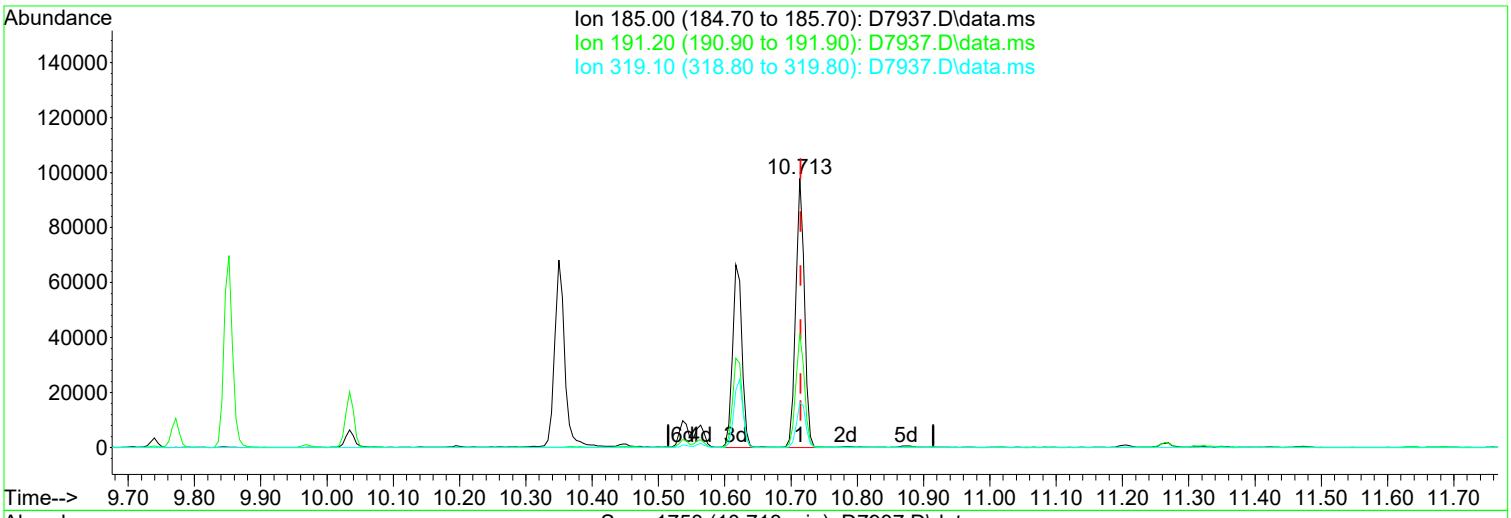
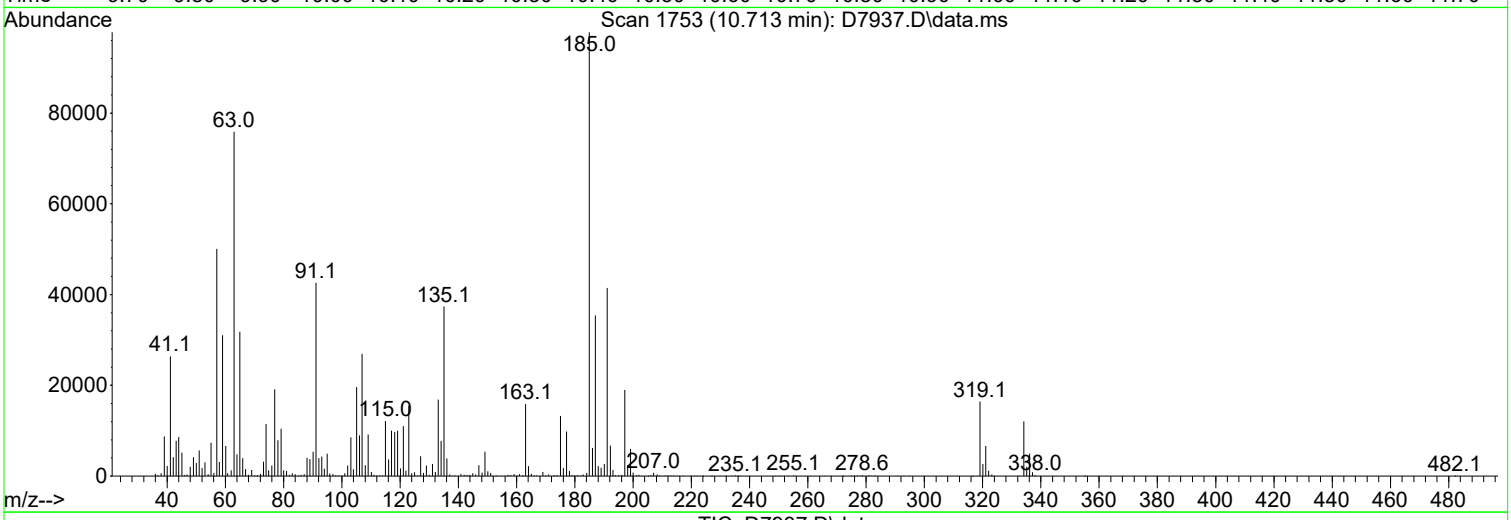
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration





TIC: D7937.D\data.ms

(126) Aramite (TM)

10.713min (-0.002) 87.26 ppm m

response 154346

Ion	Exp%	Act%
185.00	100.00	100.00
191.20	40.80	42.38
319.10	19.60	16.78
0.00	0.00	0.00

Manual Integration:

After

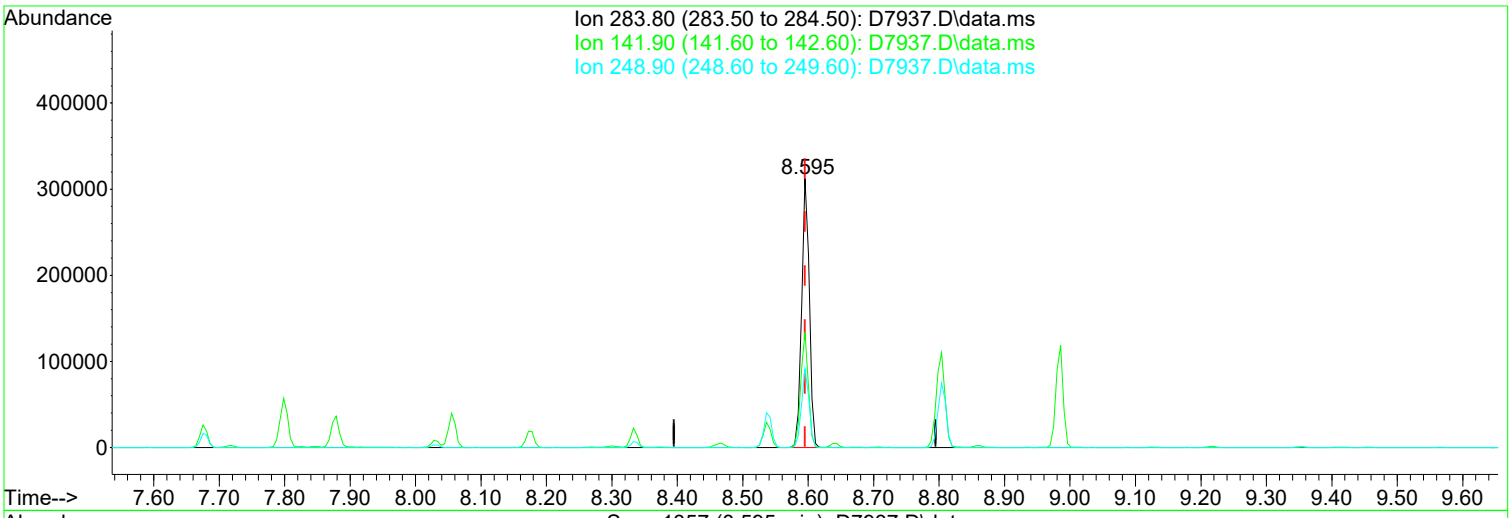
Poor integration.

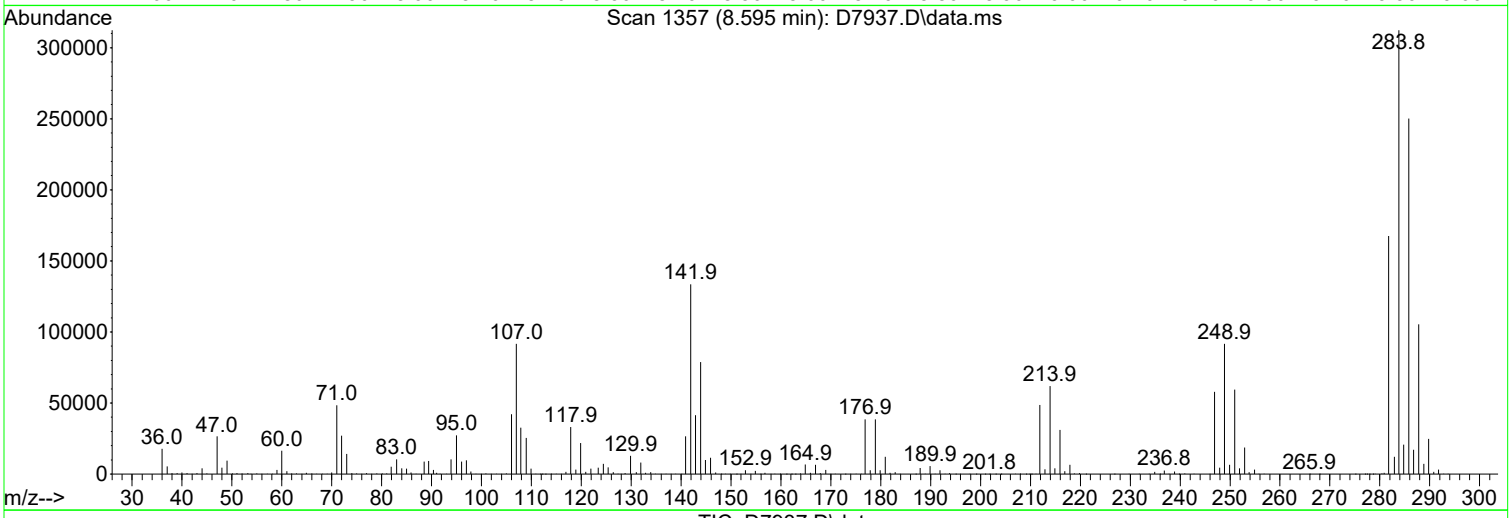
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7937.D
Acq On : 05 Aug 2024 01:19 pm
Operator : EDeGray
Sample : ICV
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 17:41:20 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 17:39:38 2024
Response via : Initial Calibration





TIC: D7937.D\data.ms

(103) Hexachlorobenzene (TM)

8.595min (+ 0.000) 41.84 ppm m

response 259458

Ion	Exp%	Act%
283.80	100.00	100.00
141.90	38.30	42.77
248.90	28.40	29.32
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7936.D
Acq On : 05 Aug 2024 12:55 pm
Operator : EDeGray
Sample : 100 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 06 09:37:41 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 09:35:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.621	152	358230	40.00	ppm		0.00
34) d8-Naphthalene	5.809	136	1411572	40.00	ppm		0.00
58) d10-Acenaphthene	7.520	164	774629	40.00	ppm		0.00
92) d10-Phenanthrene	8.986	188	1326048	40.00	ppm		0.00
118) d12-Chrysene	12.147	240	1159774	40.00	ppm		0.01
136) d12-Perylene	14.955	264	1150159	40.00	ppm		0.01
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.471	112	1108197	97.35	ppm		0.00
Spiked Amount 20.000	Range 10 - 70		Recovery = 486.75%#				
13) SURR2,PHENOL-D6	4.311	99	1443836	97.42	ppm		0.01
Spiked Amount 20.000	Range 10 - 107		Recovery = 487.10%#				
35) SURR4,NITROBENZENE-D5	5.135	82	1213858	96.87	ppm		0.01
Spiked Amount 10.000	Range 31 - 110		Recovery = 968.70%#				
64) SURR5,2-FLUOROBIPHENYL	6.862	172	2188385	89.46	ppm		0.01
Spiked Amount 10.000	Range 31 - 118		Recovery = 894.60%#				
89) SURR3,2,4,6-TRIBROMOPH...	8.301	330	327148	113.42	ppm		0.00
Spiked Amount 20.000	Range 35 - 141		Recovery = 567.10%#				
125) SURR6,TERPHENYL-D14	10.644	244	2301264	91.97	ppm		0.01
Spiked Amount 10.000	Range 10 - 165		Recovery = 919.70%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.679	88	455722	88.993	ppm		99
3) Pyridine	2.097	79	1228474	92.558	ppm		99
4) N-Nitrosodimethylamine	2.064	74	804242	92.952	ppm		98
5) 2-Picoline	2.894	93	1329681	94.509	ppm		99
6) N-Nitrosomethylamine	3.006	42	461658	98.231	ppm		99
7) Methyl Methansulfonate	3.300	80	632641	91.155	ppm		99
9) N-Nitrosodiethylamine	3.658	102	576648	94.306	ppm		98
10) Ethyl Mathanesulfonate	3.931	79	901384	92.366	ppm		98
11) Benzaldehyde	4.231	106	579940	67.218	ppm		97
12) Aniline	4.327	93	1755392	93.983	ppm		80
14) Phenol	4.322	94	1629014	94.391	ppm		72
15) bis(2-Clethyl)Ether	4.380	93	1170910	88.918	ppm		99
16) Pentachloroethane	4.370	117	405534	91.584	ppm		99
17) 2-Chlorophenol	4.439	128	1194277	96.321	ppm		99
18) 1,3-Diclbenzene	4.568	146	1181116	89.566	ppm		99
19) 1,4-Dichlorobenzene	4.637	146	1214801	88.892	ppm		99
20) 1,2-Diclbenzene	4.776	146	1139066	88.664	ppm		99
21) Benzyl Alcohol	4.755	79	886684	95.654	ppm		99
22) 1-Methyl-2-pyrrolidinone	4.824	99	759563	93.625	ppm		97
23) 2,2'-oxybis(1-Chloropr...	4.867	45	1381616	86.215	ppm		95
24) 2-Methylphenol	4.894	108	1062417	93.799	ppm		95
25) 3+4-Methylphenol	5.022	108	1186214	94.829	ppm	#	26
26) Acetophenone	4.990	105	1633685	89.882	ppm		100
27) N-Nitroso-Di-n-propyla...	5.001	70	933174	91.232	ppm		92
28) N-Nitrosopyrrolidine	4.990	100	647014	96.649	ppm		66
29) N-Nitrosomorpholine	5.022	56	743051	89.107	ppm		96
30) o-Toluidine	5.028	106	1731115	86.770	ppm		85
31) Hexachloroethane	5.086	117	497772	90.225	ppm		90
32) o,o,o-Triethylphosphor...	5.552	198	551291	92.798	ppm		94
33) Alpha-terpinol	5.846	121	468275	94.116	ppm		96
36) Nitrobenzene	5.156	77	1196343	93.890	ppm		96
37) N-Nitrosopiperidine	5.295	42	756525	89.879	ppm		98
38) Isophorone	5.381	82	2246252	91.273	ppm		96

Do Not Use

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7936.D
Acq On : 05 Aug 2024 12:55 pm
Operator : EDeGray
Sample : 100 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 06 09:37:41 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 09:35:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) 2-Nitrophenol	5.450	139	613180	113.930	ppm		97
40) Benzoic Acid	5.637	105	659315	85.194	ppm		98
41) 2,4-Dimethylphenol	5.504	107	1210878	95.091	ppm		98
42) bis(-2-Chloroethoxy)Me...	5.579	93	1309555	89.672	ppm		99
43) 2,4-Dichlorophenol	5.691	162	928765	101.579	ppm		99
44) a,a-Dimethylphenethyla...	6.365	58	2636269m	90.001	ppm		
45) 1,2,4-Trichlorobenzene	5.755	180	923366	90.790	ppm		99
46) Naphthalene	5.830	128	3065269	86.039	ppm		98
47) 4-Chloroaniline	5.889	127	1281114	91.407	ppm		98
48) 2,6-Dichlorophenol	5.899	162	880310	98.861	ppm		96
49) Hexachlorobutadiene	5.948	225	521252	90.047	ppm		98
50) Hexachloropropene	5.910	213	587921	100.866	ppm		99
51) 4-Chloro-3-methylphenol	6.375	107	1057964	102.857	ppm		95
52) N-N-di-n-butylamine	6.210	84	841506	76.709	ppm		92
53) Caprolactam	6.263	113	402430	94.715	ppm		98
54) p-Phenylenediamine	6.252	80	108459	30.104	ppm		90
55) Safrole	6.418	162	799914	94.565	ppm		93
56) 2-Methylnaphthalene	6.499	142	2128830	90.043	ppm		99
57) 1-Methylnaphthalene	6.595	142	1985999	89.803	ppm		98
59) Hexachlorocyclopentadiene	6.654	237	414793	94.179	ppm		100
60) 1,2,4,5-Tetrachloroben...	6.664	216	878515	90.177	ppm		99
61) 1,2,3,4-Tetrachloroben...	6.942	216	880311	90.801	ppm		99
62) 2,4,6-Trichlorophenol	6.782	196	631794	109.799	ppm		100
63) 2,4,5-Trichlorophenol	6.830	196	673130	110.968	ppm		100
65) Isosafrole	6.921	104	412528	94.981	ppm		97
66) 1,1'-Biphenyl	6.958	154	2549721	88.416	ppm		97
67) 2-Chloronaphthalene	6.975	162	1884504	89.358	ppm		95
68) 2-Nitroaniline	7.087	65	675600	105.742	ppm		100
69) 1,4-Naphthoquinone	7.156	158	653135m	91.555	ppm		
70) m-Dinitrobenzene	7.301	168	382298	96.747	ppm		78
71) Acenaphthylene	7.381	152	2812219	89.982	ppm		98
72) Dimethyl phthalate	7.269	163	2196478	90.595	ppm		100
73) 2,6-Dinitrotoluene	7.322	165	520996	107.492	ppm		95
74) Acenaphthene	7.552	153	1953440	88.483	ppm		99
75) 3-Nitroaniline	7.493	138	632301	109.109	ppm		96
76) 2,4-Dinitrophenol	7.595	184	240837	87.103	ppm		88
77) Dibenzofuran	7.723	168	2630968	87.770	ppm		93
78) 2,4-Dinitrotoluene	7.723	165	697768	94.455	ppm		91
79) 4-Nitrophenol	7.686	65	569245m	123.782	ppm		
80) Pentachlorobenzene	7.681	250	790948	89.484	ppm		98
81) 1-Napthylamine	7.804	143	1501762	91.171	ppm		98
82) 2-Napthylamine	7.884	143	1375395	95.779	ppm		98
83) 2,3,4,6-Tetrachlorophenol	7.852	232	473482	96.713	ppm		95
84) Fluorene	8.060	166	2180490	87.304	ppm		99
85) 4-Chlorophenyl-phenyle...	8.060	204	1032967	88.878	ppm		96
86) Diethylphthalate	7.959	149	2235785	91.229	ppm		99
87) 4-Nitroaniline	8.103	138	640238	103.255	ppm		95
88) 5-Nitro-o-toluidine	8.087	152	705084	107.554	ppm		98
90) Sulfotepp	8.344	322	387584	98.269	ppm		89
91) Octachlorocyclopentene	8.306	307	253817	112.011	ppm		99
93) Thionazin	8.039	107	425939	96.761	ppm		95
94) 4,6-Dinitro-2-methylph...	8.124	198	363415m	94.991	ppm		
95) Diphenylamine	8.189	169	3380014	173.047	ppm		98
96) 1,2 Diphenylhydrazine	8.221	77	2479148	87.013	ppm		92
97) N-Nitrosodiphenylamine	8.189	169	3381079	173.069	ppm		98
98) 1,3,5-Trinirobenzene	8.478	213	251932	84.477	ppm	#	1

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Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
99) Diallate	8.461	86	914181	87.454	ppm		86
100) Phorate	8.472	121	500627	97.409	ppm	#	64
101) Phenacetin	8.515	108	1304290	106.216	ppm		95
102) 4-Bromophenyl-phenylether	8.542	248	595120	91.191	ppm		96
103) Hexachlorobenzene	8.601	284	661002	88.685	ppm		95
104) Dimethoate	8.654	87	674725	83.464	ppm		99
105) Atrazine	8.718	215	160752	61.196	ppm		88
106) Pentachlorophenol	8.809	266	425400	96.580	ppm		96
107) 4-Aminobiphenyl	8.804	169	1920870	94.153	ppm		99
108) Pentachloronitrobenzene	8.809	237	277039	103.769	ppm		96
109) Pronamide	8.868	173	1110545	98.654	ppm		98
110) Dinoseb	8.986	211	523243	85.572	ppm		99
111) Disulfoton	8.991	88	1348262	94.511	ppm		94
112) Phenanthrene	9.012	178	2978770	86.365	ppm		98
113) Anthracene	9.061	178	3004787	89.410	ppm		98
114) Carbazole	9.226	167	3028395	99.776	ppm		97
115) Di-n-butylphthalate	9.569	149	3877067	94.996	ppm		98
116) 4-Nitroquinonline-1-oxide	9.777	190	240581	86.447	ppm		96
117) Fluoranthene	10.205	202	3262882	93.841	ppm		99
119) Methyl Parathion	9.355	109	575664	97.547	ppm		97
120) Ethyl Parathion	9.745	97	555963	101.191	ppm		93
121) Methapyrilene	9.857	58	1290968	85.059	ppm		95
122) Isodrin	10.039	193	343654	86.266	ppm		93
123) Benzidine	10.360	184	1327110	89.870	ppm		100
124) Pyrene	10.457	202	3375627	87.397	ppm		97
126) Aramite	10.719	185	221879m	111.638	ppm		
127) p-(Dimethylamino)azobe...	10.820	120	1150810	100.663	ppm		94
128) Chlorobenzilate	10.879	139	1340239	102.013	ppm		98
129) Butyl benzyl phthalate	11.296	149	1846112	96.385	ppm		99
130) 3,3-Dimethylbenzidine	11.275	212	1694987	97.550	ppm		99
131) 2-Acetylaminofluorene	11.655	181	1482718	97.954	ppm		99
132) 3,3'-Dichlorobenzidine	12.109	252	1199669	96.685	ppm		98
133) Benzo(a)anthracene	12.131	228	3181327	90.857	ppm		99
134) Chrysene	12.195	228	2955171	91.183	ppm		99
135) bis(2-Ethylhexyl)phtha...	12.243	149	2491135	93.725	ppm		97
137) Di-n-octyl phthalate	13.516	149	4157037	101.815	ppm		100
138) 7,12-Dimethylbenz(a)an...	14.168	256	1578682	97.550	ppm		98
139) Benzo(b)Fluoranthene	14.179	252	3160306	97.516	ppm		99
140) Benzo(k)fluoranthene	14.233	252	2880734	93.786	ppm		98
141) Benzo(a)pyrene	14.837	252	2632497	98.743	ppm		98
142) 3-Methylcholanthrene	15.629	268	1598509	101.182	ppm		98
143) Indeno(1,2,3-cd)Pyrene	16.955	276	2289897	100.915	ppm		99
144) Dibenz(a,h)anthracene	17.009	278	2449001	106.636	ppm		99
145) Benzo(g,h,i)perylene	17.383	276	2297415	93.227	ppm		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

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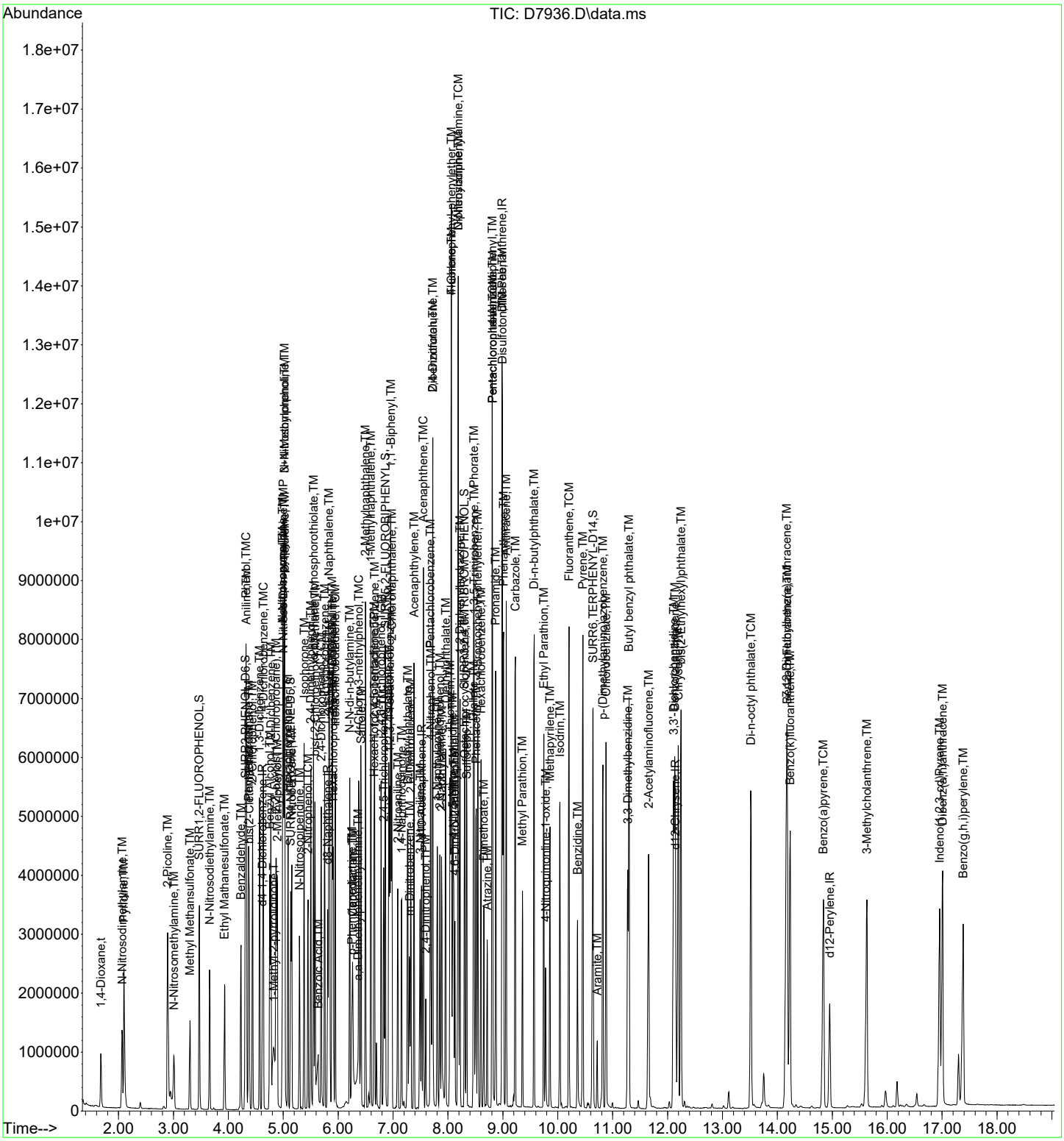
Quant Time: Aug 06 09:37:41 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 09:35:33 2024
Response via : Initial Calibration



Quantitation Report (Qedit)

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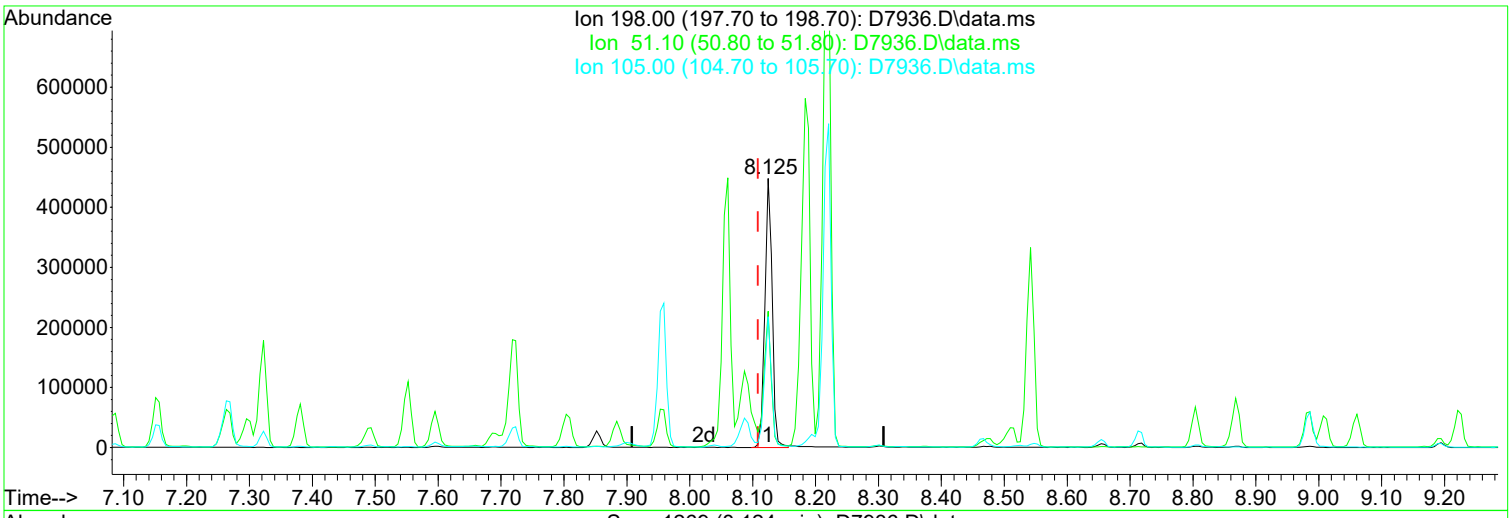

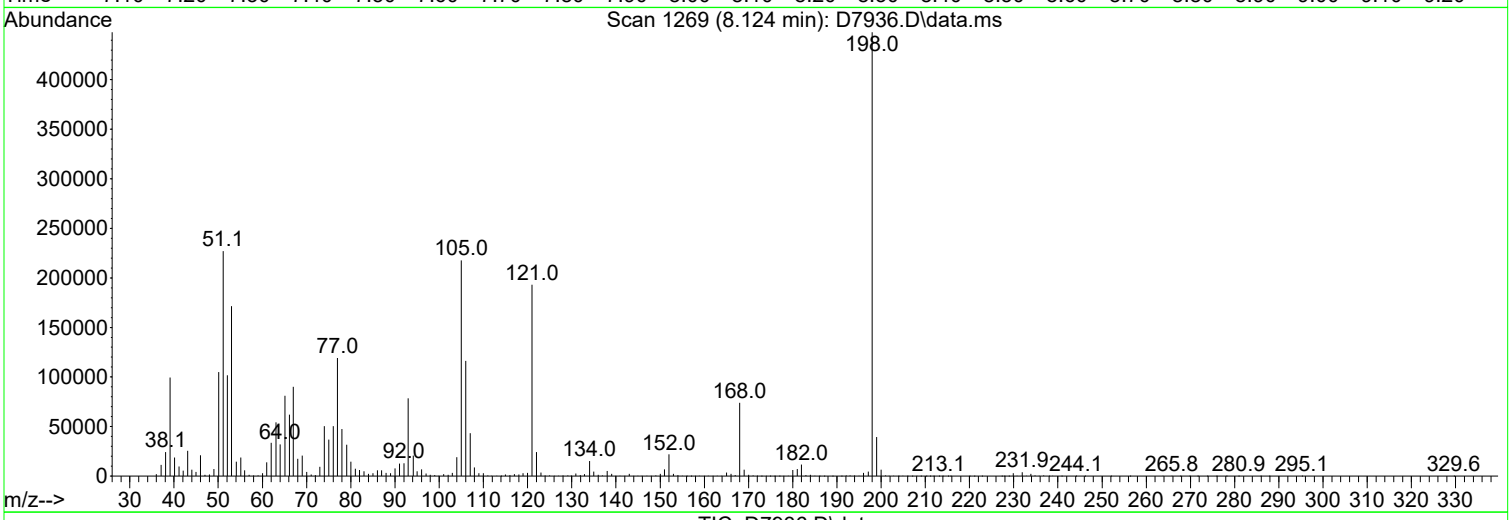

TIC: D7936.D\data.ms

(94) 4,6-Dinitro-2-methylphenol (TM)

8.124min (+ 0.016) 94.99 ppm m

response 363415

Ion	Exp%	Act%
198.00	100.00	100.00
51.10	46.70	50.69
105.00	43.30	48.61
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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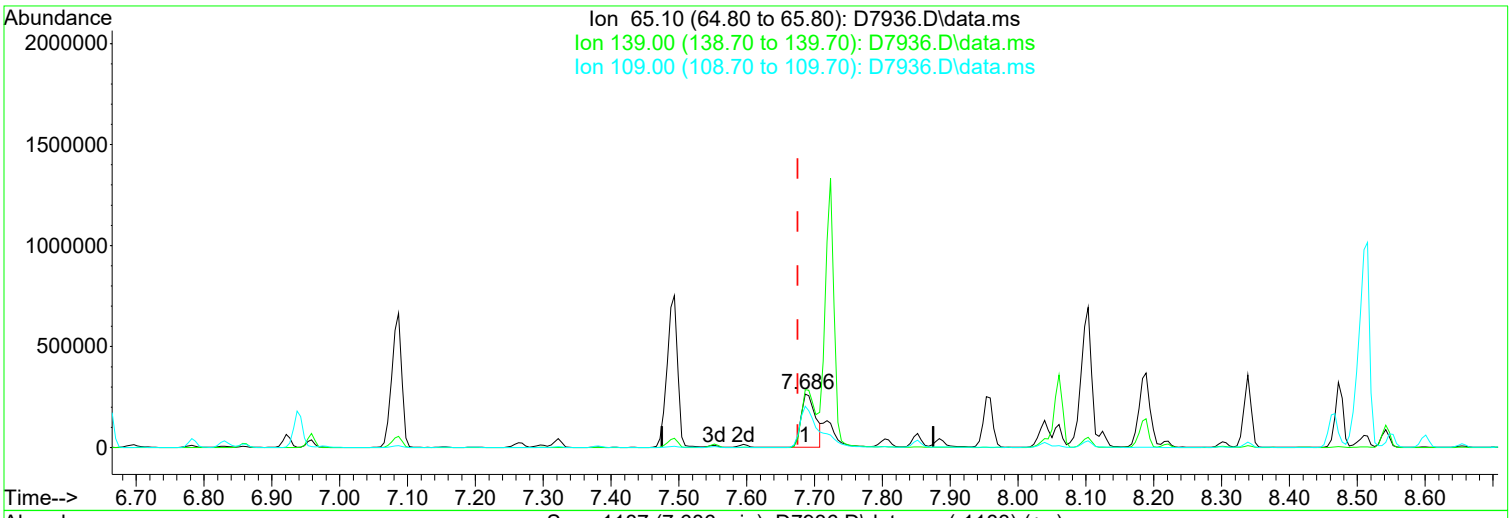

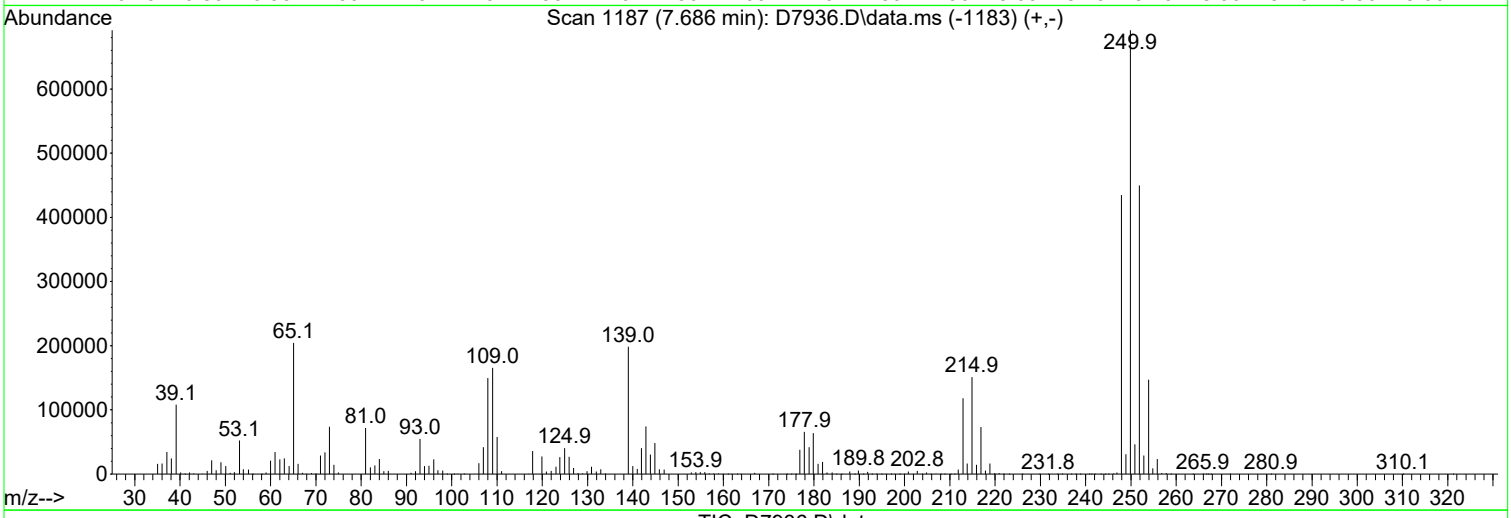

TIC: D7936.D\data.ms

(79) 4-Nitrophenol (TMP)

7.686min (+ 0.011) 83.65 ppm

response 384696

Ion	Exp%	Act%
65.10	100.00	100.00
139.00	103.40	97.27
109.00	85.60	80.97
0.00	0.00	0.00

Manual Integration:

Before

08/06/24

Quantitation Report (Qedit)

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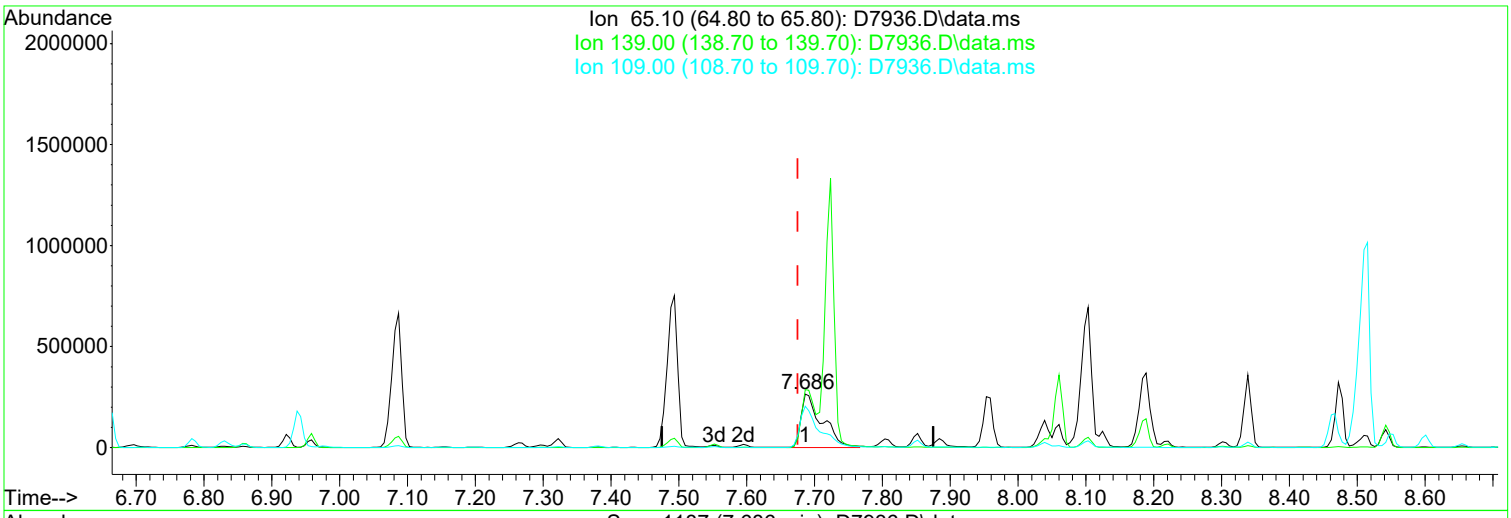

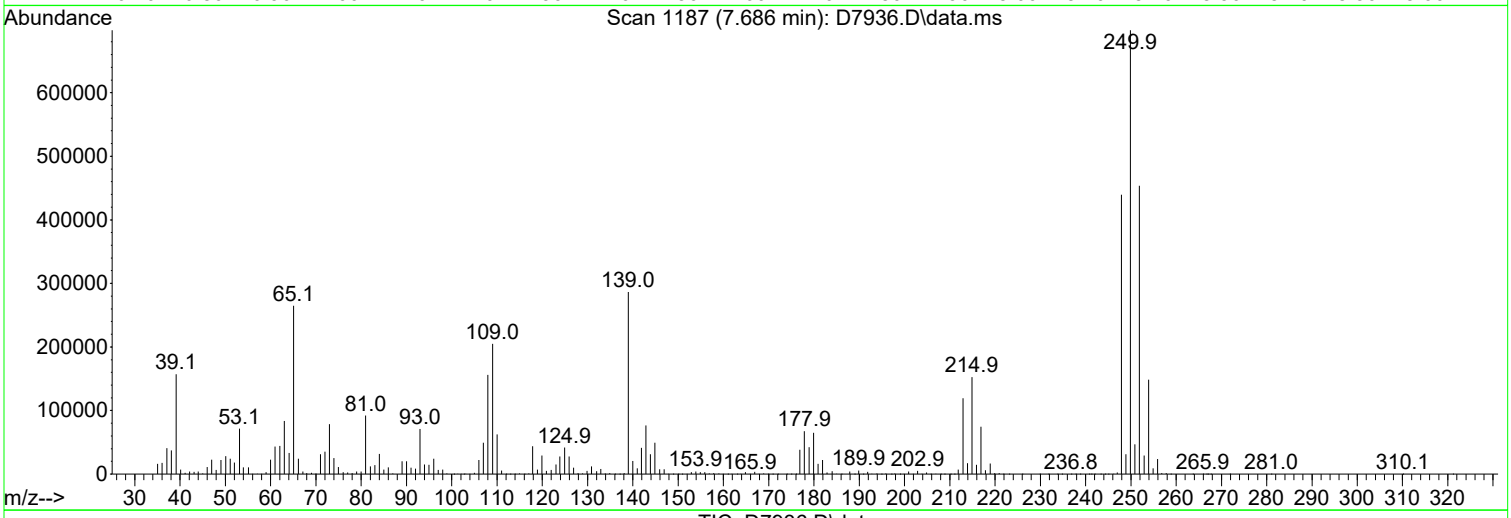

TIC: D7936.D\data.ms

(79) 4-Nitrophenol (TMP)

7.686min (+ 0.011) 123.78 ppm m

response 569245

Ion	Exp%	Act%
65.10	100.00	100.00
139.00	103.40	108.12
109.00	85.60	77.33
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

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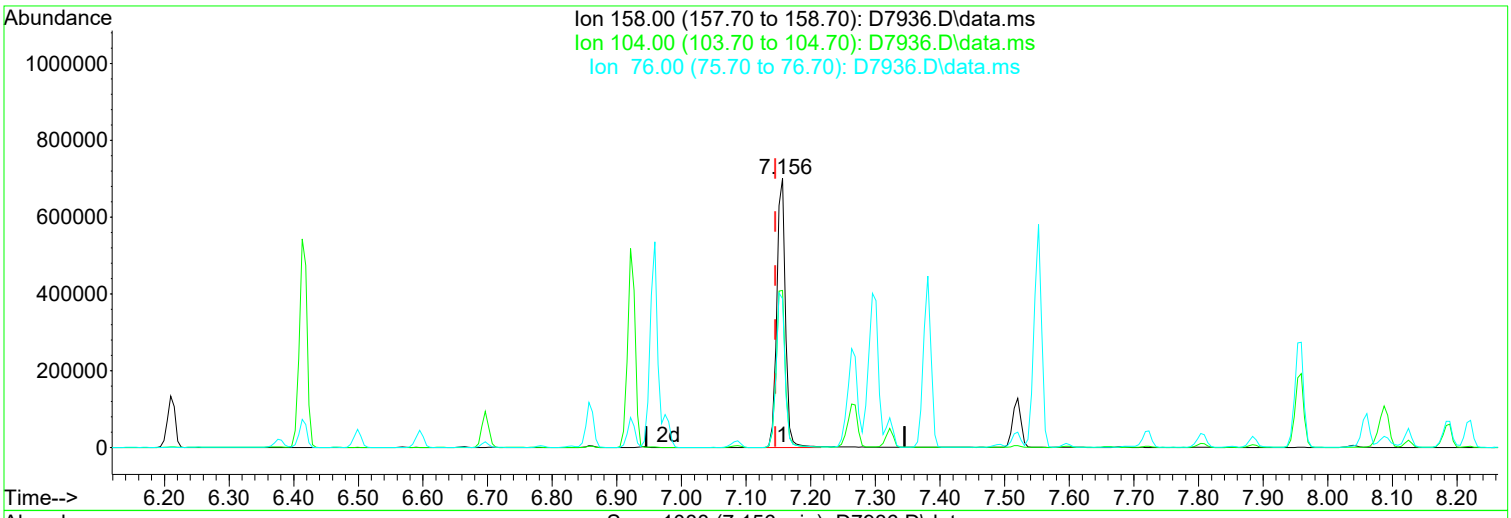

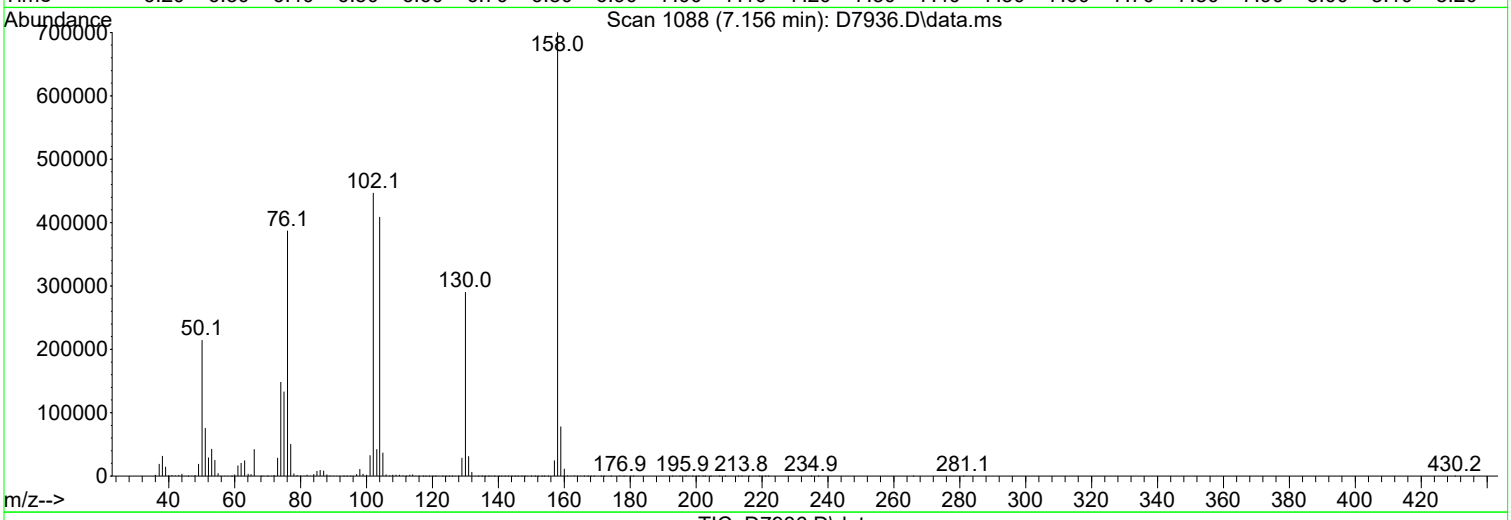

TIC: D7936.D\data.ms

(69) 1,4-Naphthoquinone (TM)

7.156min (+ 0.011) 91.55 ppm m

response 653135

Ion	Exp%	Act%
158.00	100.00	100.00
104.00	56.20	58.41
76.00	48.20	55.30
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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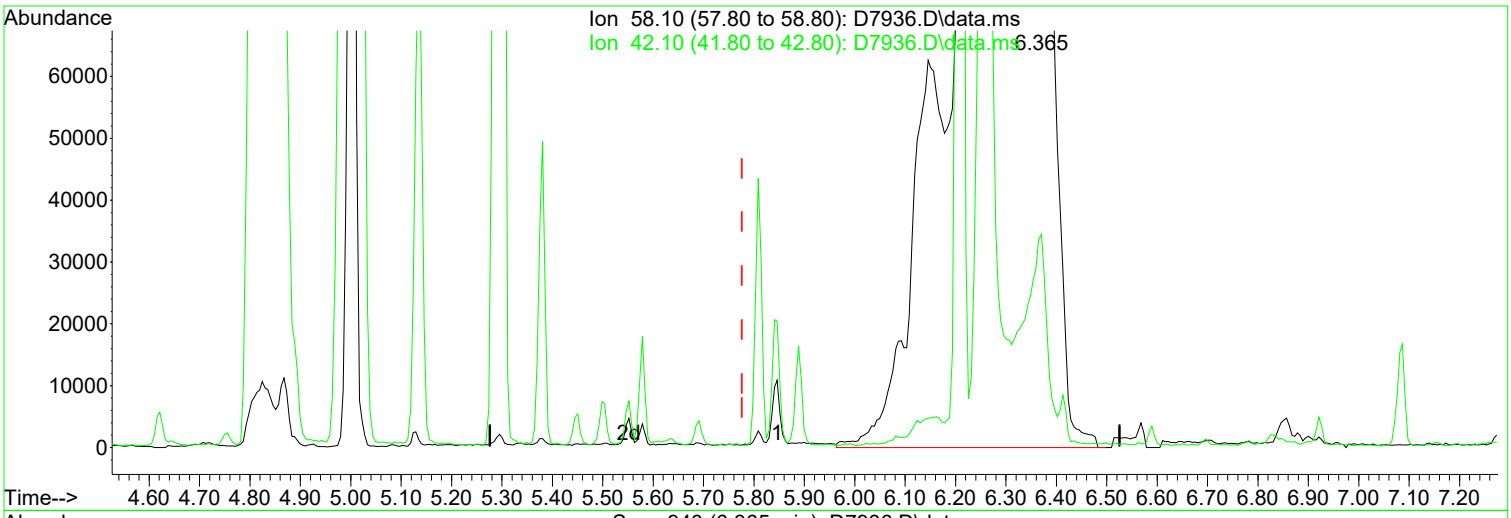

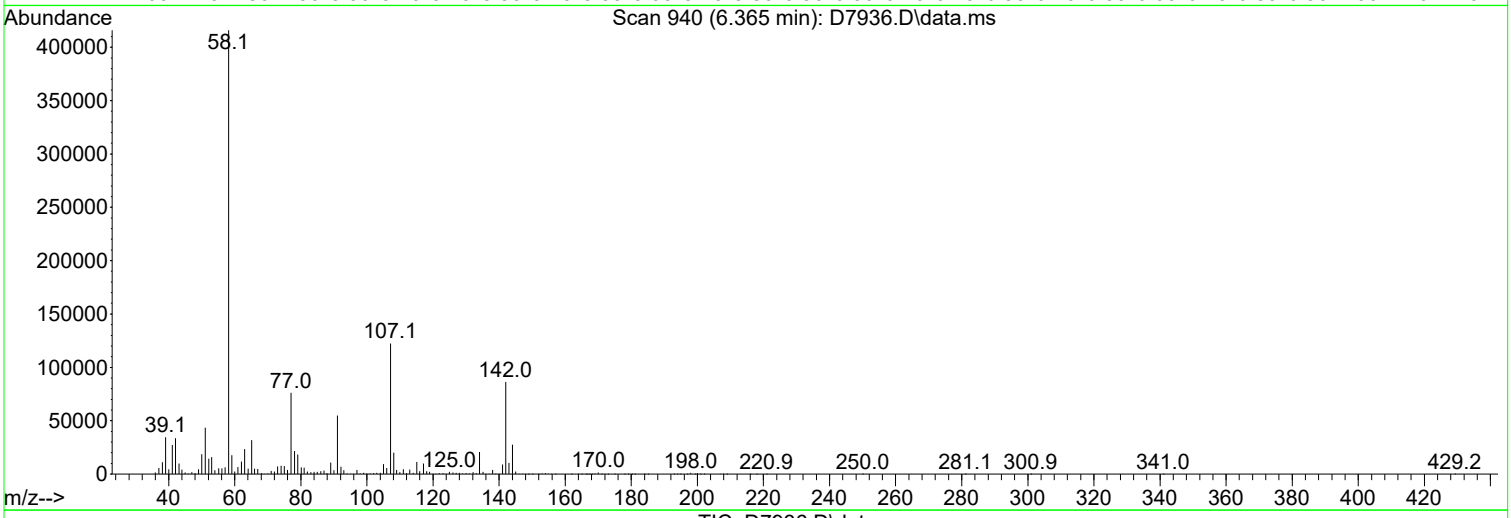

TIC: D7936.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

6.365min (+ 0.588) 90.00 ppm m

response 2636269

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.40	8.07
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

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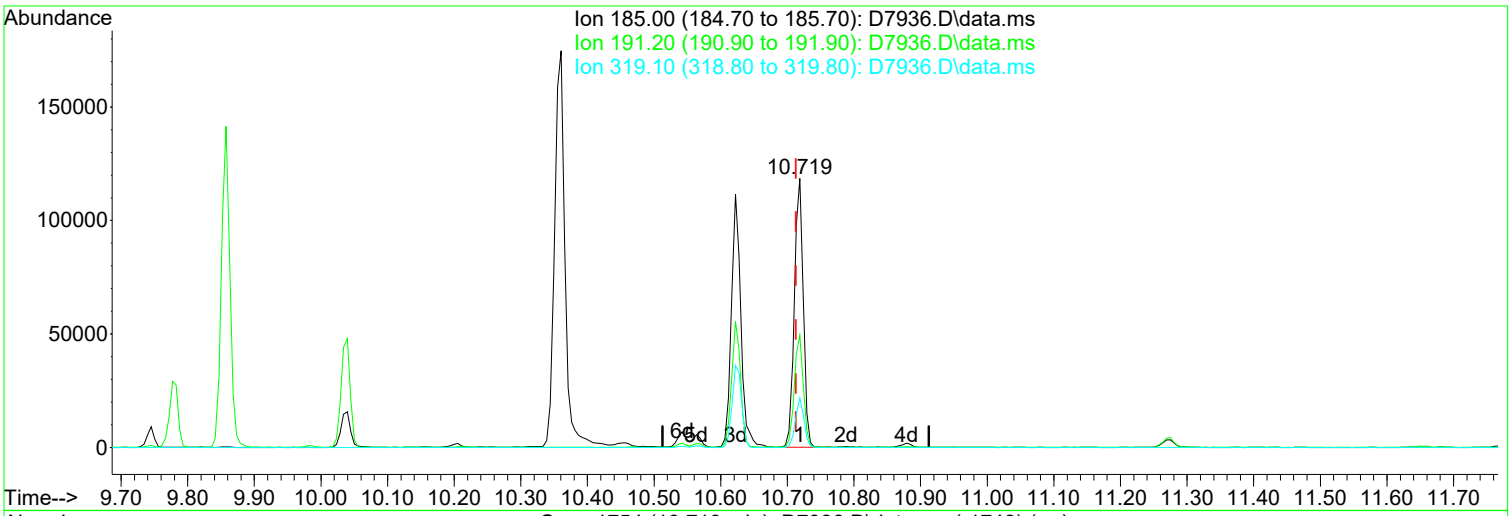
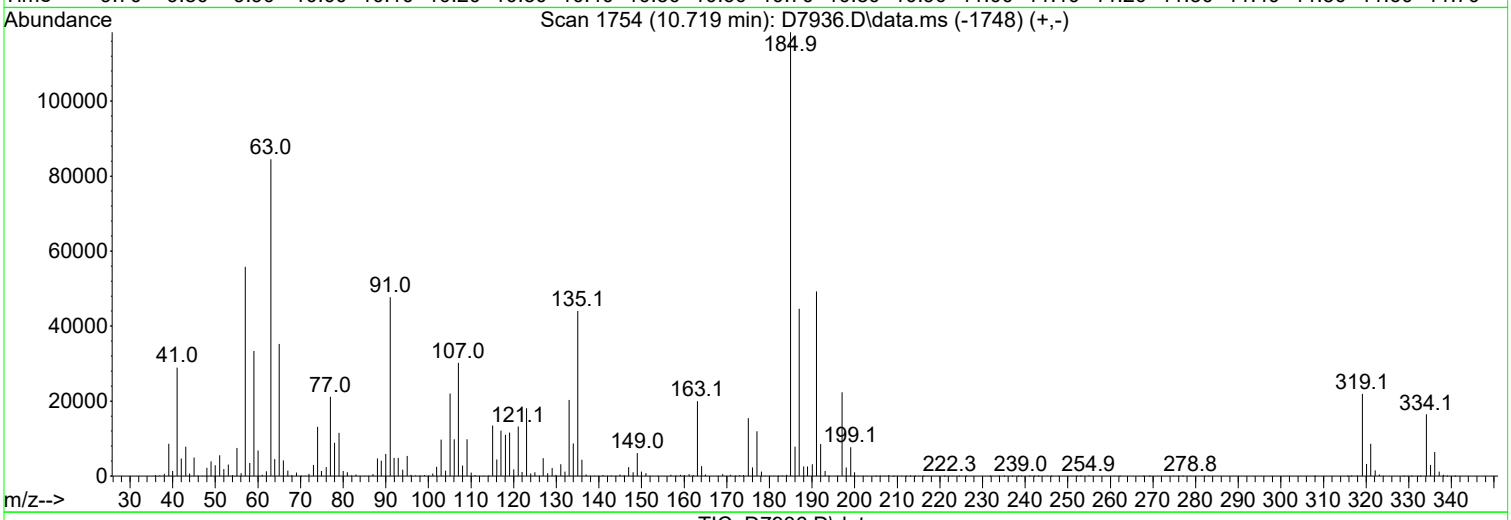
Response via : Initial Calibration





TIC: D7936.D\data.ms

(126) Aramite (TM)

10.719min (+ 0.005) 55.78 ppm

response 110870

Ion	Exp%	Act%
185.00	100.00	100.00
191.20	40.80	41.61
319.10	19.60	18.50
0.00	0.00	0.00

Manual Integration:

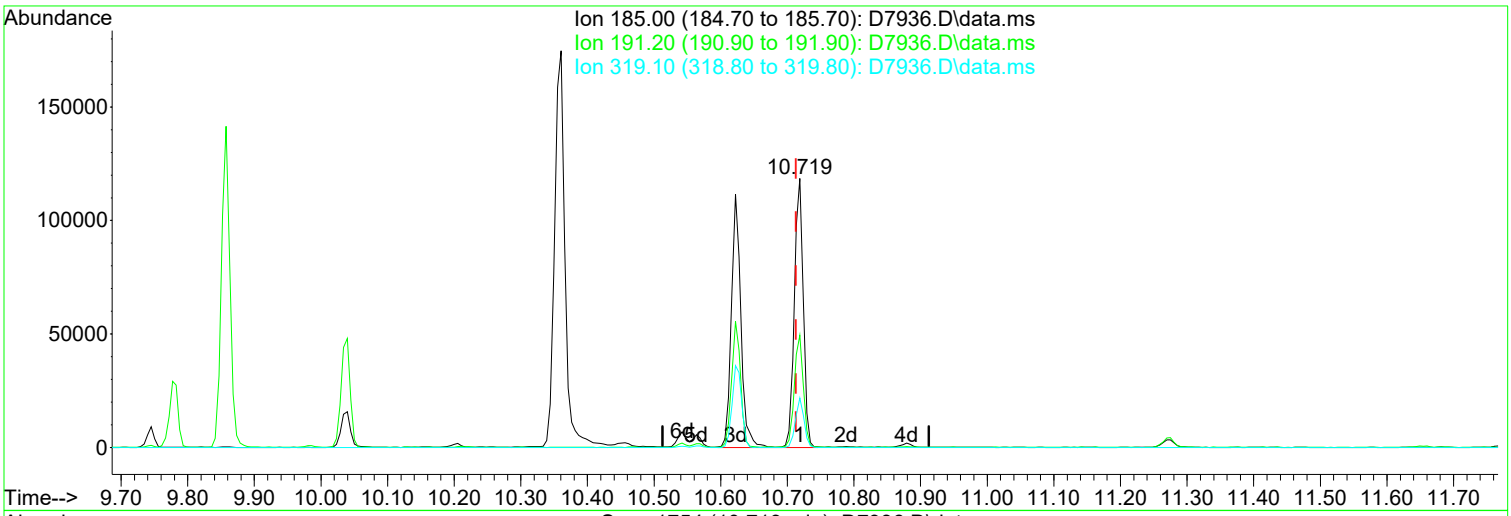
Before

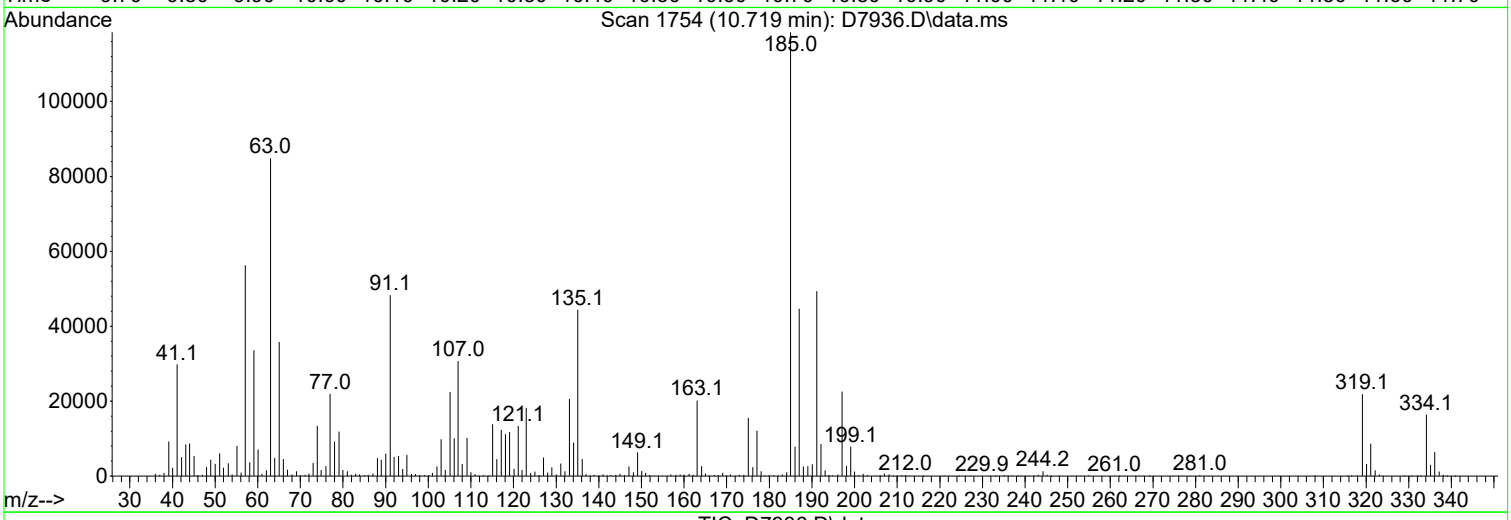
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7936.D
Acq On : 05 Aug 2024 12:55 pm
Operator : EDeGray
Sample : 100 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 06 09:37:41 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 09:35:33 2024
Response via : Initial Calibration





TIC: D7936.D\data.ms

(126) Aramite (TM)

10.719min (+ 0.005) 111.64 ppm m

response 221879

Ion	Exp%	Act%
185.00	100.00	100.00
191.20	40.80	41.71
319.10	19.60	18.48
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
Operator : EDeGray
Sample : 80 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 15:17:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.621	152	318174	40.00	ppm		0.00
34) d8-Naphthalene	5.809	136	1246798	40.00	ppm		0.00
58) d10-Acenaphthene	7.520	164	684132	40.00	ppm		0.00
92) d10-Phenanthrene	8.986	188	1172086	40.00	ppm		0.00
118) d12-Chrysene	12.147	240	1016265	40.00	ppm		0.00
136) d12-Perylene	14.949	264	979916	40.00	ppm		0.00
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.466	112	872762	87.47	ppm		0.00
Spiked Amount 20.000	Range 10 - 70		Recovery = 437.35%#				
13) SURR2,PHENOL-D6	4.306	99	1132030	87.10	ppm		0.00
Spiked Amount 20.000	Range 10 - 107		Recovery = 435.50%#				
35) SURR4,NITROBENZENE-D5	5.135	82	959476	87.95	ppm		0.00
Spiked Amount 10.000	Range 31 - 110		Recovery = 879.50%#				
64) SURR5,2-FLUOROBIPHENYL	6.857	172	1750755	82.25	ppm		0.00
Spiked Amount 10.000	Range 31 - 118		Recovery = 822.50%#				
89) SURR3,2,4,6-TRIBROMOPH...	8.301	330	254181	101.42	ppm		0.00
Spiked Amount 20.000	Range 35 - 141		Recovery = 507.10%#				
125) SURR6,TERPHENYL-D14	10.644	244	1809057	83.68	ppm		0.00
Spiked Amount 10.000	Range 10 - 165		Recovery = 836.80%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.674	88	362387	80.746	ppm		99
3) Pyridine	2.097	79	967018	83.065	ppm		97
4) N-Nitrosodimethylamine	2.059	74	630904	83.172	ppm		98
5) 2-Picoline	2.888	93	1048625	85.019	ppm		99
6) N-Nitrosomethylamine	3.006	42	354027	85.646	ppm		98
7) Methyl Methansulfonate	3.300	80	498805	81.943	ppm		99
9) N-Nitrosodiethylamine	3.658	102	454315	84.740	ppm		93
10) Ethyl Mathanesulfonate	3.931	79	708963	82.817	ppm		96
11) Benzaldehyde	4.225	106	485170m	64.744	ppm		
12) Aniline	4.327	93	1381796	84.363	ppm		92
14) Phenol	4.316	94	1285214	84.243	ppm		88
15) bis(2-Clethyl)Ether	4.381	93	926453	79.851	ppm		98
16) Pentachloroethane	4.364	117	321079	82.722	ppm		98
17) 2-Chlorophenol	4.439	128	933339	85.784	ppm		99
18) 1,3-Diclbenzene	4.568	146	948787	82.203	ppm		99
19) 1,4-Dichlorobenzene	4.637	146	971015	81.134	ppm		98
20) 1,2-Diclbenzene	4.776	146	912291	81.096	ppm		99
21) Benzyl Alcohol	4.750	79	705421	86.924	ppm		99
22) 1-Methyl-2-pyrrolidinone	4.814	99	597198	83.925	ppm		95
23) 2,2'-oxybis(1-Chloropr...	4.867	45	1090307	77.526	ppm		96
24) 2-Methylphenol	4.883	108	839183	84.524	ppm		96
25) 3+4-Methylphenol	5.017	108	946072	86.407	ppm	#	49
26) Acetophenone	4.990	105	1300546	81.666	ppm		99
27) N-Nitroso-Di-n-propyla...	5.001	70	734380	81.840	ppm		94
28) N-Nitrosopyrrolidine	4.985	100	506934	86.329	ppm		92
29) N-Nitrosomorpholine	5.017	56	586401	80.163	ppm		95
30) o-Toluidine	5.028	106	1396511	79.270	ppm		93
31) Hexachloroethane	5.087	117	397601	82.293	ppm		87
32) o,o,o-Triethylphosphor...	5.552	198	438548	84.282	ppm		99
33) Alpha-terpinol	5.841	121	366907	84.042	ppm		98
36) Nitrobenzene	5.151	77	952101	85.869	ppm		99
37) N-Nitrosopiperidine	5.295	42	597280	80.839	ppm		95
38) Isophorone	5.375	82	1776470	82.851	ppm		97

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
Operator : EDeGray
Sample : 80 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 15:17:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) 2-Nitrophenol	5.445	139	488294m	104.760	ppm	
40) Benzoic Acid	5.621	105	519617m	100.235	ppm	
41) 2,4-Dimethylphenol	5.498	107	960830	86.693	ppm	99
42) bis(-2-Chloroethoxy)Me...	5.579	93	1034748	81.313	ppm	99
43) 2,4-Dichlorophenol	5.686	162	738069	92.857	ppm	98
44) a,a-Dimethylphenethyla...	6.306	58	2077971m	81.370	ppm	
45) 1,2,4-Trichlorobenzene	5.755	180	739948m	83.643	ppm	
46) Naphthalene	5.830	128	2469908	79.223	ppm	99
47) 4-Chloroaniline	5.889	127	1030092	84.542	ppm	98
48) 2,6-Dichlorophenol	5.894	162	699901	90.386	ppm	99
49) Hexachlorobutadiene	5.948	225	417930	82.998	ppm	99
50) Hexachloropropene	5.910	213	465267	91.760	ppm	100
51) 4-Chloro-3-methylphenol	6.376	107	830227m	92.459	ppm	
52) N-N-di-n-butylamine	6.210	84	666942	67.651	ppm	93
53) Caprolactam	6.253	113	321362	87.165	ppm	99
54) p-Phenylenediamine	6.247	80	114437m	37.283	ppm	
55) Safrole	6.413	162	629599	85.417	ppm	98
56) 2-Methylnaphthalene	6.499	142	1705943	82.943	ppm	100
57) 1-Methylnaphthalene	6.595	142	1586277	82.414	ppm	99
59) Hexachlorocyclopentadiene	6.648	237	318182m	105.079	ppm	
60) 1,2,4,5-Tetrachloroben...	6.659	216	706709	83.441	ppm	99
61) 1,2,3,4-Tetrachloroben...	6.937	216	701492	83.134	ppm	97
62) 2,4,6-Trichlorophenol	6.782	196	501035	100.277	ppm	98
63) 2,4,5-Trichlorophenol	6.830	196	529611	100.440	ppm	99
65) Isosafrole	6.921	104	322829	85.249	ppm	98
66) 1,1'-Biphenyl	6.959	154	2050669	81.767	ppm	99
67) 2-Chloronaphthalene	6.975	162	1508600	82.218	ppm	97
68) 2-Nitroaniline	7.082	65	534511	96.471	ppm	97
69) 1,4-Naphthoquinone	7.151	158	531541m	85.907	ppm	
70) m-Dinitrobenzene	7.296	168	303095m	109.427	ppm	
71) Acenaphthylene	7.381	152	2250232	82.757	ppm	99
72) Dimethyl phthalate	7.263	163	1756915	83.296	ppm	100
73) 2,6-Dinitrotoluene	7.322	165	416726	99.111	ppm	87
74) Acenaphthene	7.552	153	1569455	81.693	ppm	100
75) 3-Nitroaniline	7.488	138	493735	98.076	ppm	99
76) 2,4-Dinitrophenol	7.595	184	183222m	124.304	ppm	
77) Dibenzofuran	7.723	168	2137038	82.070	ppm	97
78) 2,4-Dinitrotoluene	7.718	165	557702m	108.368	ppm	
79) 4-Nitrophenol	7.686	65	427045m	100.770	ppm	
80) Pentachlorobenzene	7.681	250	629001	81.724	ppm	99
81) 1-Napthylamine	7.804	143	1175996	81.849	ppm	99
82) 2-Napthylamine	7.884	143	1034870	82.238	ppm	100
83) 2,3,4,6-Tetrachlorophenol	7.852	232	378253m	108.703	ppm	
84) Fluorene	8.060	166	1784424	82.319	ppm	99
85) 4-Chlorophenyl-phenyle...	8.060	204	844566	83.743	ppm	99
86) Diethylphthalate	7.953	149	1795528	84.269	ppm	100
87) 4-Nitroaniline	8.098	138	493224	91.284	ppm	95
88) 5-Nitro-o-toluidine	8.082	152	554259	97.416	ppm	92
90) Sulfotepp	8.339	322	311670	91.019	ppm	95
91) Octachlorocyclopentene	8.306	307	197526	100.122	ppm	100
93) Thionazin	8.039	107	335351	87.388	ppm	98
94) 4,6-Dinitro-2-methylph...	8.119	198	284596m	111.190	ppm	
95) Diphenylamine	8.183	169	2737209	161.075	ppm	98
96) 1,2 Diphenylhydrazine	8.216	77	1996042	80.473	ppm	98
97) N-Nitrosodiphenylamine	8.183	169	2737655	161.069	ppm	98
98) 1,3,5-Trinirobenzene	8.472	213	200979m	132.944	ppm	

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
Operator : EDeGray
Sample : 80 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 15:17:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration

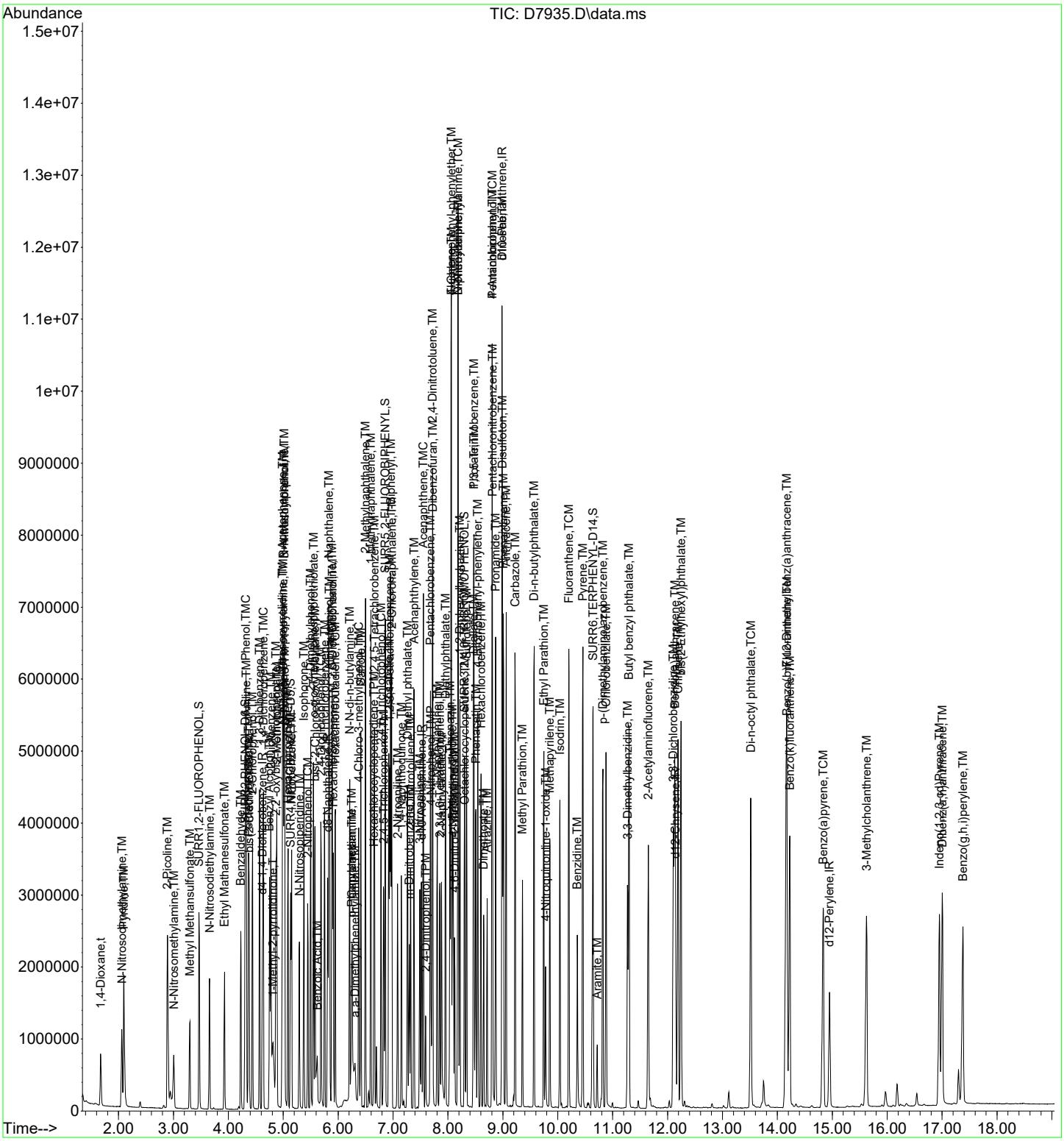
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
99) Diallate	8.462	86	724971	79.520	ppm		97
100) Phorate	8.472	121	392542	87.572	ppm	#	66
101) Phenacetin	8.510	108	1023172	95.658	ppm		95
102) 4-Bromophenyl-phenylether	8.542	248	479042	84.378	ppm		98
103) Hexachlorobenzene	8.601	284	529545m	81.591	ppm		
104) Dimethoate	8.649	87	560441	79.889	ppm		99
105) Atrazine	8.713	215	164927m	62.051	ppm		
106) Pentachlorophenol	8.804	266	325196m	101.802	ppm		
107) 4-Aminobiphenyl	8.804	169	1610986	91.336	ppm		100
108) Pentachloronitrobenzene	8.809	237	220078	95.000	ppm		97
109) Pronamide	8.868	173	879421	89.903	ppm		98
110) Dinoseb	8.986	211	417004	114.027	ppm		97
111) Disulfoton	8.991	88	1078140	80.438	ppm		95
112) Phenanthrene	9.007	178	2387019	79.442	ppm		98
113) Anthracene	9.061	178	2404184	82.060	ppm		98
114) Carbazole	9.221	167	2397270	90.709	ppm		97
115) Di-n-butylphthalate	9.569	149	3113807	87.731	ppm		99
116) 4-Nitroquinonline-1-oxide	9.777	190	192186m	97.918	ppm		
117) Fluoranthene	10.200	202	2605985	86.102	ppm		97
119) Methyl Parathion	9.355	109	474768	94.125	ppm		98
120) Ethyl Parathion	9.745	97	438155m	106.621	ppm		
121) Methapyrilene	9.852	58	1030813	78.841	ppm		99
122) Isodrin	10.039	193	272277	79.111	ppm		93
123) Benzidine	10.355	184	986661m	87.202	ppm		
124) Pyrene	10.457	202	2689573	80.672	ppm		98
126) Aramite	10.719	185	174074m	101.869	ppm		
127) p-(Dimethylamino)azobe...	10.820	120	897548	90.884	ppm		94
128) Chlorobenzilate	10.879	139	1052100	93.014	ppm		100
129) Butyl benzyl phthalate	11.296	149	1452042	87.807	ppm		99
130) 3,3-Dimethylbenzidine	11.270	212	1303203	86.962	ppm		97
131) 2-Acetylaminofluorene	11.649	181	1129005	108.160	ppm		99
132) 3,3'-Dichlorobenzidine	12.104	252	918112	105.387	ppm		99
133) Benzo(a)anthracene	12.131	228	2486598	82.116	ppm		99
134) Chrysene	12.190	228	2310088	82.425	ppm		99
135) bis(2-Ethylhexyl)phtha...	12.243	149	1982182	86.675	ppm		98
137) Di-n-octyl phthalate	13.516	149	3245776	95.069	ppm		98
138) 7,12-Dimethylbenz(a)an...	14.169	256	1219539	90.125	ppm		98
139) Benzo(b)Fluoranthene	14.174	252	2447789	90.151	ppm		99
140) Benzo(k)fluoranthene	14.227	252	2254210	87.661	ppm		99
141) Benzo(a)pyrene	14.837	252	2020813	90.377	ppm		99
142) 3-Methylcholanthrene	15.623	268	1205503	90.785	ppm		99
143) Indeno(1,2,3-cd)Pyrene	16.950	276	1717105	89.956	ppm		99
144) Dibenz(a,h)anthracene	17.003	278	1836669	95.144	ppm		99
145) Benzo(g,h,i)perylene	17.378	276	1753810	84.717	ppm		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
Operator : EDeGray
Sample : 80 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

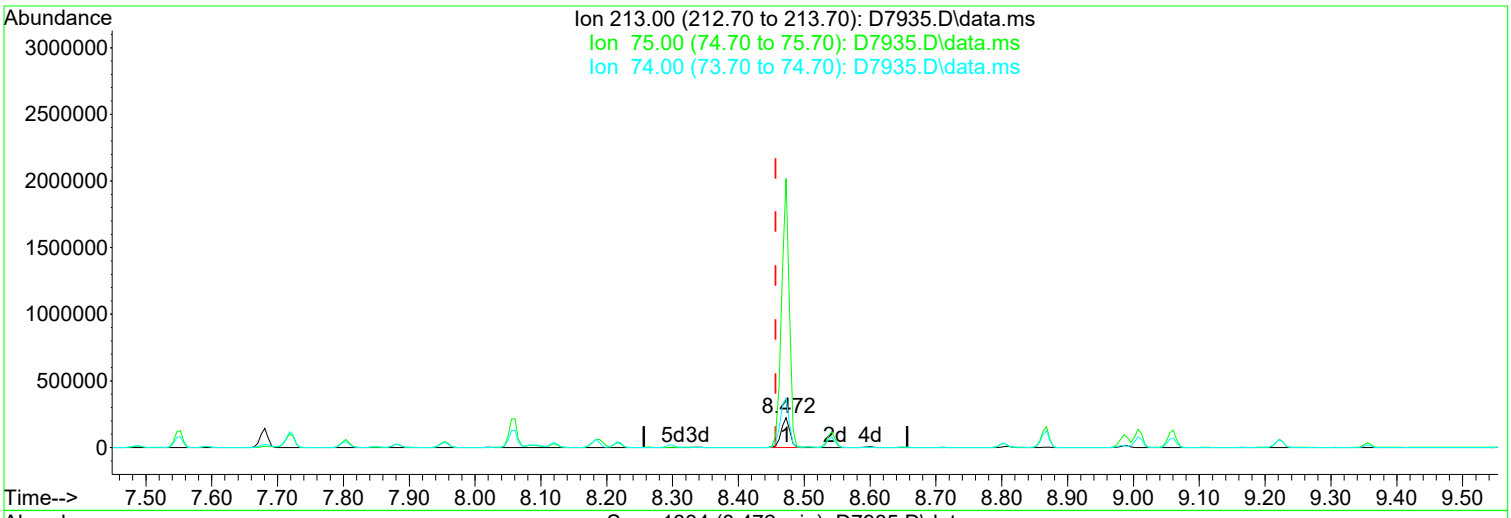
Quant Time: Aug 05 15:17:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration

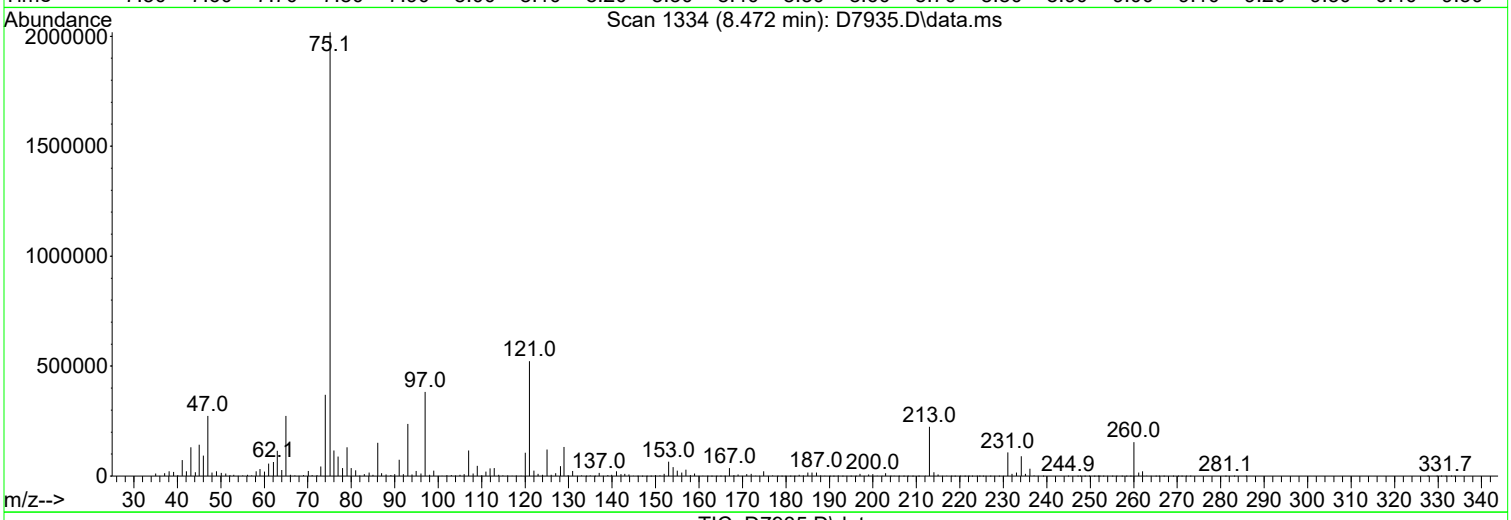


Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
Operator : EDeGray
Sample : 80 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 15:17:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration





TIC: D7935.D\data.ms

(98) 1,3,5-Trinirobenzene (TM)

8.472min (+ 0.015) 132.94 ppm m

response 200979

Ion	Exp%	Act%
213.00	100.00	100.00
75.00	266.70	900.51#
74.00	152.40	165.19
0.00	0.00	0.00

Manual Integration:

After

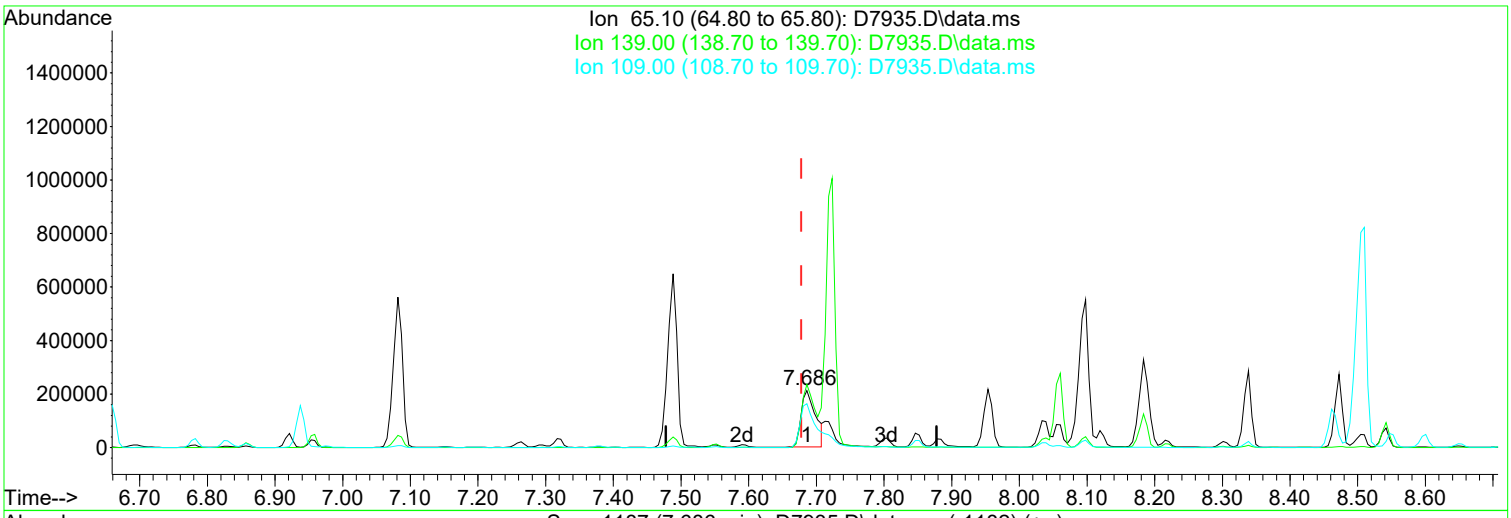
Poor integration.

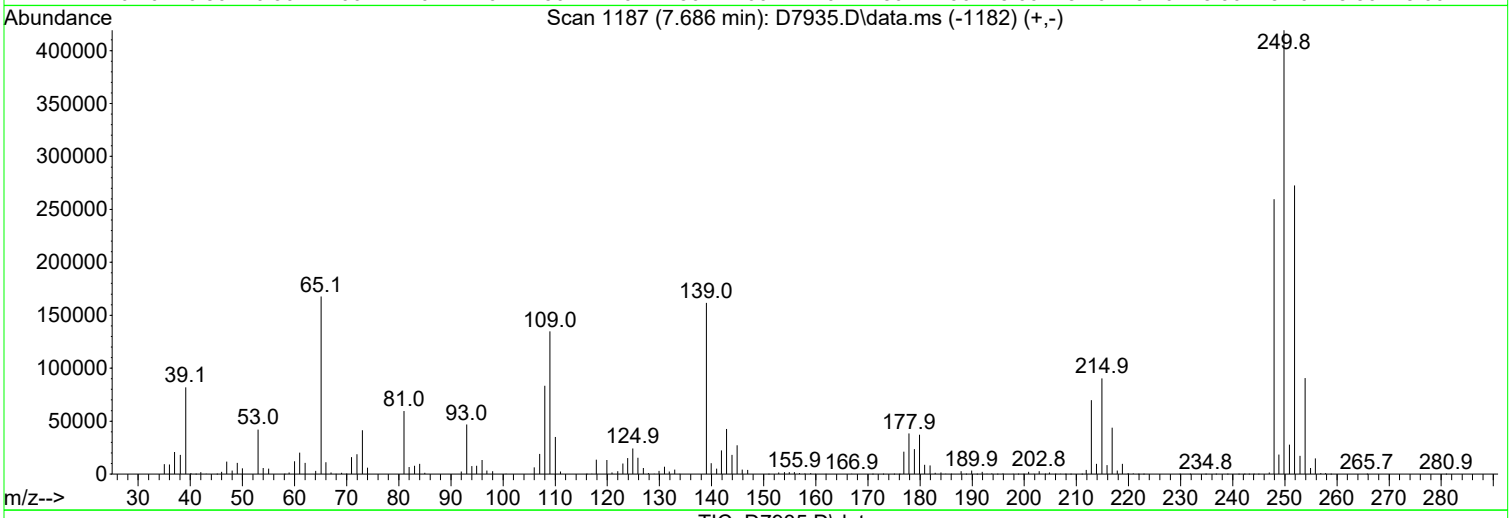
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
Operator : EDeGray
Sample : 80 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 15:17:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration





TIC: D7935.D\data.ms

(79) 4-Nitrophenol (TMP)

7.686min (+ 0.008) 73.71 ppm

response 312372

Ion	Exp%	Act%
65.10	100.00	100.00
139.00	103.40	96.37
109.00	85.60	80.35
0.00	0.00	0.00

Manual Integration:

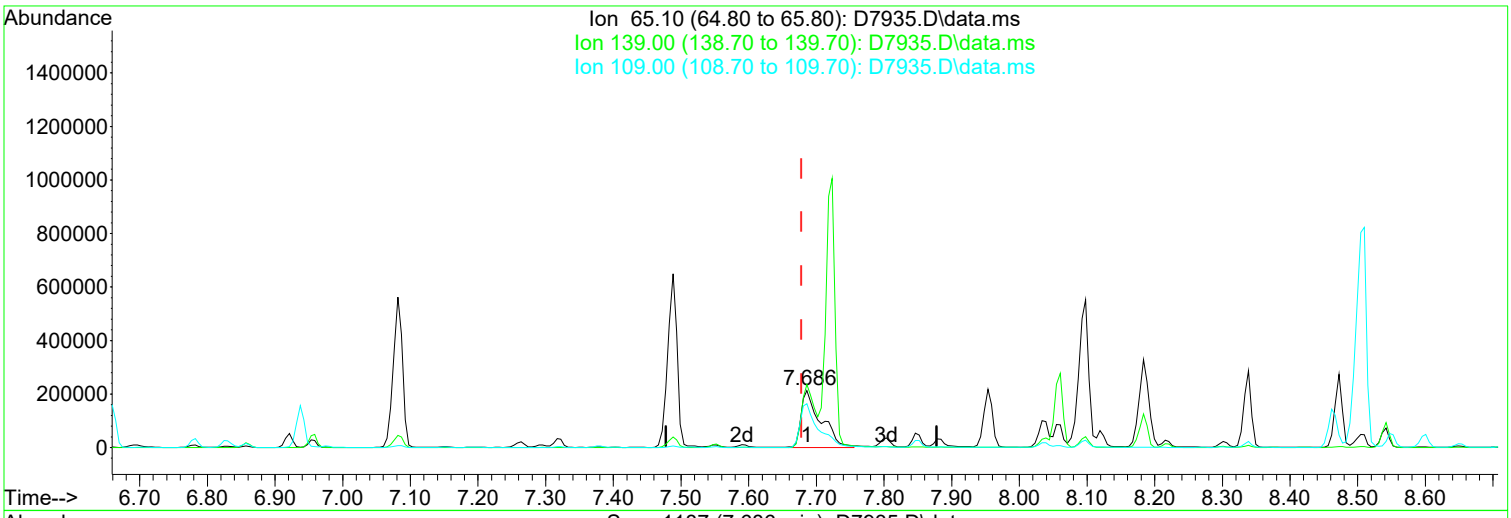
Before

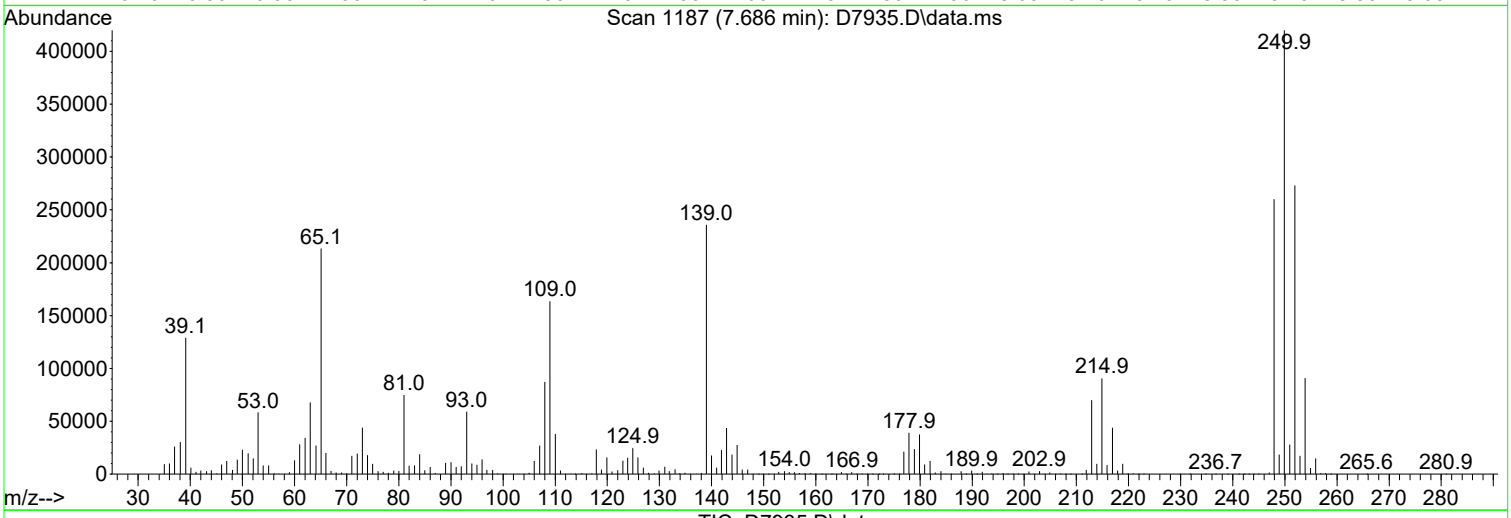
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
Operator : EDeGray
Sample : 80 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 15:17:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration





TIC: D7935.D\data.ms

(79) 4-Nitrophenol (TMP)

7.686min (+ 0.008) 100.77 ppm m

response 427045

Ion	Exp%	Act%
65.10	100.00	100.00
139.00	103.40	110.59
109.00	85.60	76.63
0.00	0.00	0.00

Manual Integration:

After

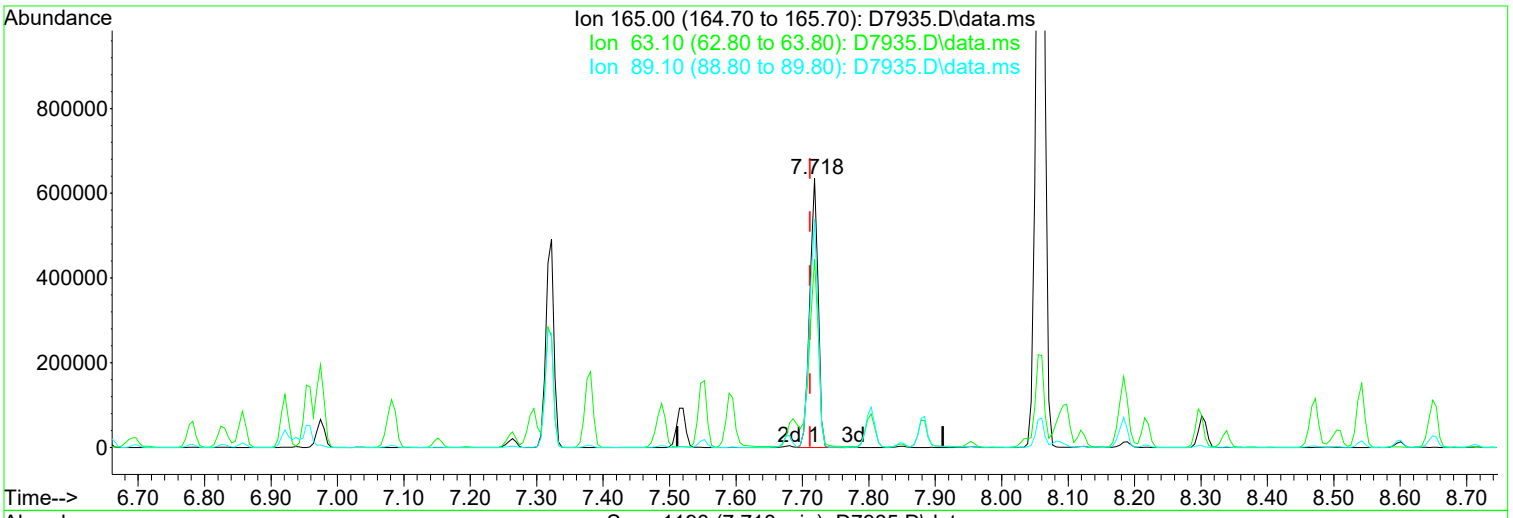
Poor integration.

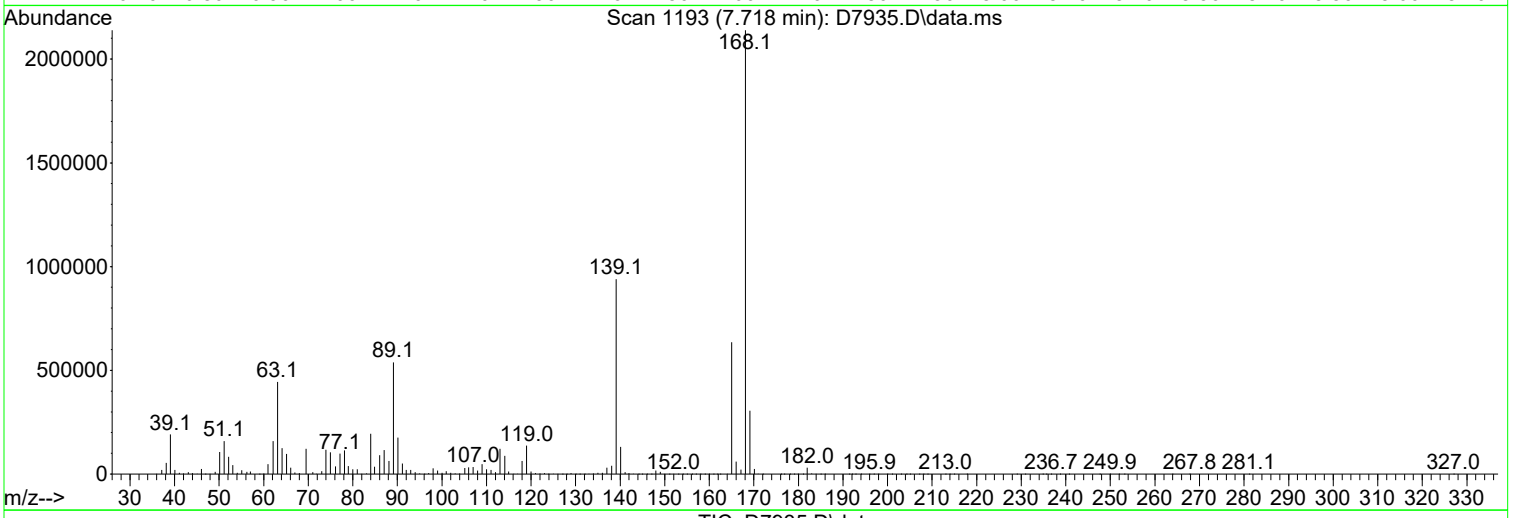
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
Operator : EDeGray
Sample : 80 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 15:17:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration





TIC: D7935.D\data.ms

(78) 2,4-Dinitrotoluene (TM)

7.718min (+ 0.006) 108.37 ppm m

response 557702

Ion	Exp%	Act%
165.00	100.00	100.00
63.10	55.10	70.03
89.10	81.70	84.86
0.00	0.00	0.00

Manual Integration:

After

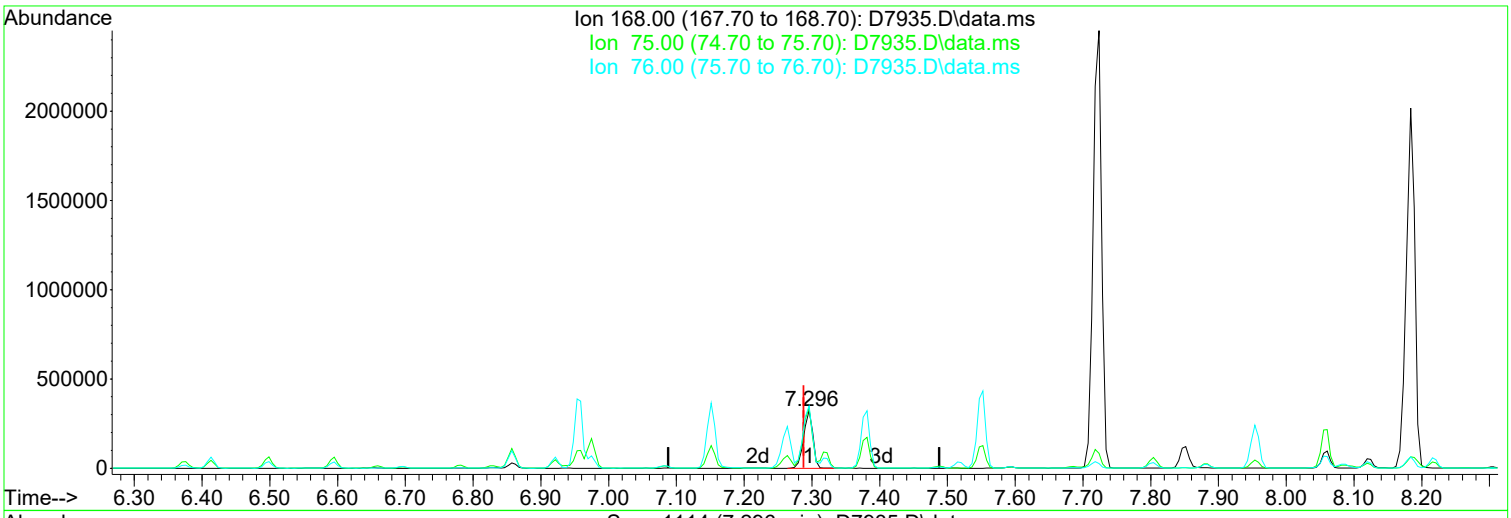
Poor integration.

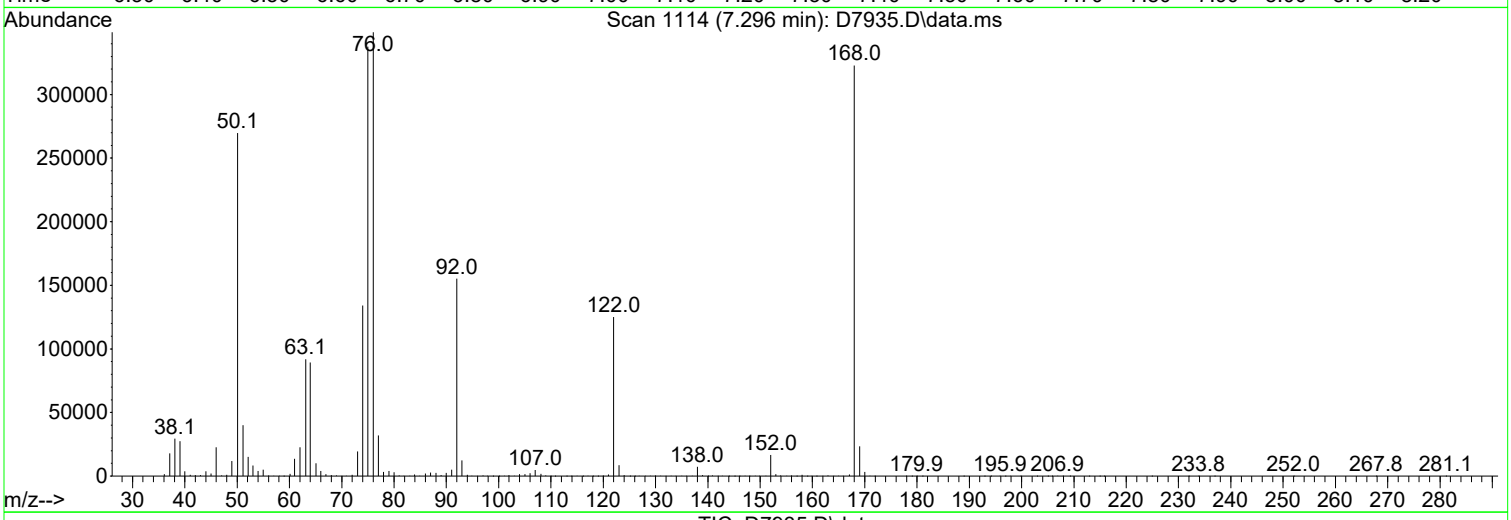
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
Operator : EDeGray
Sample : 80 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 15:17:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration





TIC: D7935.D\data.ms

(70) m-Dinitrobenzene (TM)

7.296min (+ 0.007) 109.43 ppm m

response 303095

Ion	Exp%	Act%
168.00	100.00	100.00
75.00	104.60	104.56
76.00	111.70	108.09
0.00	0.00	0.00

Manual Integration:

After

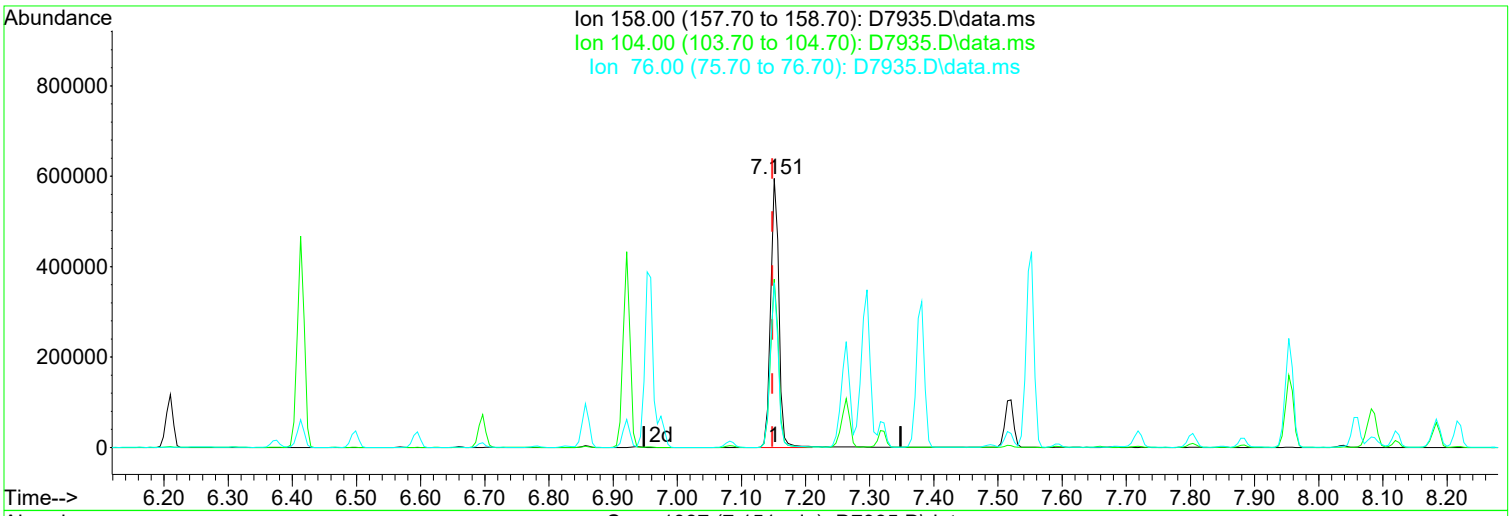
Poor integration.

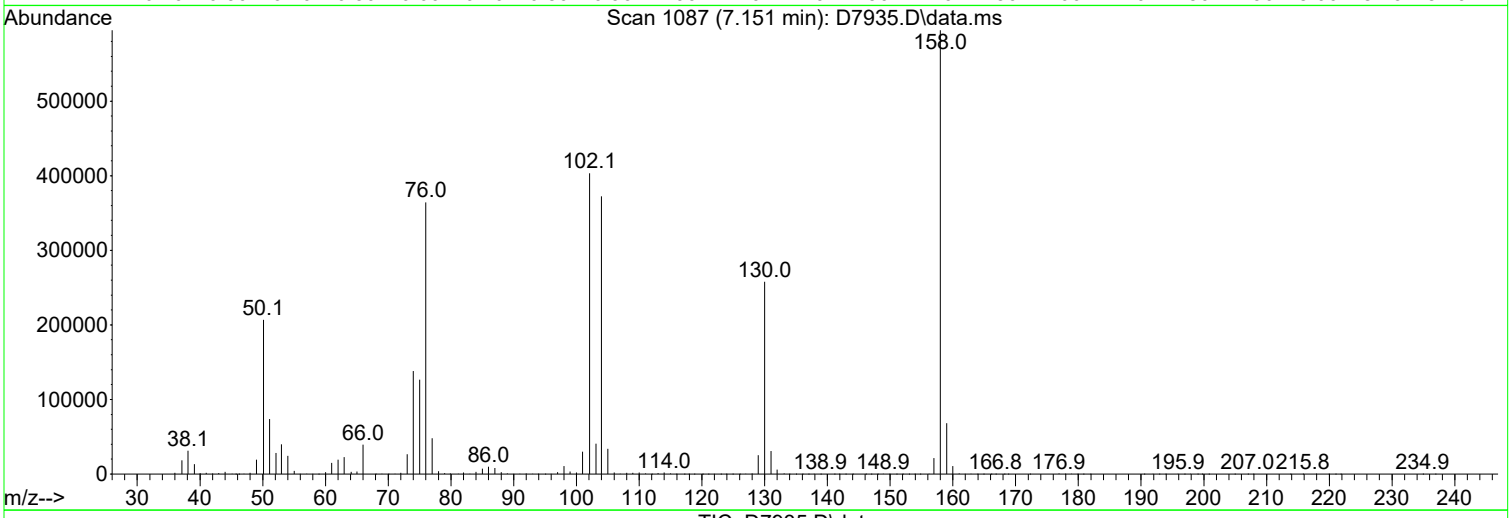
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
Operator : EDeGray
Sample : 80 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 15:17:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration





TIC: D7935.D\data.ms

(69) 1,4-Naphthoquinone (TM)

7.151min (+ 0.003) 85.91 ppm m

response 531541

Ion	Exp%	Act%
158.00	100.00	100.00
104.00	56.20	62.61
76.00	48.20	61.22
0.00	0.00	0.00

Manual Integration:

After

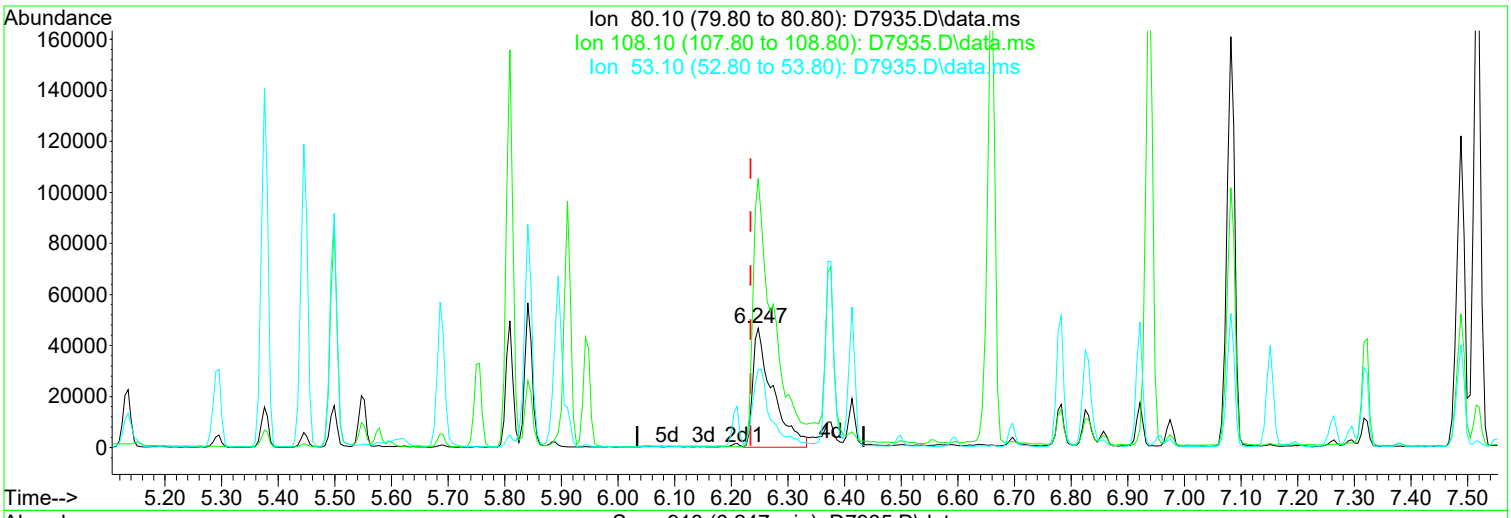
Poor integration.

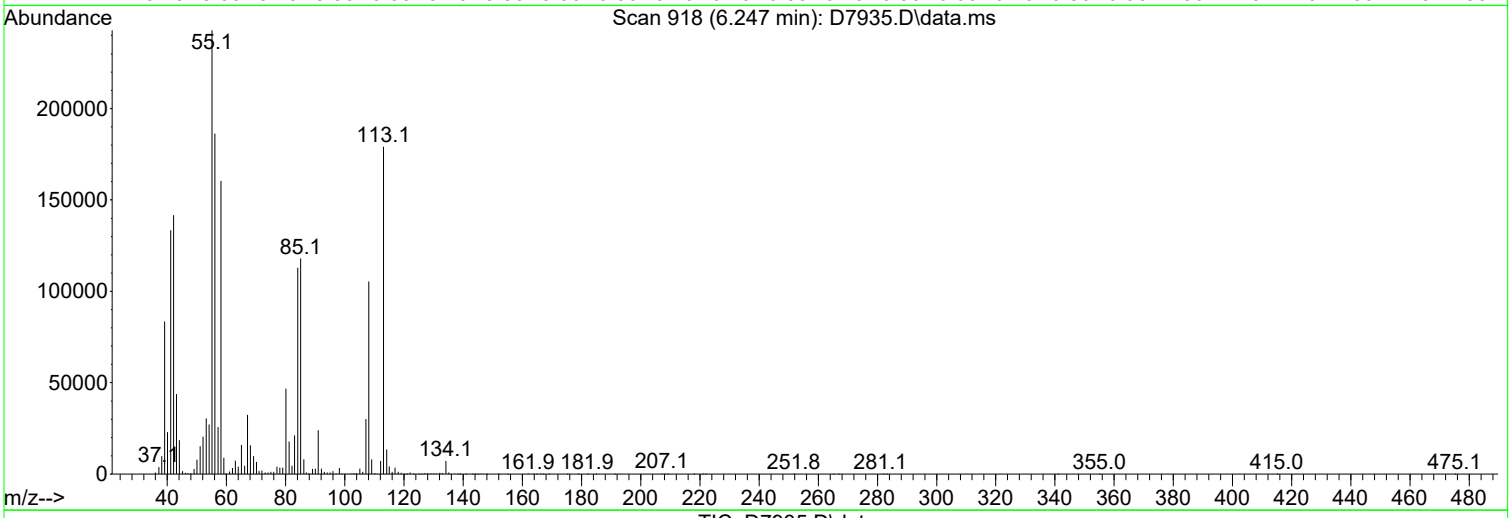
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
Operator : EDeGray
Sample : 80 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 15:17:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration





TIC: D7935.D\data.ms

(54) p-Phenylenediamine (TM)

6.247min (+ 0.013) 37.28 ppm m

response 114437

Ion	Exp%	Act%
80.10	100.00	100.00
108.10	221.90	225.29
53.10	38.10	65.05
0.00	0.00	0.00

Manual Integration:

After

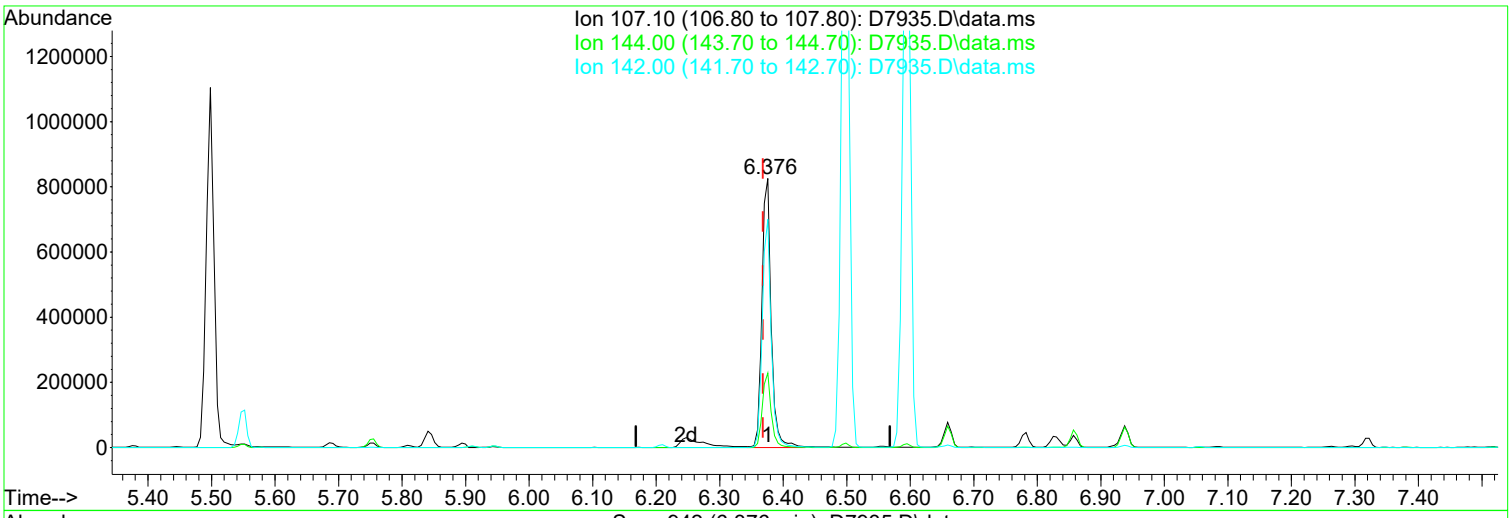
Poor integration.

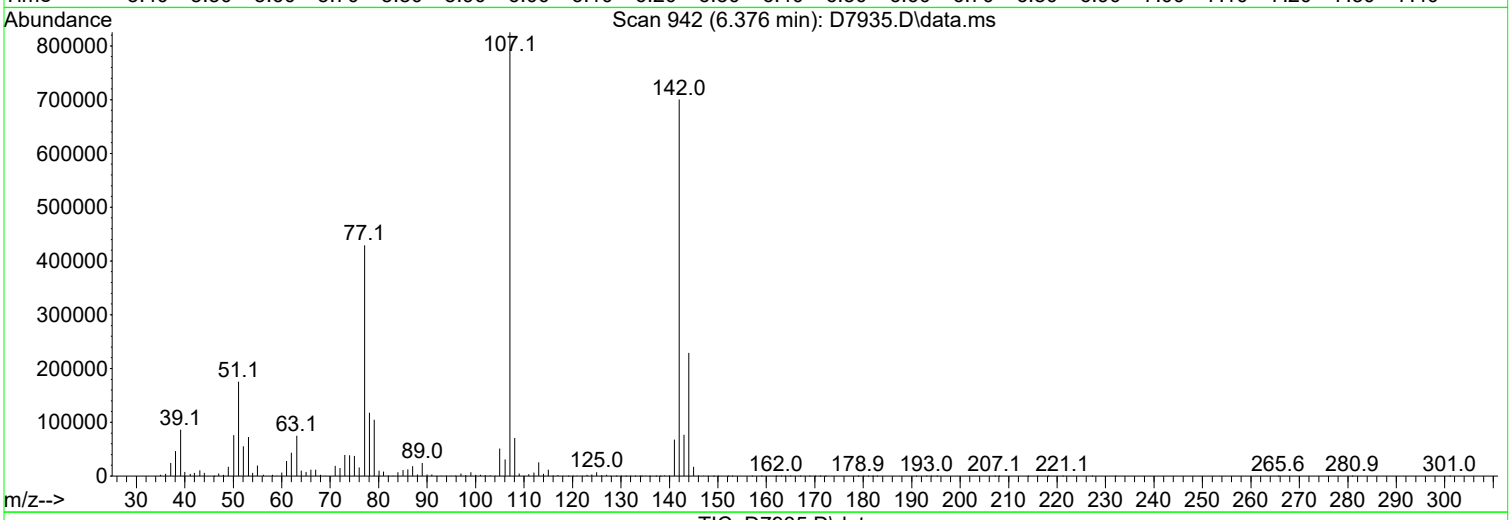
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
Operator : EDeGray
Sample : 80 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 15:17:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration





TIC: D7935.D\data.ms

(51) 4-Chloro-3-methylphenol (TMC)

6.376min (+ 0.007) 92.46 ppm m

response 830227

Ion	Exp%	Act%
107.10	100.00	100.00
144.00	27.70	27.75
142.00	85.90	84.86
0.00	0.00	0.00

Manual Integration:

After

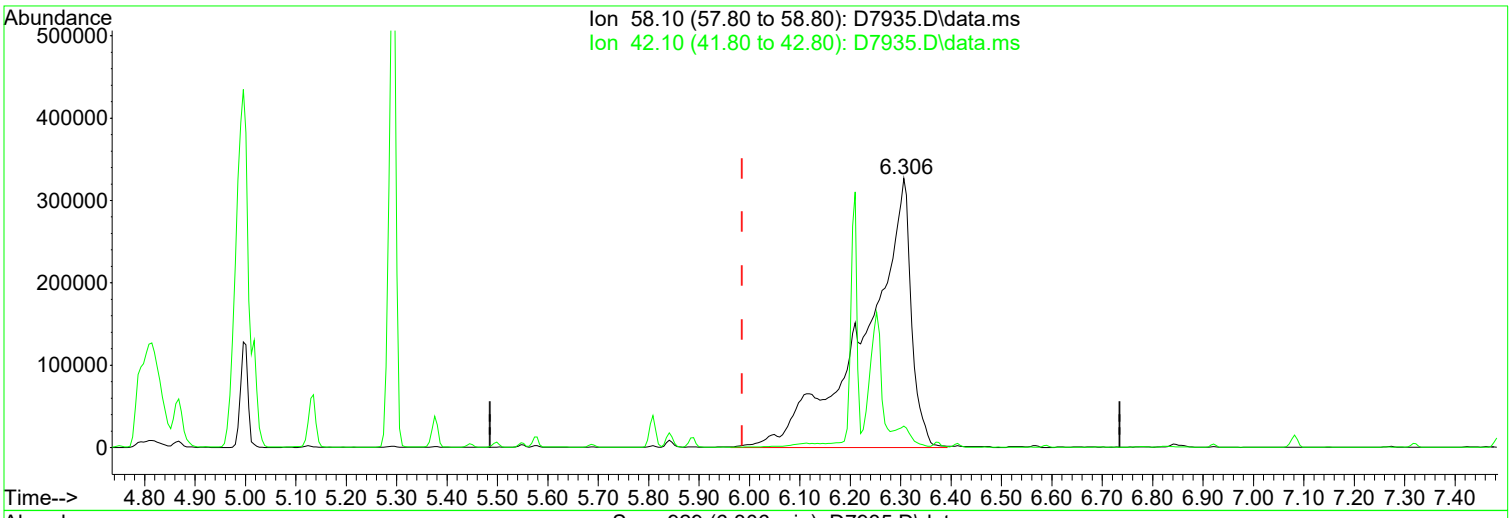
Poor integration.

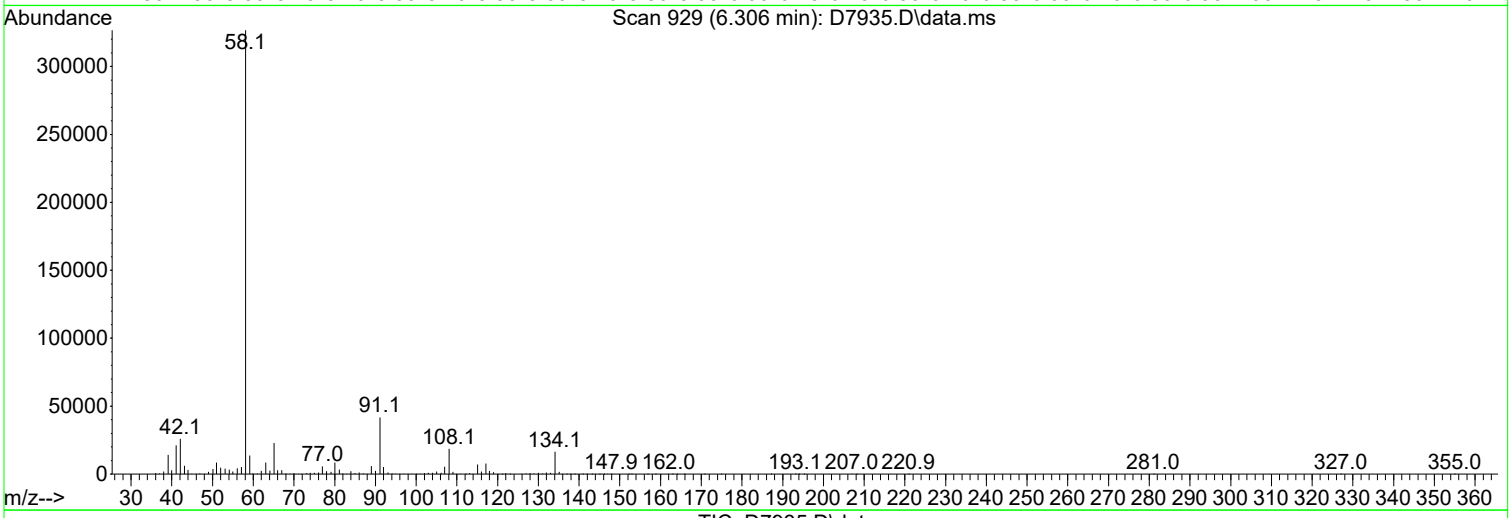
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
Operator : EDeGray
Sample : 80 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 15:17:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration





TIC: D7935.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

6.306min (+ 0.321) 81.37 ppm m

response 2077971

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.40	7.95
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

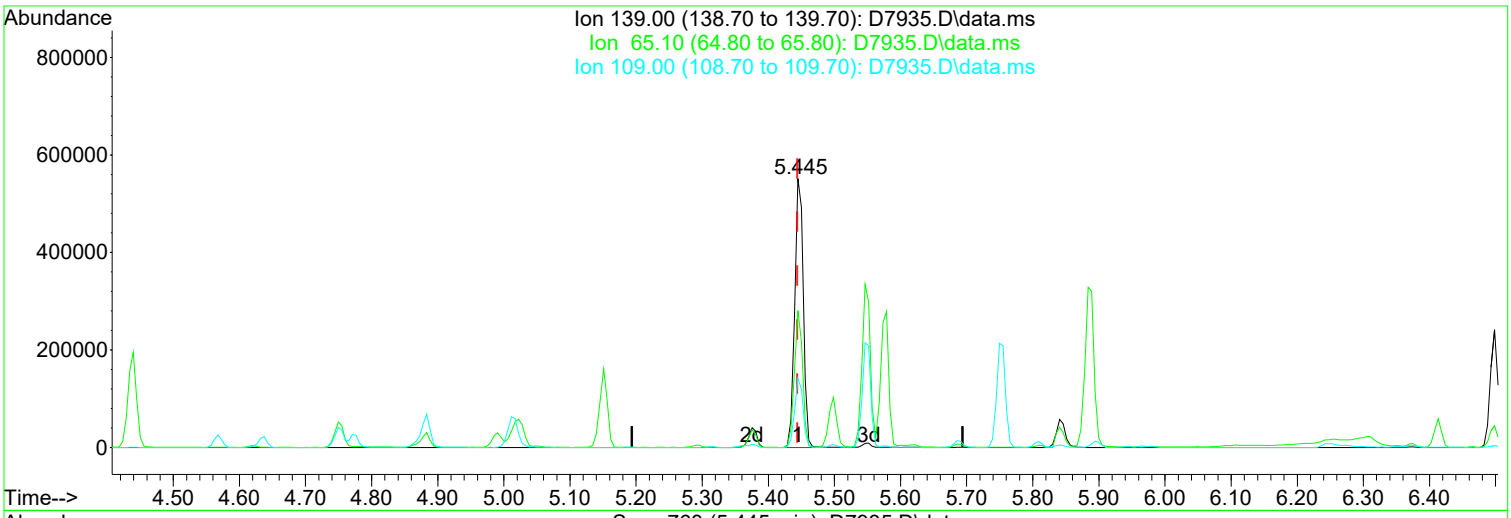
Poor integration.

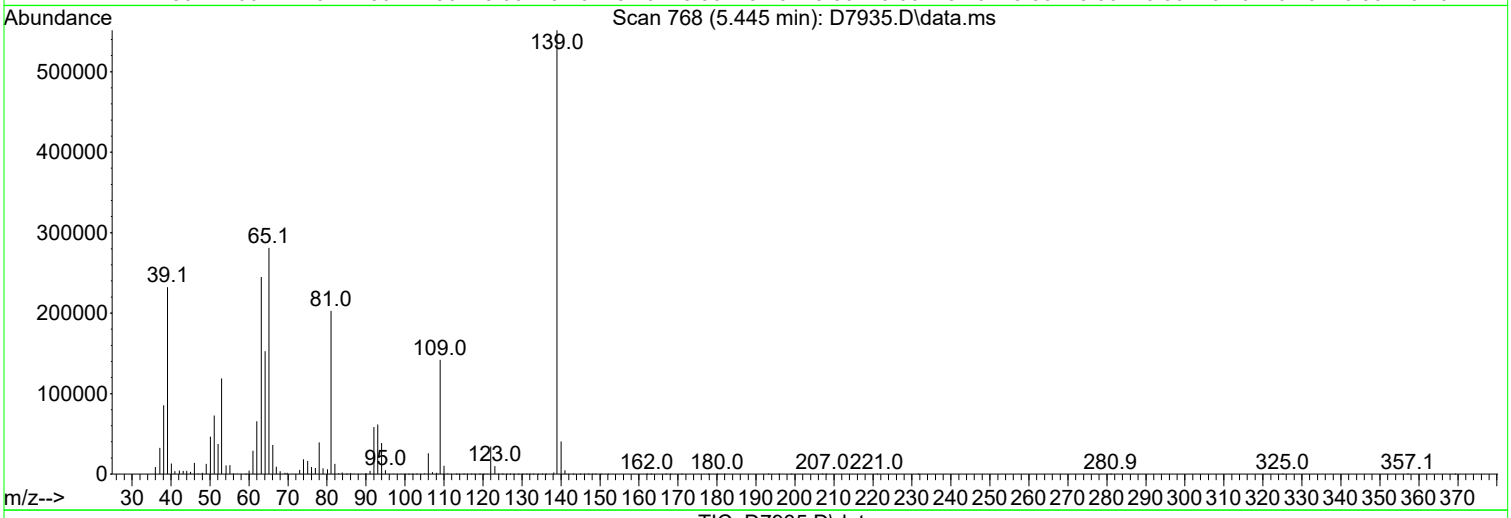
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
Operator : EDeGray
Sample : 80 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 15:17:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration





TIC: D7935.D\data.ms

(39) 2-Nitrophenol (TCM)

5.445min (+ 0.001) 104.76 ppm m

response 488294

Ion	Exp%	Act%
139.00	100.00	100.00
65.10	46.10	50.96
109.00	24.00	25.75
0.00	0.00	0.00

Manual Integration:

After

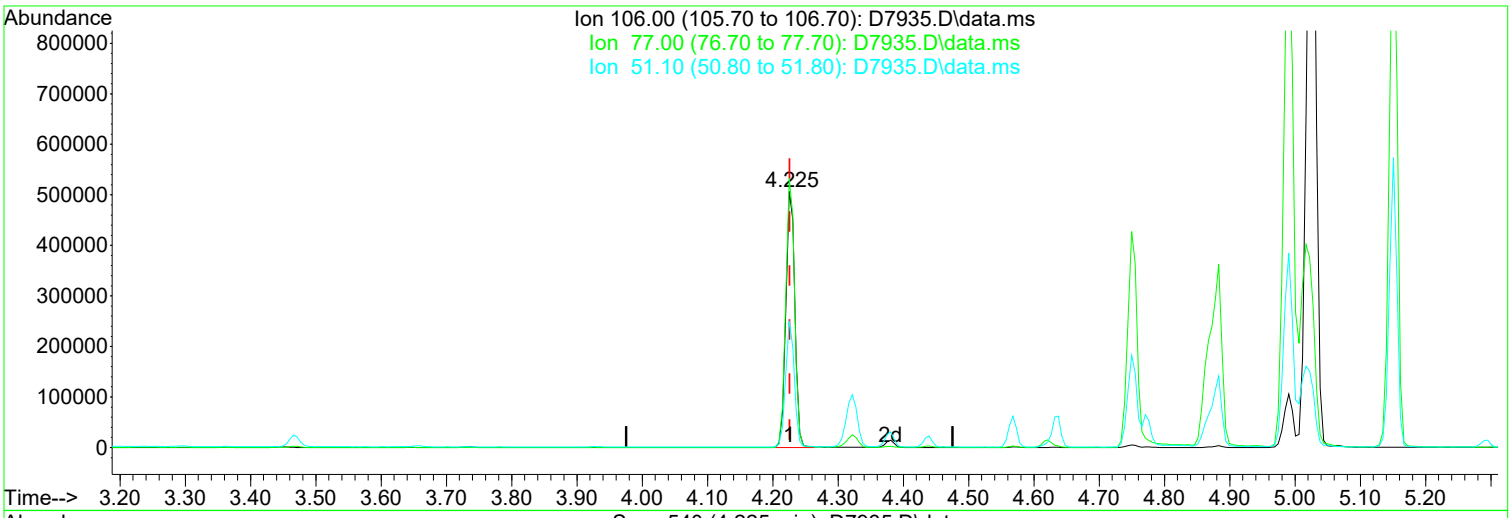
Poor integration.

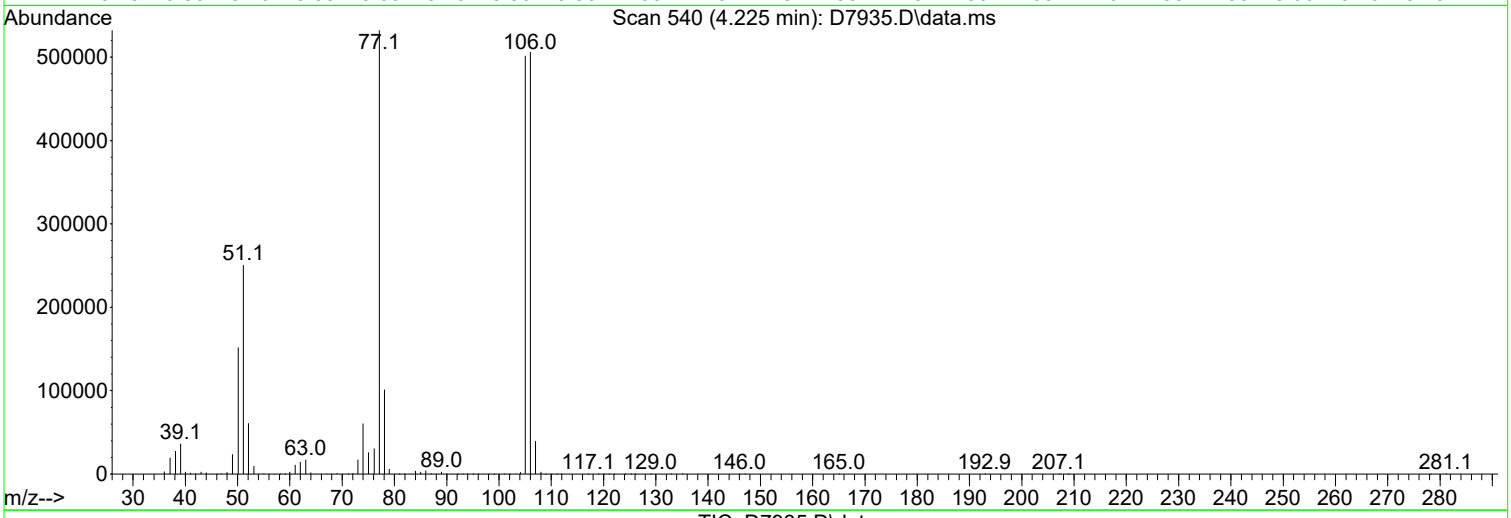
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
Operator : EDeGray
Sample : 80 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 15:17:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration





TIC: D7935.D\data.ms

(11) Benzaldehyde (TM)

4.225min (-0.001) 64.74 ppm m

response 485170

Ion	Exp%	Act%
106.00	100.00	100.00
77.00	104.00	105.12
51.10	49.10	49.52
0.00	0.00	0.00

Manual Integration:

After

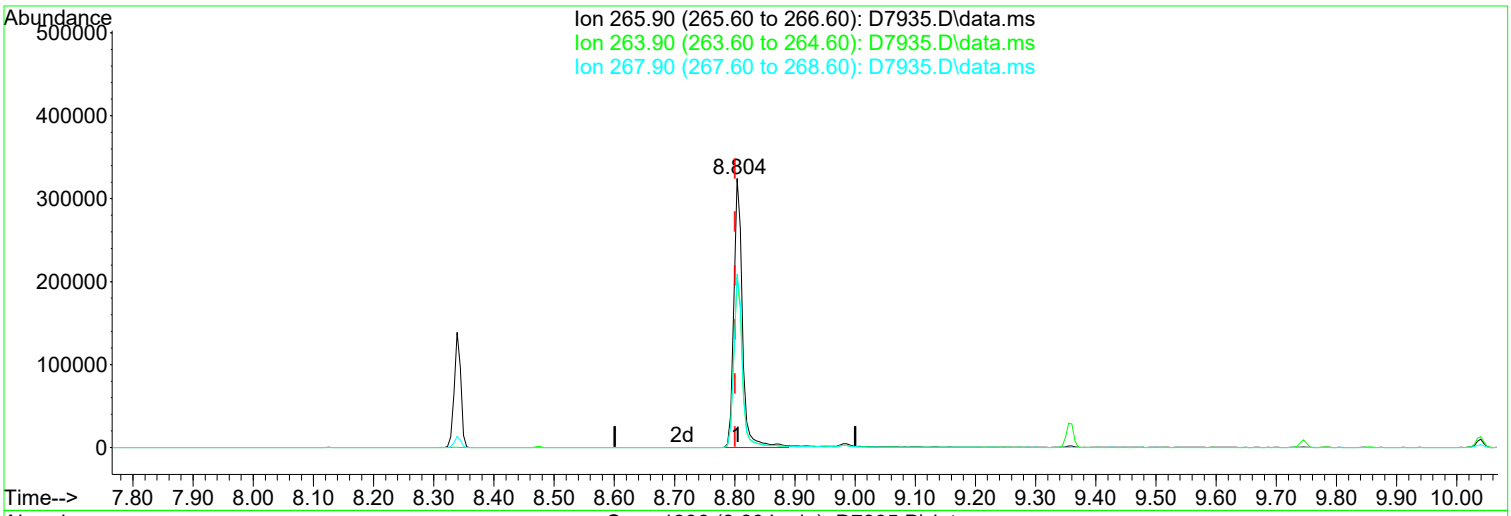
Poor integration.

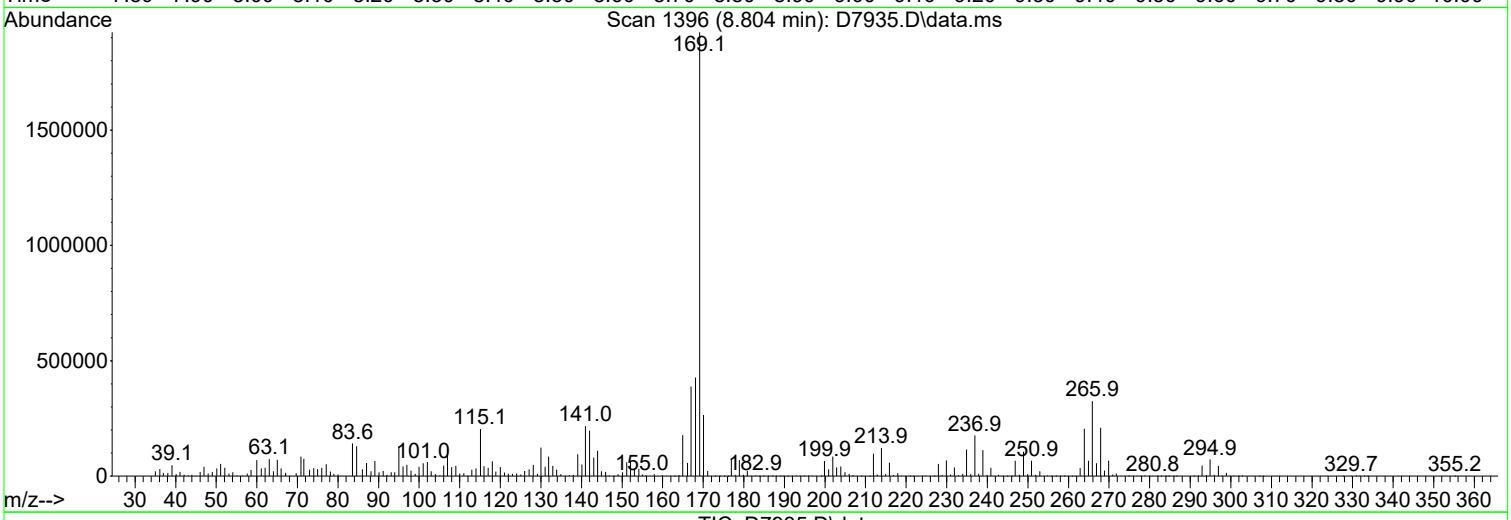
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
Operator : EDeGray
Sample : 80 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 15:17:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration





TIC: D7935.D\data.ms

(106) Pentachlorophenol (TCM)

8.804min (+ 0.003) 101.80 ppm m

response 325196

Ion	Exp%	Act%
265.90	100.00	100.00
263.90	65.40	63.33
267.90	62.60	64.59
0.00	0.00	0.00

Manual Integration:

After

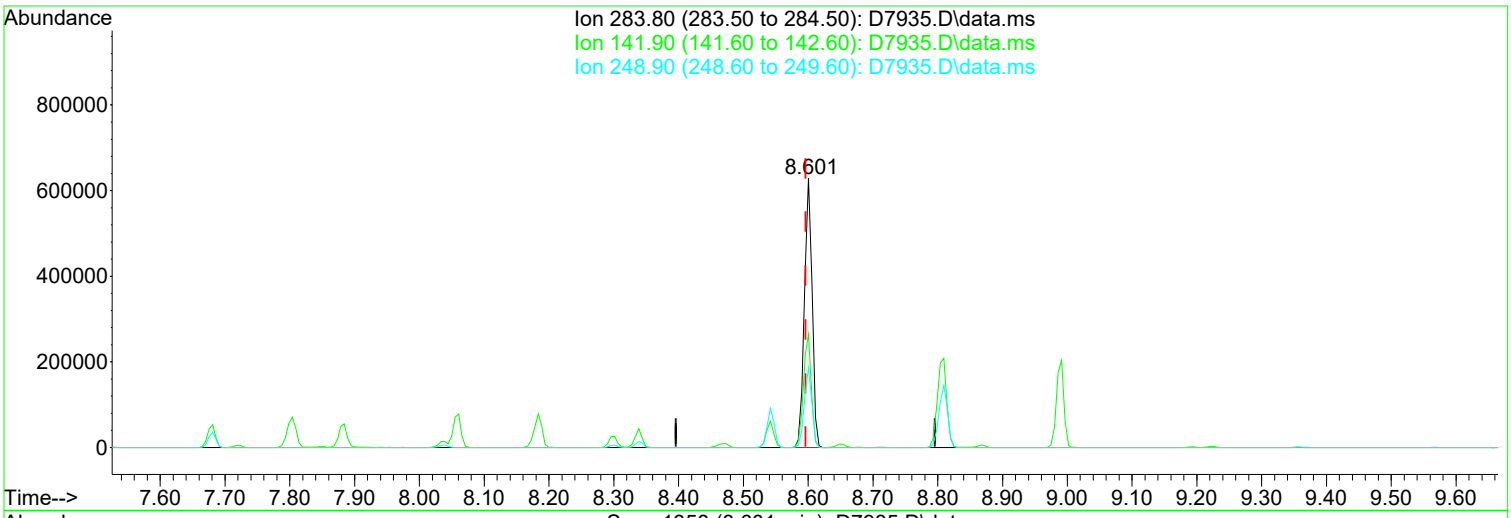
Poor integration.

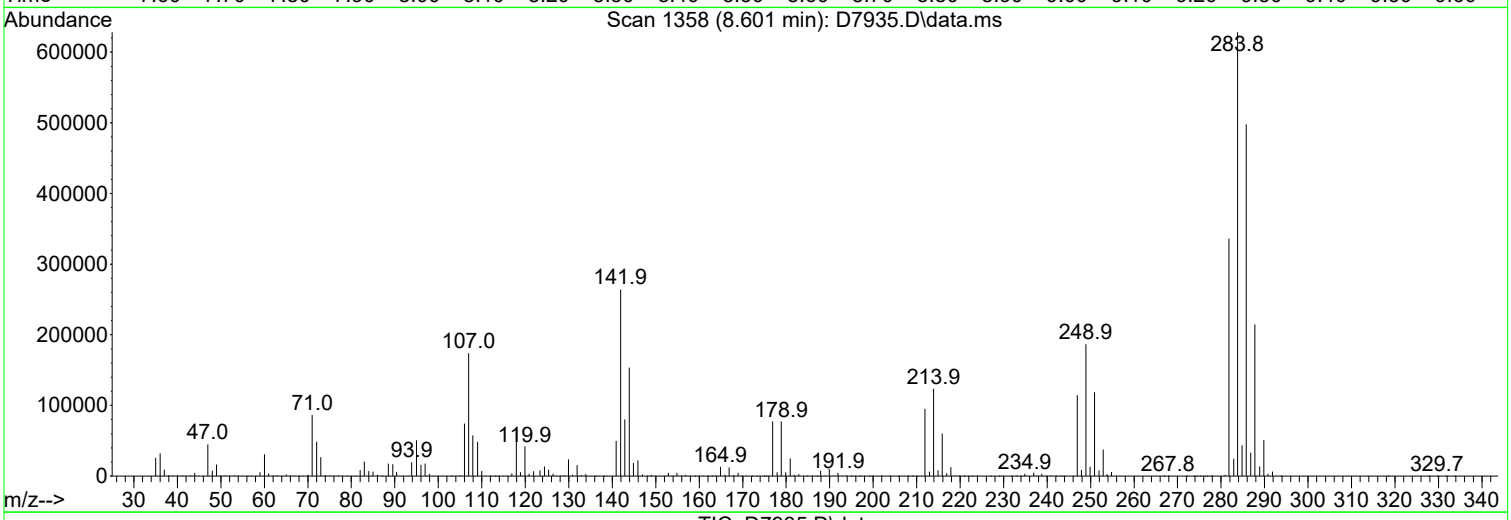
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7935.D
Acq On : 05 Aug 2024 02:55 pm
Operator : EDeGray
Sample : 80 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 15:17:58 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration





TIC: D7935.D\data.ms

(103) Hexachlorobenzene (TM)

8.601min (+ 0.004) 81.59 ppm m

response 529545

Ion	Exp%	Act%
283.80	100.00	100.00
141.90	38.30	42.06
248.90	28.40	29.69
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7934.D
Acq On : 05 Aug 2024 02:31 pm
Operator : EDeGray
Sample : 60 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 05 15:05:10 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.621	152	334840	40.00	ppm		0.00
34) d8-Naphthalene	5.809	136	1310740	40.00	ppm		0.00
58) d10-Acenaphthene	7.520	164	714667	40.00	ppm		0.00
92) d10-Phenanthrene	8.986	188	1201756	40.00	ppm		0.00
118) d12-Chrysene	12.152	240	1056610	40.00	ppm		0.02
136) d12-Perylene	14.955	264	1035334	40.00	ppm		0.01
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.466	112	648721	62.04	ppm		0.00
Spiked Amount 20.000	Range 10 - 70		Recovery = 310.20%#				
13) SURR2,PHENOL-D6	4.300	99	838628	61.50	ppm		0.00
Spiked Amount 20.000	Range 10 - 107		Recovery = 307.50%#				
35) SURR4,NITROBENZENE-D5	5.129	82	714704	62.66	ppm		0.00
Spiked Amount 10.000	Range 31 - 110		Recovery = 626.60%#				
64) SURR5,2-FLUOROBIPHENYL	6.857	172	1306883	58.60	ppm		0.00
Spiked Amount 10.000	Range 31 - 118		Recovery = 586.00%#				
89) SURR3,2,4,6-TRIBROMOPH...	8.301	330	182335	71.56	ppm		0.00
Spiked Amount 20.000	Range 35 - 141		Recovery = 357.80%#				
125) SURR6,TERPHENYL-D14	10.649	244	1333128	59.21	ppm		0.01
Spiked Amount 10.000	Range 10 - 165		Recovery = 592.10%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.674	88	274626	57.890	ppm		98
3) Pyridine	2.097	79	726744	59.223	ppm		98
4) N-Nitrosodimethylamine	2.054	74	475392	59.488	ppm		98
5) 2-Picoline	2.888	93	785765	60.614	ppm		98
6) N-Nitrosomethylamine	3.001	42	263666	60.700	ppm		99
7) Methyl Methansulfonate	3.295	80	374351	58.220	ppm		99
9) N-Nitrosodiethylamine	3.653	102	344209	61.154	ppm		95
10) Ethyl Mathanesulfonate	3.926	79	530066	58.675	ppm		97
11) Benzaldehyde	4.225	106	426904	52.927	ppm		98
12) Aniline	4.322	93	1044460	60.679	ppm		84
14) Phenol	4.316	94	967127	60.272	ppm		84
15) bis(2-Clethyl)Ether	4.375	93	698473	56.827	ppm		99
16) Pentachloroethane	4.364	117	240257	58.653	ppm		98
17) 2-Chlorophenol	4.434	128	706592	61.964	ppm		99
18) 1,3-Diclbenzene	4.568	146	714219	58.632	ppm		99
19) 1,4-Dichlorobenzene	4.637	146	734817	58.113	ppm		98
20) 1,2-Diclbenzene	4.771	146	688033	57.857	ppm		100
21) Benzyl Alcohol	4.750	79	532125	62.650	ppm		99
22) 1-Methyl-2-pyrrolidinone	4.782	99	451439	60.325	ppm		95
23) 2,2'-oxybis(1-Chloropr...	4.867	45	824805	55.168	ppm		88
24) 2-Methylphenol	4.873	108	627594	60.075	ppm		98
25) 3+4-Methylphenol	5.012	108	711571	62.014	ppm	#	79
26) Acetophenone	4.990	105	979539	58.232	ppm		98
27) N-Nitroso-Di-n-propyla...	4.996	70	552242	58.268	ppm		95
28) N-Nitrosopyrrolidine	4.980	100	378160	61.368	ppm		97
29) N-Nitrosomorpholine	5.012	56	440992	56.916	ppm		95
30) o-Toluidine	5.022	106	1137266m	61.538	ppm		
31) Hexachloroethane	5.087	117	299090	58.658	ppm		86
32) o,o,o-Triethylphosphor...	5.552	198	324217	59.097	ppm		93
33) Alpha-terpinol	5.841	121	271471	58.959	ppm		98
36) Nitrobenzene	5.151	77	713394	61.377	ppm		96
37) N-Nitrosopiperidine	5.290	42	445135	56.943	ppm		99
38) Isophorone	5.375	82	1335044	59.118	ppm		95

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7934.D
Acq On : 05 Aug 2024 02:31 pm
Operator : EDeGray
Sample : 60 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 05 15:05:10 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) 2-Nitrophenol	5.445	139	357656m	75.319	ppm	
40) Benzoic Acid	5.605	105	359226m	70.531	ppm	
41) 2,4-Dimethylphenol	5.493	107	711735	61.243	ppm	99
42) bis(-2-Chloroethoxy)Me...	5.573	93	788308	58.775	ppm	99
43) 2,4-Dichlorophenol	5.686	162	545765	66.151	ppm	99
44) a,a-Dimethylphenethyla...	6.242	58	1567612m	58.269	ppm	
45) 1,2,4-Trichlorobenzene	5.755	180	549571	58.965	ppm	99
46) Naphthalene	5.830	128	1880060	57.004	ppm	99
47) 4-Chloroaniline	5.883	127	781071	61.119	ppm	99
48) 2,6-Dichlorophenol	5.894	162	516737	64.007	ppm	98
49) Hexachlorobutadiene	5.948	225	308455	58.029	ppm	99
50) Hexachloropropene	5.910	213	348215	66.163	ppm	100
51) 4-Chloro-3-methylphenol	6.370	107	614003	65.834	ppm	96
52) N-N-di-n-butylamine	6.204	84	629065m	60.797	ppm	
53) Caprolactam	6.242	113	239536	62.112	ppm	98
54) p-Phenylenediamine	6.242	80	121048m	36.416	ppm	
55) Safrole	6.413	162	462320	59.615	ppm	97
56) 2-Methylnaphthalene	6.499	142	1279218	59.044	ppm	100
57) 1-Methylnaphthalene	6.595	142	1185073	58.367	ppm	99
59) Hexachlorocyclopentadiene	6.648	237	238893	78.422	ppm	97
60) 1,2,4,5-Tetrachloroben...	6.659	216	518795	58.447	ppm	99
61) 1,2,3,4-Tetrachloroben...	6.937	216	519794	58.825	ppm	97
62) 2,4,6-Trichlorophenol	6.782	196	365885	71.827	ppm	99
63) 2,4,5-Trichlorophenol	6.830	196	385177	71.620	ppm	99
65) Isosafrole	6.921	104	233526	58.897	ppm	97
66) 1,1'-Biphenyl	6.959	154	1525135	57.967	ppm	100
67) 2-Chloronaphthalene	6.975	162	1126579	58.603	ppm	97
68) 2-Nitroaniline	7.082	65	389014	68.585	ppm	99
69) 1,4-Naphthoquinone	7.151	158	412982	64.492	ppm	93
70) m-Dinitrobenzene	7.295	168	219066	79.166	ppm	87
71) Acenaphthylene	7.381	152	1697745	59.738	ppm	99
72) Dimethyl phthalate	7.263	163	1299271	58.823	ppm	100
73) 2,6-Dinitrotoluene	7.322	165	310764	72.611	ppm	87
74) Acenaphthene	7.552	153	1167293	57.911	ppm	99
75) 3-Nitroaniline	7.488	138	356171	69.213	ppm	96
76) 2,4-Dinitrophenol	7.595	184	116452m	83.029	ppm	
77) Dibenzofuran	7.723	168	1603874	58.818	ppm	97
78) 2,4-Dinitrotoluene	7.718	165	405460	78.294	ppm	94
79) 4-Nitrophenol	7.686	65	305957m	71.839	ppm	
80) Pentachlorobenzene	7.681	250	466270	57.716	ppm	99
81) 1-Napthylamine	7.804	143	862850	57.146	ppm	100
82) 2-Napthylamine	7.884	143	750461	56.696	ppm	100
83) 2,3,4,6-Tetrachlorophenol	7.852	232	263365	75.048	ppm	98
84) Fluorene	8.060	166	1348343	59.479	ppm	99
85) 4-Chlorophenyl-phenyle...	8.060	204	631096	59.889	ppm	97
86) Diethylphthalate	7.953	149	1316128	59.008	ppm	99
87) 4-Nitroaniline	8.092	138	368303	66.218	ppm	96
88) 5-Nitro-o-toluidine	8.082	152	406900	70.108	ppm	97
90) Sulfotepp	8.344	322	225234	63.414	ppm	88
91) Octachlorocyclopentene	8.306	307	142944	70.941	ppm	99
93) Thionazin	8.039	107	240638	61.328	ppm	97
94) 4,6-Dinitro-2-methylph...	8.119	198	195213m	79.128	ppm	
95) Diphenylamine	8.183	169	2040162	116.689	ppm	100
96) 1,2 Diphenylhydrazine	8.221	77	1499200	58.803	ppm	93
97) N-Nitrosodiphenylamine	8.183	169	2040909	116.710	ppm	100
98) 1,3,5-Trinirobenzene	8.467	213	140549m	99.402	ppm	

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7934.D
Acq On : 05 Aug 2024 02:31 pm
Operator : EDeGray
Sample : 60 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 05 15:05:10 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
99)	Diallate	8.467	86	523793	55.511	ppm		79
100)	Phorate	8.472	121	285626	62.466	ppm	#	66
101)	Phenacetin	8.504	108	745971	69.344	ppm		97
102)	4-Bromophenyl-phenylether	8.547	248	349635	60.073	ppm		95
103)	Hexachlorobenzene	8.601	284	391037m	58.590	ppm		
104)	Dimethoate	8.649	87	430372	59.810	ppm		98
105)	Atrazine	8.718	215	139138m	49.991	ppm		
106)	Pentachlorophenol	8.809	266	226117	71.739	ppm		97
107)	4-Aminobiphenyl	8.804	169	1219107	68.623	ppm		99
108)	Pentachloronitrobenzene	8.809	237	160236	68.888	ppm		95
109)	Pronamide	8.868	173	636917	64.129	ppm		99
110)	Dinoseb	8.986	211	284686	81.319	ppm		98
111)	Disulfoton	8.991	88	764337	52.499	ppm		94
112)	Phenanthrene	9.012	178	1794891	58.020	ppm		99
113)	Anthracene	9.061	178	1788901	59.488	ppm		99
114)	Carbazole	9.226	167	1769064	66.118	ppm		99
115)	Di-n-butylphthalate	9.569	149	2296080	63.563	ppm		98
116)	4-Nitroquinonline-1-oxide	9.783	190	137957m	70.317	ppm		
117)	Fluoranthene	10.205	202	1923678	62.284	ppm		98
119)	Methyl Parathion	9.360	109	352423	68.574	ppm		96
120)	Ethyl Parathion	9.745	97	311201	75.530	ppm		95
121)	Methapyrilene	9.857	58	747331	54.220	ppm		98
122)	Isodrin	10.039	193	194588	53.662	ppm		98
123)	Benzidine	10.360	184	771211	66.795	ppm		99
124)	Pyrene	10.462	202	1999007	57.351	ppm		99
126)	Aramite	10.724	185	124786m	65.724	ppm		
127)	p-(Dimethylamino)azobe...	10.820	120	657017	64.601	ppm		97
128)	Chlorobenzilate	10.884	139	763470	65.819	ppm		99
129)	Butyl benzyl phthalate	11.302	149	1055885	61.620	ppm		99
130)	3,3-Dimethylbenzidine	11.275	212	995325	64.719	ppm		97
131)	2-Acetylaminofluorene	11.655	181	811090	77.926	ppm		98
132)	3,3'-Dichlorobenzidine	12.109	252	674346	77.103	ppm		99
133)	Benzo(a)anthracene	12.136	228	1848608	58.538	ppm		99
134)	Chrysene	12.195	228	1724244	59.057	ppm		98
135)	bis(2-Ethylhexyl)phtha...	12.248	149	1419578	59.655	ppm		99
137)	Di-n-octyl phthalate	13.521	149	2306007	64.531	ppm		99
138)	7,12-Dimethylbenz(a)an...	14.168	256	891840	62.795	ppm		98
139)	Benzo(b)Fluoranthene	14.174	252	1793336	62.889	ppm		99
140)	Benzo(k)fluoranthene	14.227	252	1712832	63.503	ppm		99
141)	Benzo(a)pyrene	14.837	252	1499955	64.024	ppm		99
142)	3-Methylcholanthrene	15.629	268	889771	63.941	ppm		99
143)	Indeno(1,2,3-cd)Pyrene	16.955	276	1305127	65.448	ppm		100
144)	Dibenz(a,h)anthracene	17.009	278	1351678	67.277	ppm		100
145)	Benzo(g,h,i)perylene	17.383	276	1338995	61.396	ppm		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

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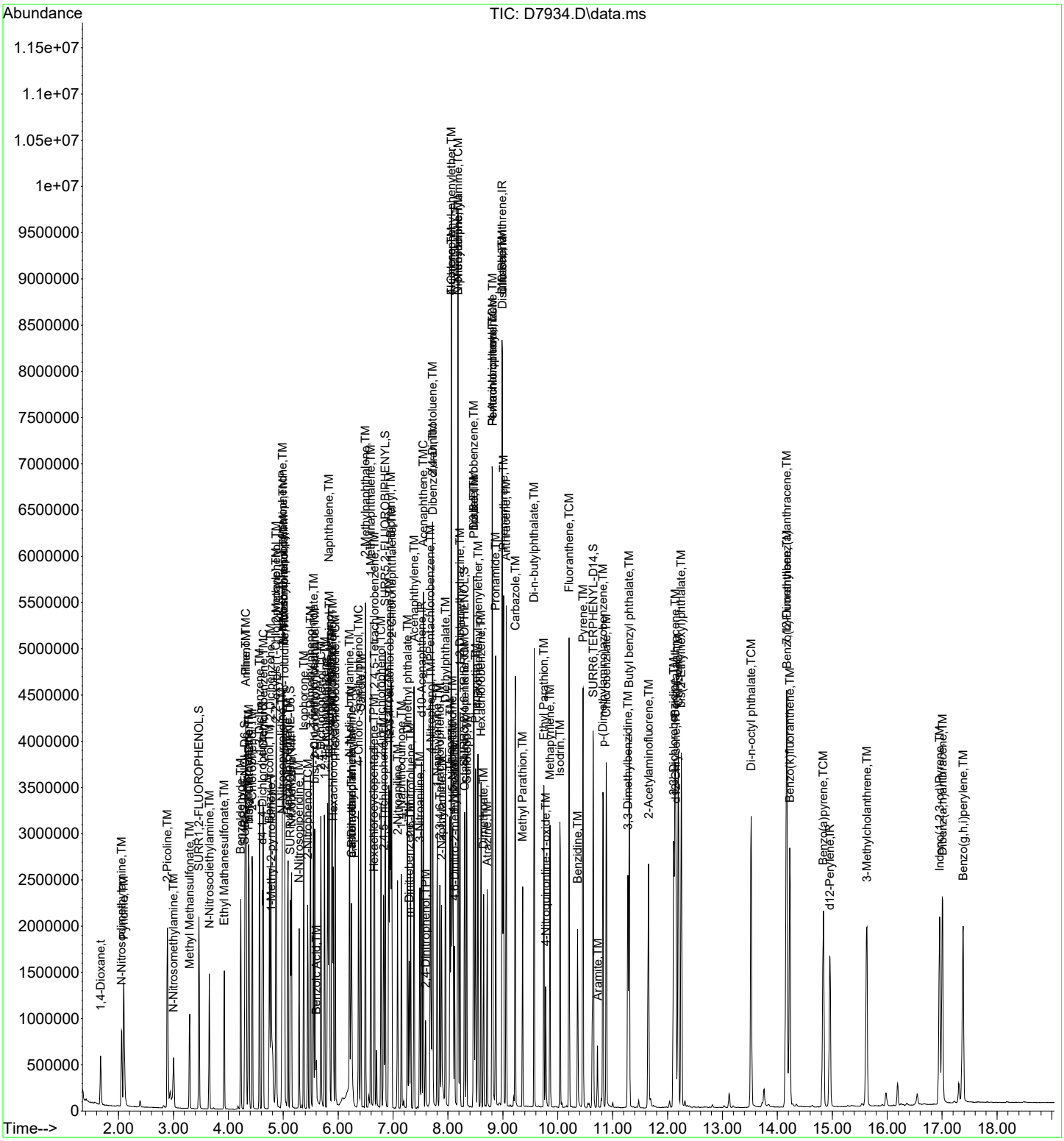
Data File : D7934.D
Acq On : 05 Aug 2024 02:31 pm
Operator : EDeGray
Sample : 60 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 05 15:05:10 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7934.D
Acq On : 05 Aug 2024 02:31 pm
Operator : EDeGray
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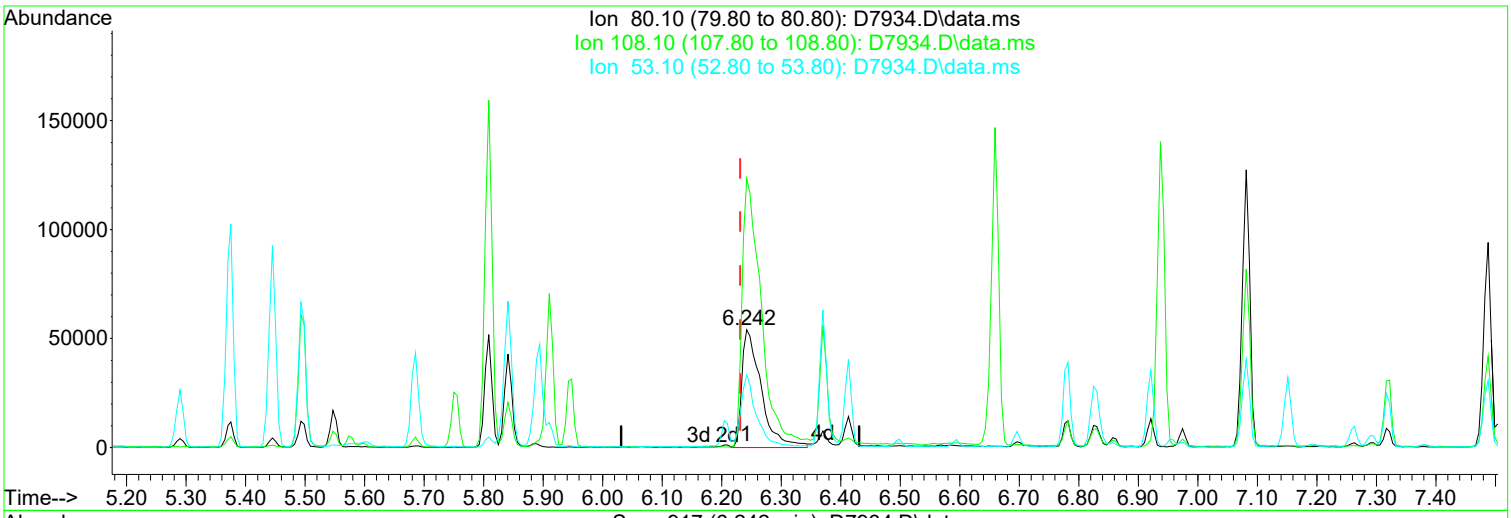

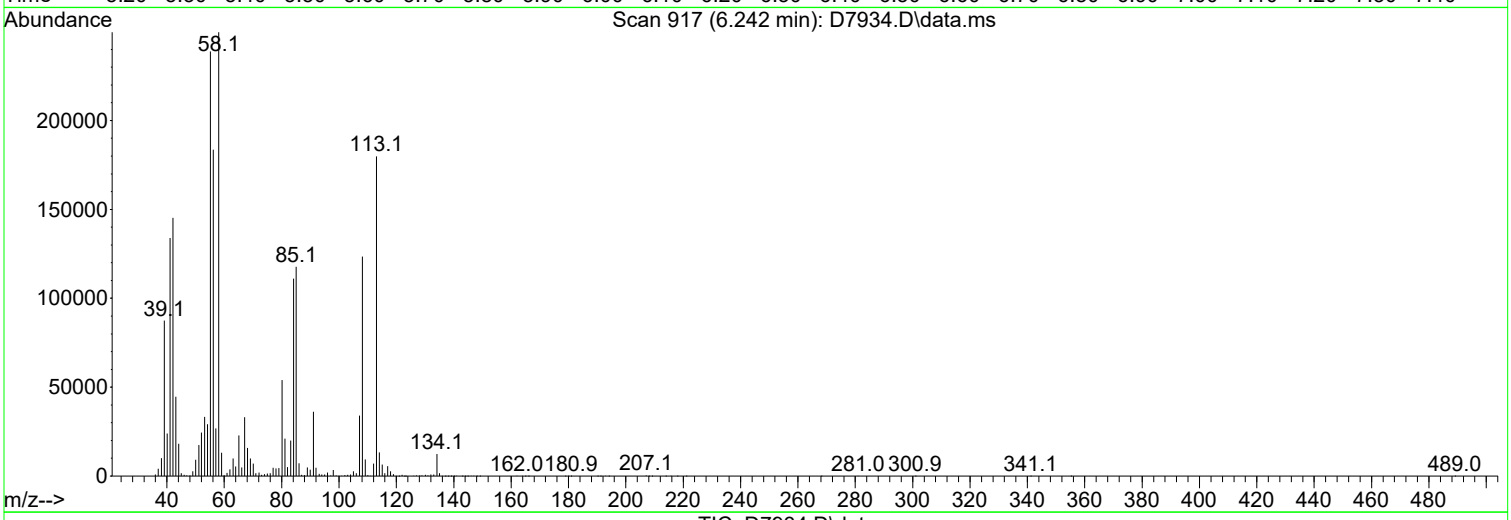

TIC: D7934.D\data.ms

(54) p-Phenylenediamine (TM)

6.242min (+ 0.010) 36.42 ppm m

response 121048

Ion	Exp%	Act%
80.10	100.00	100.00
108.10	221.90	228.49
53.10	38.10	61.71
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7934.D
Acq On : 05 Aug 2024 02:31 pm
Operator : EDeGray
Sample : 60 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 05 15:05:10 2024
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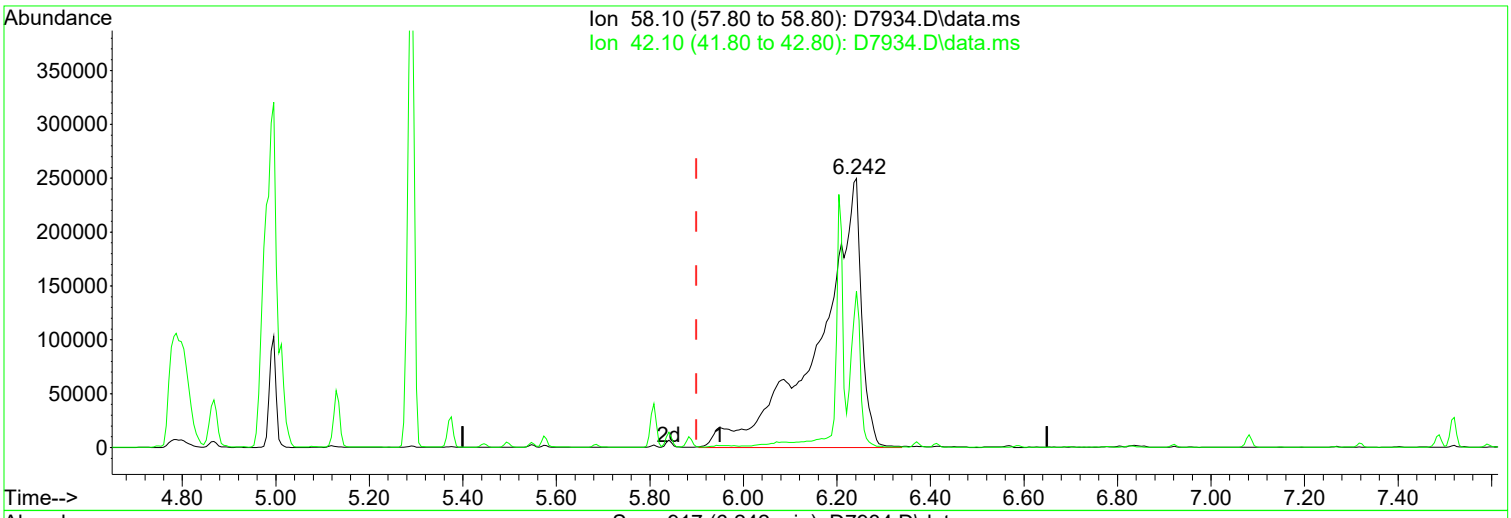
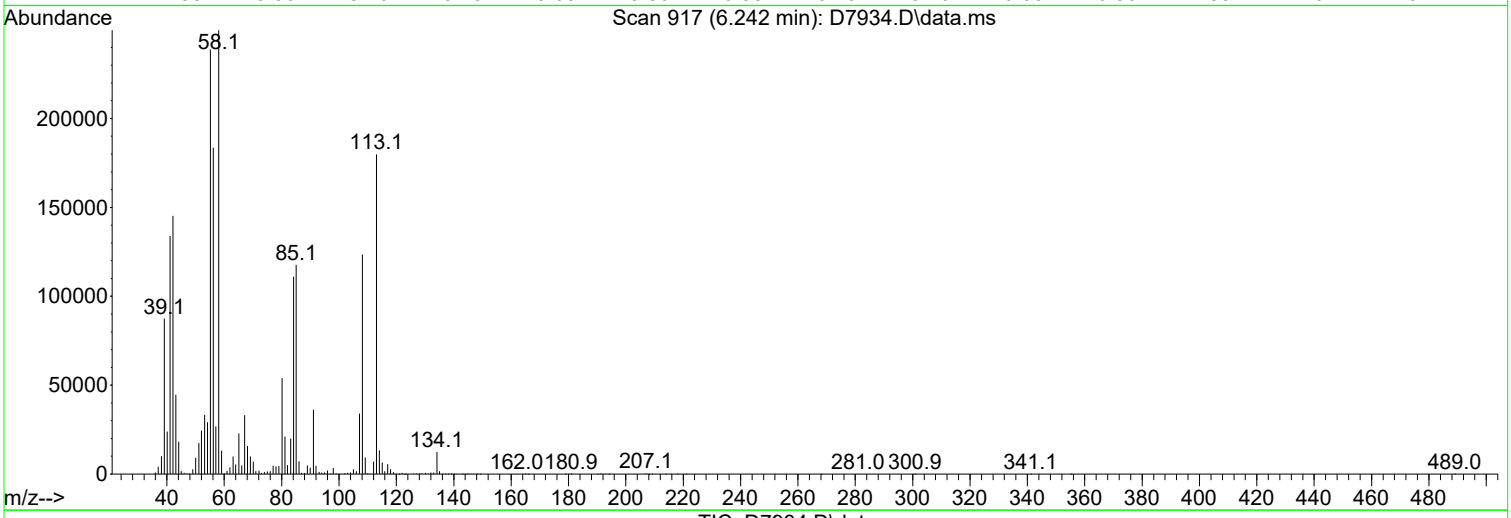
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration





TIC: D7934.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

6.242min (+ 0.342) 58.27 ppm m

response 1567612

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.40	58.22#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

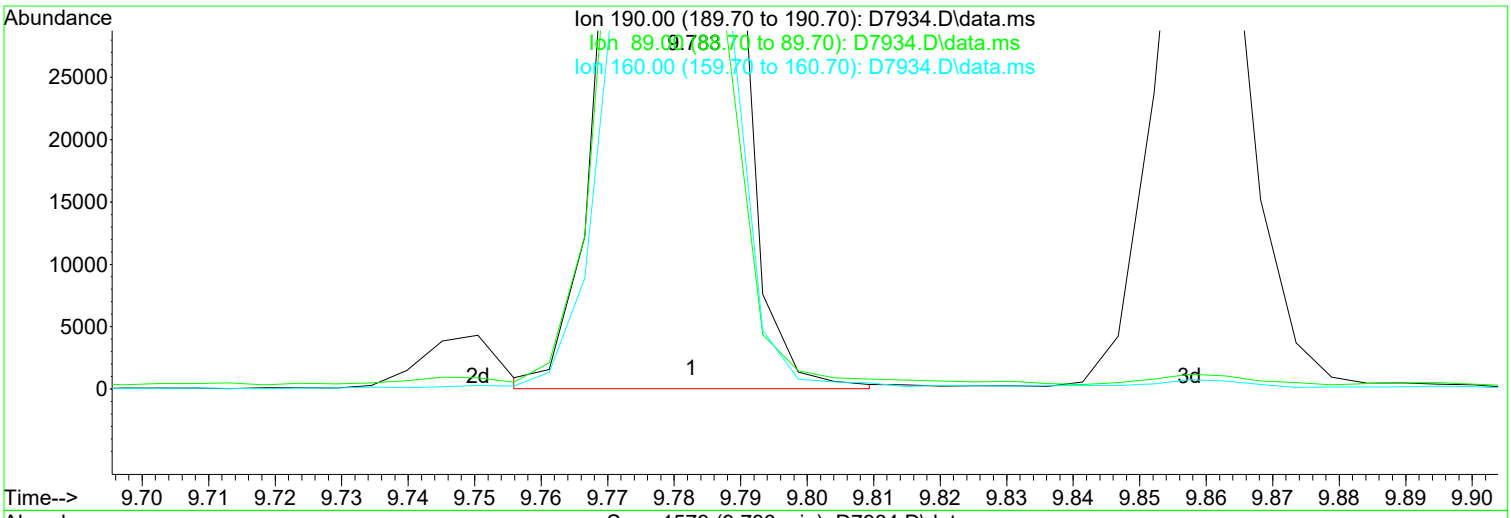
Poor integration.

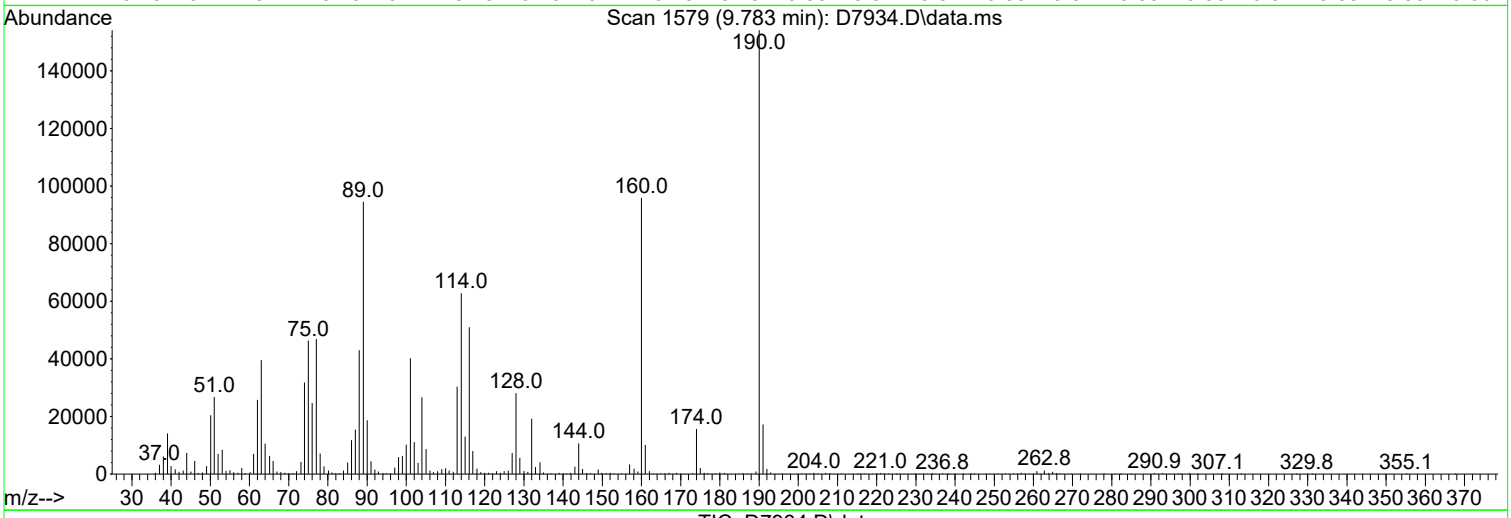
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7934.D
Acq On : 05 Aug 2024 02:31 pm
Operator : EDeGray
Sample : 60 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 05 15:05:10 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 05 14:37:36 2024
Response via : Initial Calibration





TIC: D7934.D\data.ms

(116) 4-Nitroquinonline-1-oxide (TM)

9.783min (+ 0.014) 70.32 ppm m

response 137957

Ion	Exp%	Act%
190.00	100.00	100.00
89.00	77.40	61.35
160.00	62.80	62.25
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7933.D
Acq On : 05 Aug 2024 11:42 am
Operator : EDeGray
Sample : 40 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 05 12:29:00 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.621	152	342771	40.00	ppm		-0.04
34) d8-Naphthalene	5.809	136	1362564	40.00	ppm		-0.03
58) d10-Acenaphthene	7.515	164	751959	40.00	ppm		-0.04
92) d10-Phenanthrene	8.980	188	1280239	40.00	ppm		-0.04
118) d12-Chrysene	12.141	240	1139899	40.00	ppm		-0.06
136) d12-Perylene	14.944	264	1128218	40.00	ppm		-0.08
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.466	112	419019	32.17	ppm		-0.03
Spiked Amount 20.000	Range 10 - 70		Recovery = 160.85%#				
13) SURR2,PHENOL-D6	4.300	99	554888	32.59	ppm		-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery = 162.95%#				
35) SURR4,NITROBENZENE-D5	5.129	82	474649	36.37	ppm		-0.03
Spiked Amount 10.000	Range 31 - 110		Recovery = 363.70%#				
64) SURR5,2-FLUOROBIPHENYL	6.857	172	892956	36.66	ppm		-0.04
Spiked Amount 10.000	Range 31 - 118		Recovery = 366.60%#				
89) SURR3,2,4,6-TRIBROMOPH...	8.296	330	117142	36.61	ppm		-0.04
Spiked Amount 20.000	Range 35 - 141		Recovery = 183.05%#				
125) SURR6,TERPHENYL-D14	10.638	244	914251	35.66	ppm		-0.05
Spiked Amount 10.000	Range 10 - 165		Recovery = 356.60%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.685	88	179960	33.735	ppm		96
3) Pyridine	2.102	79	478700	35.360	ppm		97
4) N-Nitrosodimethylamine	2.065	74	309198	33.322	ppm		98
5) 2-Picoline	2.894	93	516387	34.437	ppm		97
6) N-Nitrosomethylamine	3.006	42	170718m	43.819	ppm		
7) Methyl Methansulfonate	3.295	80	248340	42.274	ppm		98
9) N-Nitrosodiethylamine	3.653	102	225042	31.905	ppm		96
10) Ethyl Mathanesulfonate	3.926	79	349194	34.644	ppm		97
11) Benzaldehyde	4.225	106	321602	34.743	ppm		96
12) Aniline	4.322	93	696670	33.088	ppm		72
14) Phenol	4.316	94	640637	34.464	ppm		65
15) bis(2-Clethyl)Ether	4.375	93	467307	33.739	ppm		93
16) Pentachloroethane	4.365	117	159627	34.587	ppm		97
17) 2-Chlorophenol	4.434	128	461734m	32.712	ppm		
18) 1,3-Diclbenzene	4.568	146	476548	34.550	ppm		99
19) 1,4-Dichlorobenzene	4.637	146	489539	34.736	ppm		99
20) 1,2-Diclbenzene	4.771	146	464198	34.912	ppm		98
21) Benzyl Alcohol	4.744	79	352239	31.982	ppm		96
22) 1-Methyl-2-pyrrolidinone	4.771	99	303739	30.308	ppm		98
23) 2,2'-oxybis(1-Chloropr...	4.867	45	571254	38.428	ppm	#	63
24) 2-Methylphenol	4.867	108	421288	32.171	ppm		93
25) 3+4-Methylphenol	5.006	108	480828	36.344	ppm		93
26) Acetophenone	4.985	105	661663	35.954	ppm		95
27) N-Nitroso-Di-n-propyla...	4.990	70	377860	36.896	ppm		96
28) N-Nitrosopyrrolidine	4.974	100	251056	32.183	ppm		98
29) N-Nitrosomorpholine	5.006	56	302244	39.251	ppm		99
30) o-Toluidine	5.022	106	776833m	37.326	ppm		
31) Hexachloroethane	5.087	117	200541	35.334	ppm		99
32) o,o,o-Triethylphosphor...	5.547	198	215221	38.557	ppm		96
33) Alpha-terpinol	5.841	121	186884m	46.931	ppm		
36) Nitrobenzene	5.145	77	480314	37.183	ppm		94
37) N-Nitrosopiperidine	5.284	42	308511	45.410	ppm		94
38) Isophorone	5.370	82	909752	36.305	ppm		97

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7933.D
Acq On : 05 Aug 2024 11:42 am
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Sample : 40 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 05 12:29:00 2024
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Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) 2-Nitrophenol	5.445	139	217739m	30.339	ppm	
40) Benzoic Acid	5.584	105	150868m	22.140	ppm	
41) 2,4-Dimethylphenol	5.493	107	478732	35.216	ppm	97
42) bis(-2-Chloroethoxy)Me...	5.573	93	534946	35.230	ppm	100
43) 2,4-Dichlorophenol	5.680	162	360219	36.271	ppm	97
44) a,a-Dimethylphenethyla...	6.124	58	1081140m	35.897	ppm	
45) 1,2,4-Trichlorobenzene	5.750	180	366421	38.278	ppm	96
46) Naphthalene	5.825	128	1291795	35.646	ppm	99
47) 4-Chloroaniline	5.884	127	552852	36.603	ppm	100
48) 2,6-Dichlorophenol	5.889	162	347867	36.942	ppm	87
49) Hexachlorobutadiene	5.942	225	208718	43.178	ppm	98
50) Hexachloropropene	5.910	213	231330	41.497	ppm	100
51) 4-Chloro-3-methylphenol	6.365	107	410595m	33.859	ppm	
52) N-N-di-n-butylamine	6.204	84	432992m	39.773	ppm	
53) Caprolactam	6.231	113	159780	33.901	ppm	95
54) p-Phenylenediamine	6.237	80	142969m	23.088	ppm	
55) Safrole	6.413	162	317356	37.148	ppm	98
56) 2-Methylnaphthalene	6.493	142	874345	35.629	ppm	99
57) 1-Methylnaphthalene	6.590	142	817067	35.852	ppm	99
59) Hexachlorocyclopentadiene	6.648	237	169674	40.272	ppm	99
60) 1,2,4,5-Tetrachloroben...	6.659	216	353666	40.197	ppm	99
61) 1,2,3,4-Tetrachloroben...	6.937	216	349829	39.254	ppm	99
62) 2,4,6-Trichlorophenol	6.777	196	238438m	35.180	ppm	
63) 2,4,5-Trichlorophenol	6.825	196	251593	35.229	ppm	99
65) Isosafrole	6.916	104	160897	36.784	ppm	98
66) 1,1'-Biphenyl	6.953	154	1060518	35.479	ppm	98
67) 2-Chloronaphthalene	6.969	162	774357	35.478	ppm	97
68) 2-Nitroaniline	7.076	65	260002	34.915	ppm	90
69) 1,4-Naphthoquinone	7.146	158	290906	43.393	ppm	93
70) m-Dinitrobenzene	7.290	168	135621	30.424	ppm	92
71) Acenaphthylene	7.376	152	1169109	34.939	ppm	100
72) Dimethyl phthalate	7.258	163	899262	35.380	ppm	100
73) 2,6-Dinitrotoluene	7.317	165	204193	34.553	ppm	83
74) Acenaphthene	7.547	153	811963	34.527	ppm	98
75) 3-Nitroaniline	7.483	138	235653	30.473	ppm	94
76) 2,4-Dinitrophenol	7.590	184	59918m	17.183	ppm	
77) Dibenzofuran	7.718	168	1109366	35.977	ppm	97
78) 2,4-Dinitrotoluene	7.713	165	262652	33.937	ppm	84
79) 4-Nitrophenol	7.675	65	199608m	34.120	ppm	
80) Pentachlorobenzene	7.675	250	315153	40.331	ppm	99
81) 1-Napthylamine	7.798	143	627441	30.890	ppm	99
82) 2-Napthylamine	7.879	143	544918	25.650	ppm	99
83) 2,3,4,6-Tetrachlorophenol	7.846	232	167472	33.402	ppm	99
84) Fluorene	8.055	166	942281	37.756	ppm	99
85) 4-Chlorophenyl-phenyle...	8.055	204	434103	39.992	ppm	94
86) Diethylphthalate	7.948	149	902154	34.838	ppm	100
87) 4-Nitroaniline	8.087	138	252597	31.416	ppm	96
88) 5-Nitro-o-toluidine	8.076	152	272340	33.892	ppm	99
90) Sulfotepp	8.333	322	152368	39.388	ppm	94
91) Octachlorocyclopentene	8.301	307	96617	31.441	ppm	98
93) Thionazin	8.028	107	162536	29.613	ppm	98
94) 4,6-Dinitro-2-methylph...	8.114	198	111908m	21.924	ppm	
95) Diphenylamine	8.178	169	1447513	67.627	ppm	99
96) 1,2 Diphenylhydrazine	8.210	77	1070180	34.666	ppm	94
97) N-Nitrosodiphenylamine	8.178	169	1448051	67.639	ppm	99
98) 1,3,5-Trinirobenzene	8.462	213	81567m	28.873	ppm	

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7933.D
Acq On : 05 Aug 2024 11:42 am
Operator : EDeGray
Sample : 40 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 05 12:29:00 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
99)	Diallate	8.456	86	372315	32.734	ppm		99
100)	Phorate	8.467	121	198367	30.830	ppm	#	74
101)	Phenacetin	8.494	108	511974	32.363	ppm		98
102)	4-Bromophenyl-phenylether	8.536	248	242781	37.160	ppm		95
103)	Hexachlorobenzene	8.595	284	267498	36.871	ppm		93
104)	Dimethoate	8.638	87	321587	30.886	ppm		97
105)	Atrazine	8.708	215	116032	33.881	ppm		92
106)	Pentachlorophenol	8.799	266	136750m	27.900	ppm		
107)	4-Aminobiphenyl	8.799	169	876768	32.669	ppm		99
108)	Pentachloronitrobenzene	8.804	237	106175	40.668	ppm		91
109)	Pronamide	8.863	173	439670	36.415	ppm		98
110)	Dinoseb	8.975	211	164534	26.171	ppm		98
111)	Disulfoton	8.986	88	641292m	36.237	ppm		
112)	Phenanthrene	9.002	178	1246590	32.644	ppm		100
113)	Anthracene	9.055	178	1244534	32.672	ppm		100
114)	Carbazole	9.216	167	1234089	32.047	ppm		99
115)	Di-n-butylphthalate	9.563	149	1586225	33.353	ppm		100
116)	4-Nitroquinonline-1-oxide	9.772	190	88849m	26.089	ppm		
117)	Fluoranthene	10.200	202	1341512	34.748	ppm		99
119)	Methyl Parathion	9.355	109	246071	30.662	ppm		94
120)	Ethyl Parathion	9.740	97	205020	30.810	ppm		99
121)	Methapyrilene	9.847	58	552205	32.697	ppm		97
122)	Isodrin	10.034	193	134230	32.830	ppm		96
123)	Benzidine	10.350	184	581298m	22.846	ppm		
124)	Pyrene	10.451	202	1389346	33.529	ppm		98
126)	Aramite	10.713	185	84335m	24.963	ppm		
127)	p-(Dimethylamino)azobe...	10.815	120	453786	30.375	ppm		97
128)	Chlorobenzilate	10.874	139	512154	32.989	ppm		96
129)	Butyl benzyl phthalate	11.291	149	729127	31.398	ppm		95
130)	3,3-Dimethylbenzidine	11.264	212	714926	28.984	ppm		99
131)	2-Acetylaminofluorene	11.639	181	536570	29.326	ppm		98
132)	3,3'-Dichlorobenzidine	12.099	252	461369	32.588	ppm		98
133)	Benzo(a)anthracene	12.120	228	1290888	34.295	ppm		99
134)	Chrysene	12.184	228	1210221	34.369	ppm		100
135)	bis(2-Ethylhexyl)phtha...	12.238	149	988275	30.752	ppm		98
137)	Di-n-octyl phthalate	13.511	149	1607756	31.608	ppm		99
138)	7,12-Dimethylbenz(a)an...	14.153	256	619111	38.657	ppm		97
139)	Benzo(b)Fluoranthene	14.158	252	1243577	37.193	ppm		99
140)	Benzo(k)fluoranthene	14.211	252	1197816	37.221	ppm		99
141)	Benzo(a)pyrene	14.821	252	1048784	35.606	ppm		100
142)	3-Methylcholanthrene	15.613	268	632911	34.618	ppm		98
143)	Indeno(1,2,3-cd)Pyrene	16.939	276	940378	33.289	ppm		98
144)	Dibenz(a,h)anthracene	16.993	278	978564	33.365	ppm		99
145)	Benzo(g,h,i)perylene	17.367	276	968264	33.592	ppm		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st BA 08/07/24
2nd MP 08/07/24

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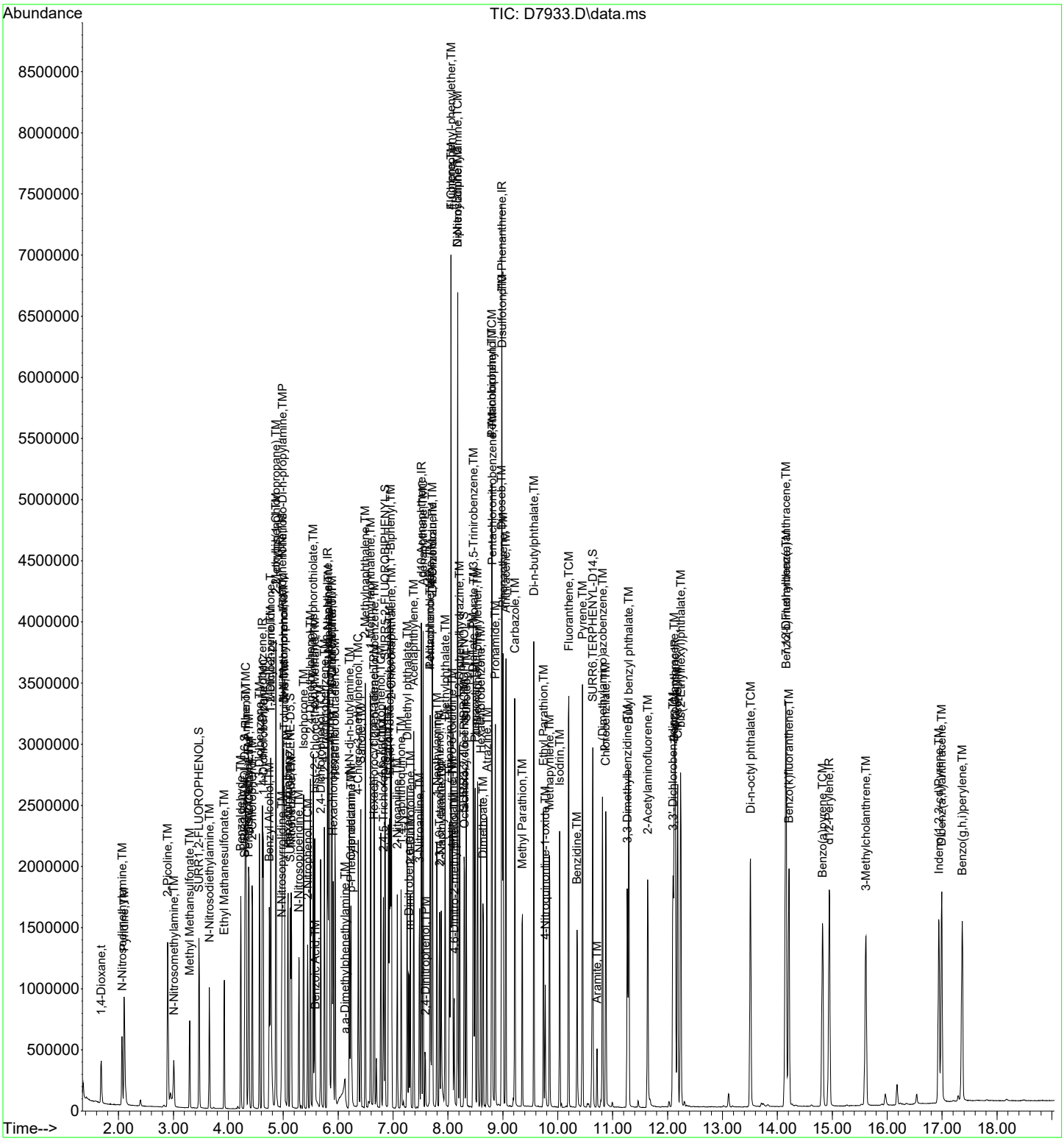
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration



Quantitation Report (Qedit)

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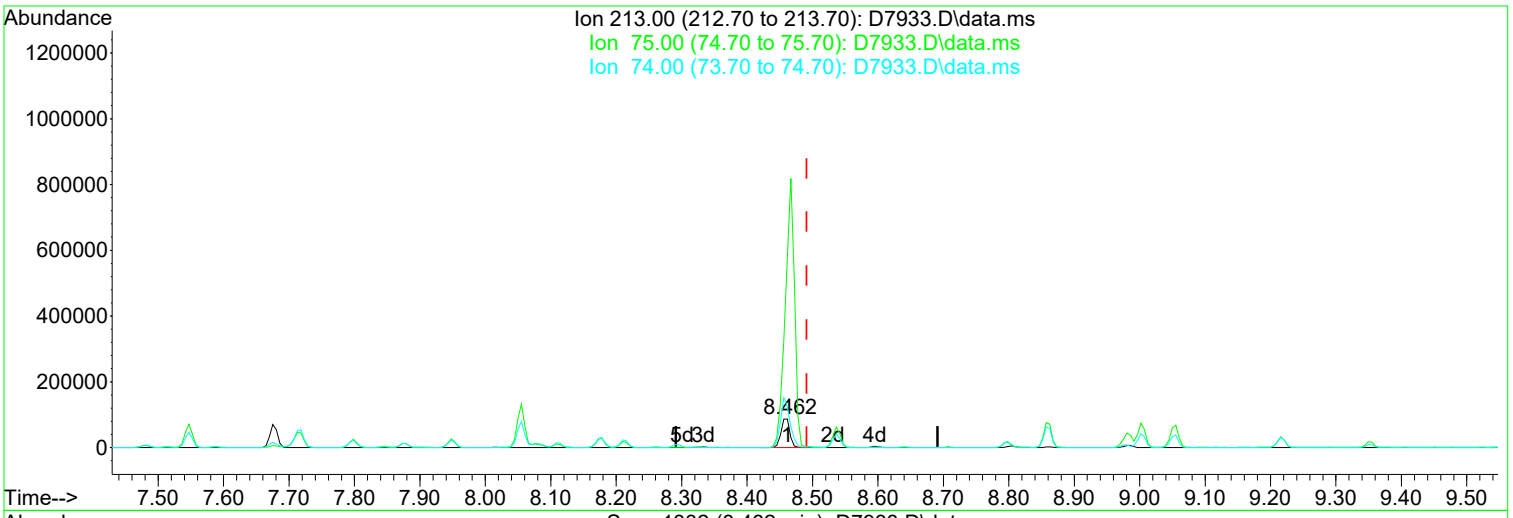

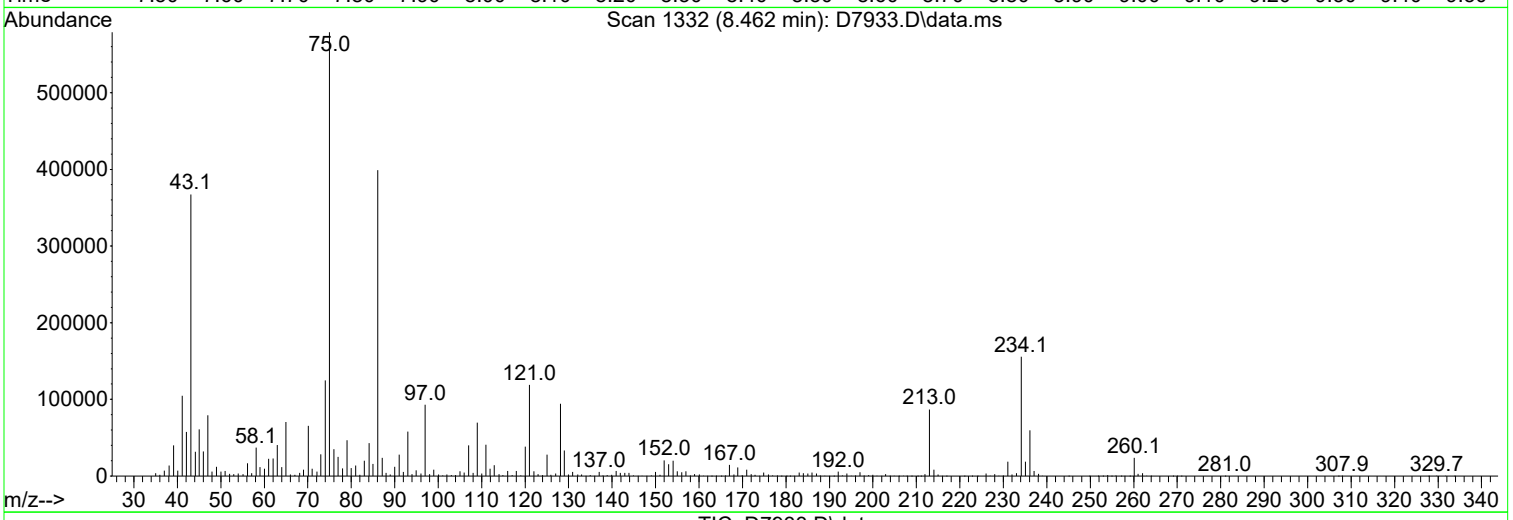

TIC: D7933.D\data.ms

(98) 1,3,5-Trinirobenzene (TM)

8.462min (-0.030) 28.87 ppm m

response 81567

Ion	Exp%	Act%
213.00	100.00	100.00
75.00	243.30	666.59#
74.00	148.00	143.69
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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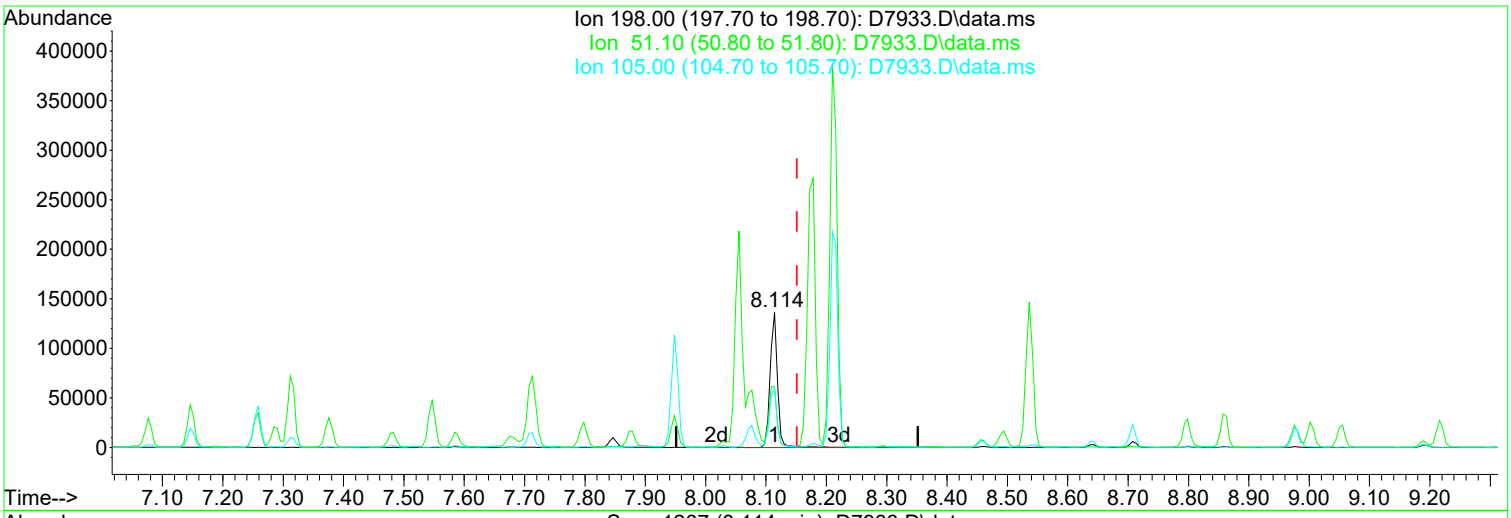

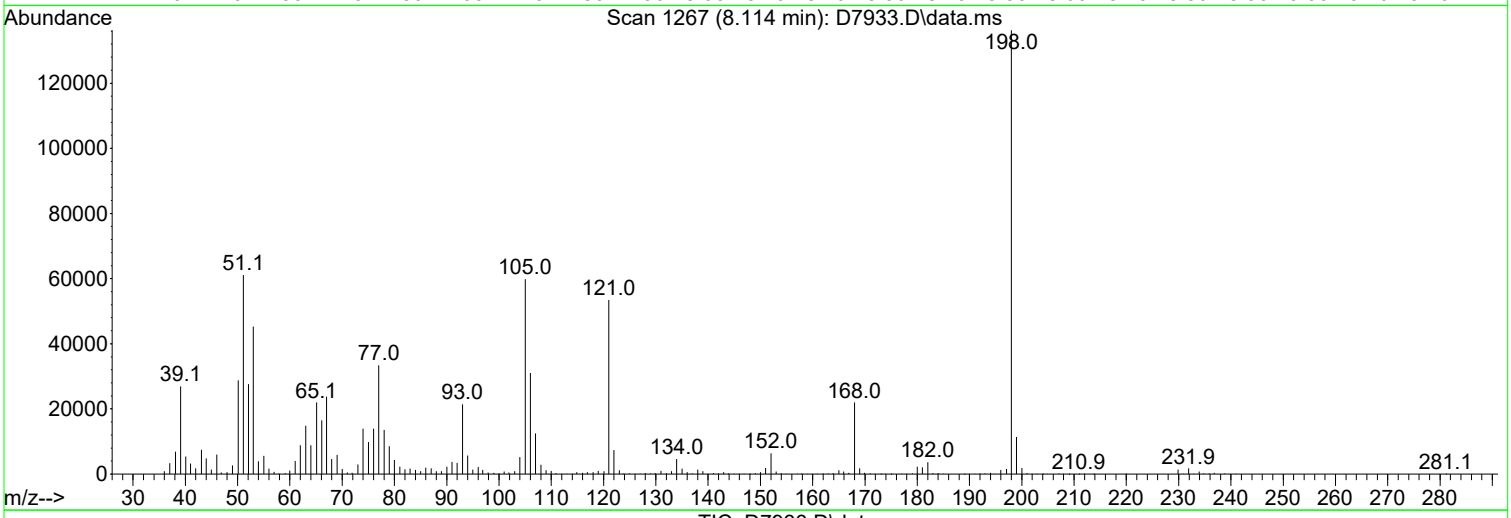

TIC: D7933.D\data.ms

(94) 4,6-Dinitro-2-methylphenol (TM)

8.114min (-0.038) 23.03 ppm m

response 117558

Ion	Exp%	Act%
198.00	100.00	100.00
51.10	43.70	44.82
105.00	44.70	43.92
0.00	0.00	0.00

Manual Integration:

Before

08/06/24

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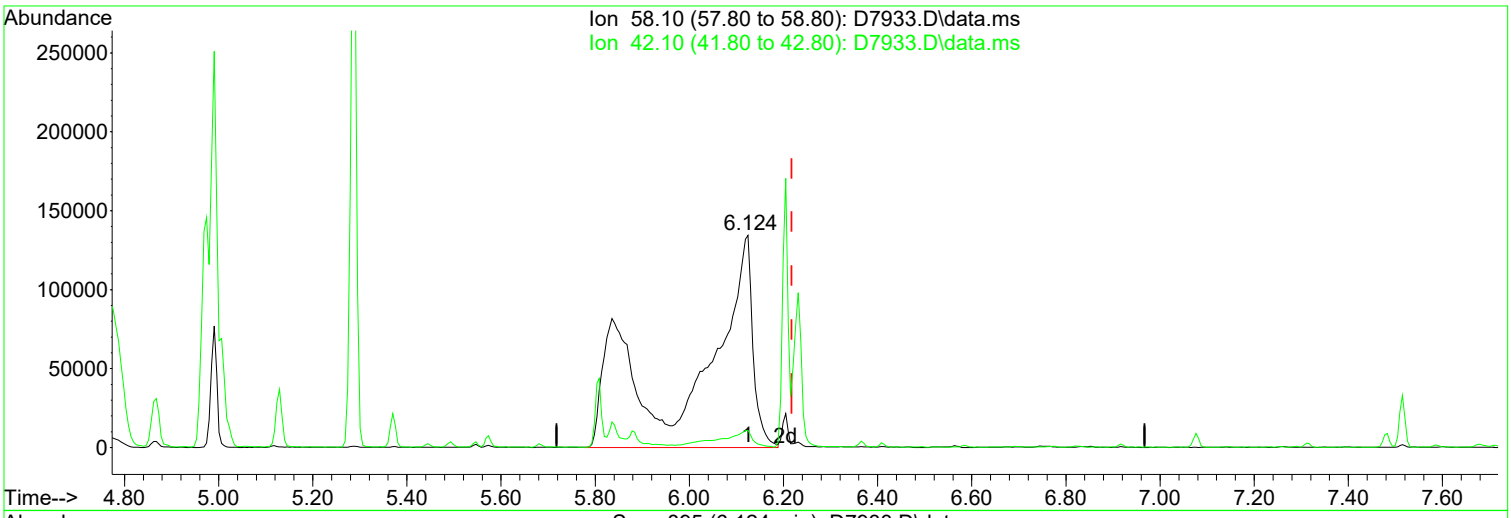

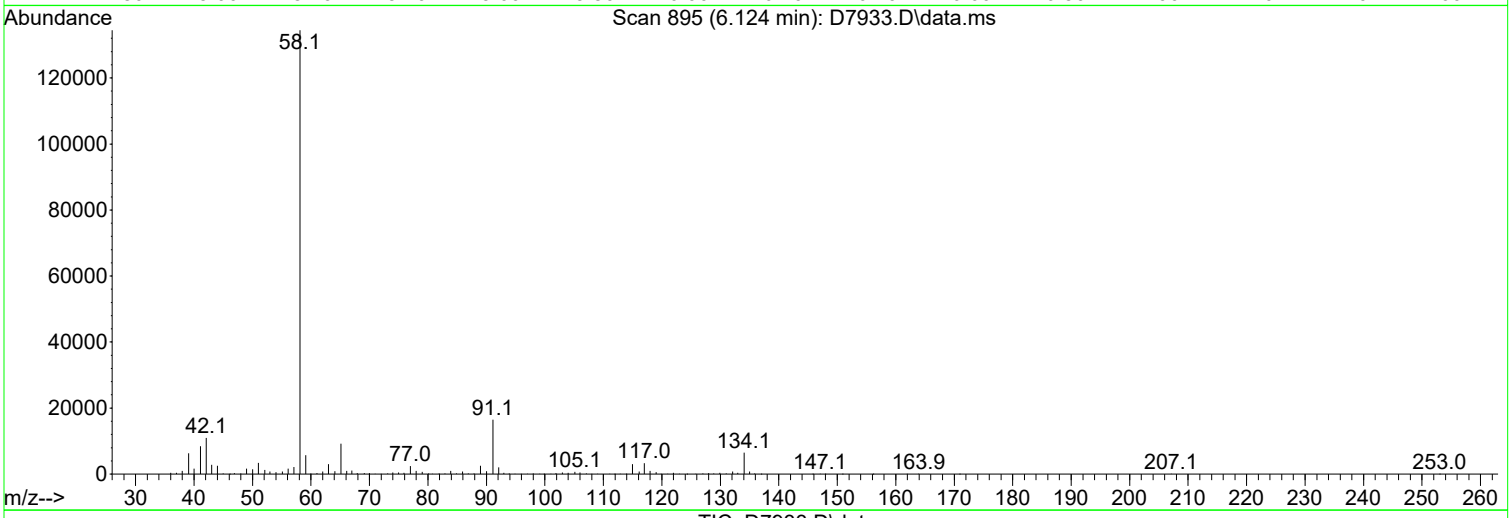

TIC: D7933.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

6.124min (-0.094) 35.90 ppm m

response 1081140

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.00	8.18
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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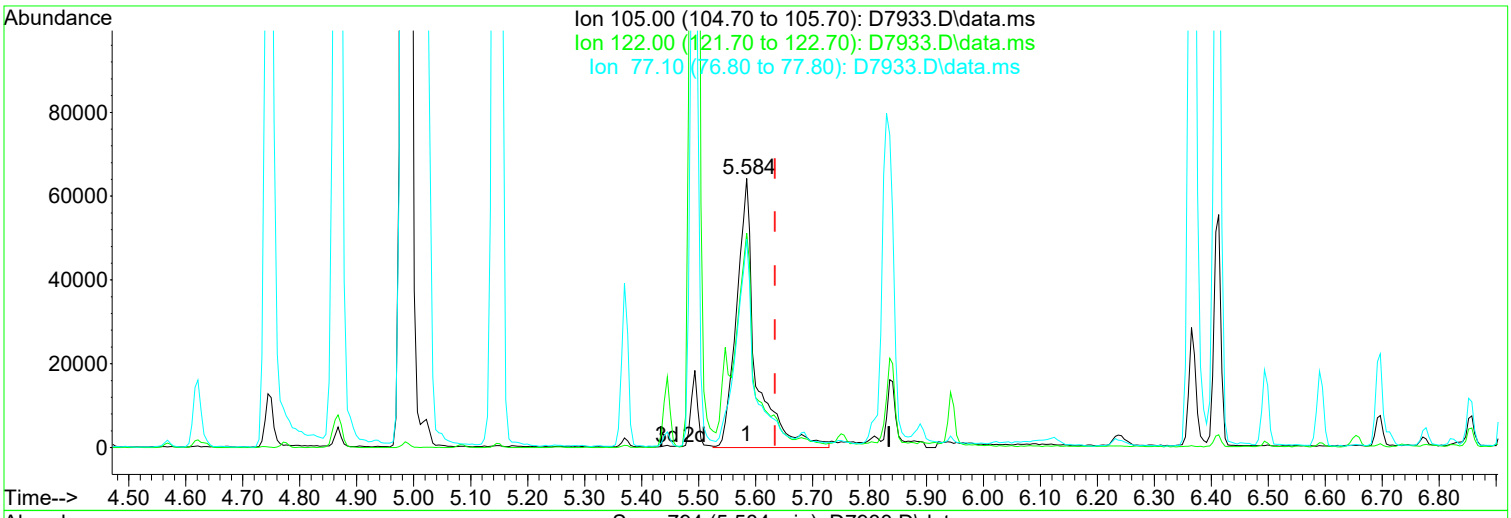

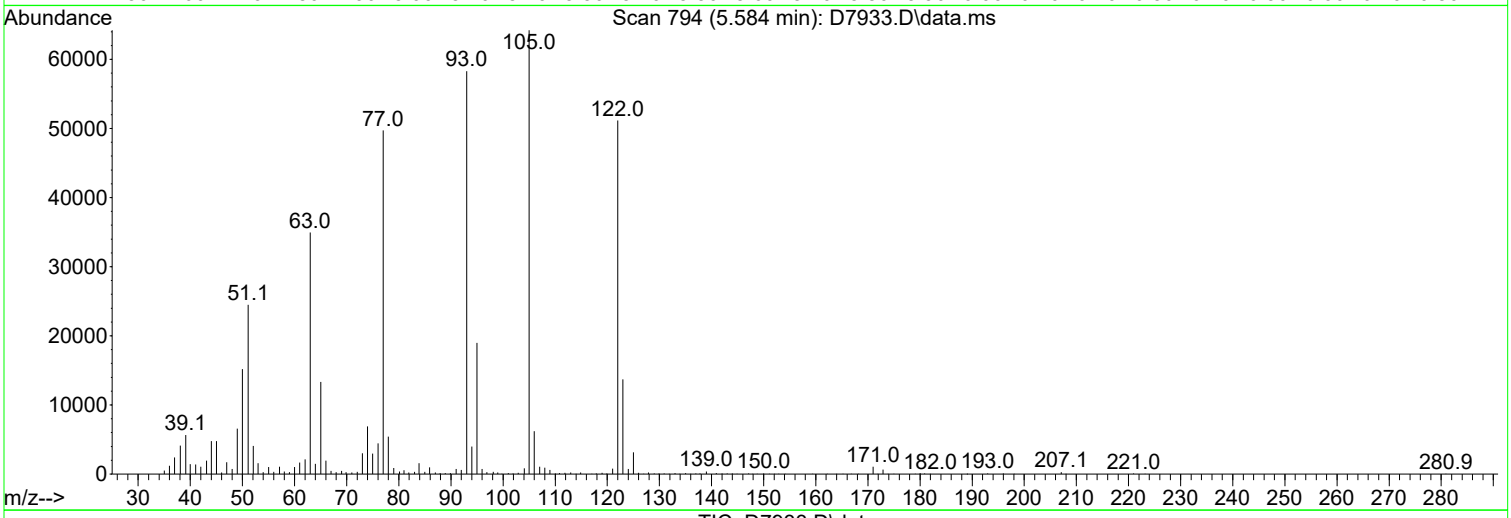

TIC: D7933.D\data.ms

(40) Benzoic Acid (TM)

5.584min (-0.050) 22.14 ppm m

response 150868

Ion	Exp%	Act%
105.00	100.00	100.00
122.00	80.40	79.65
77.10	70.70	77.41
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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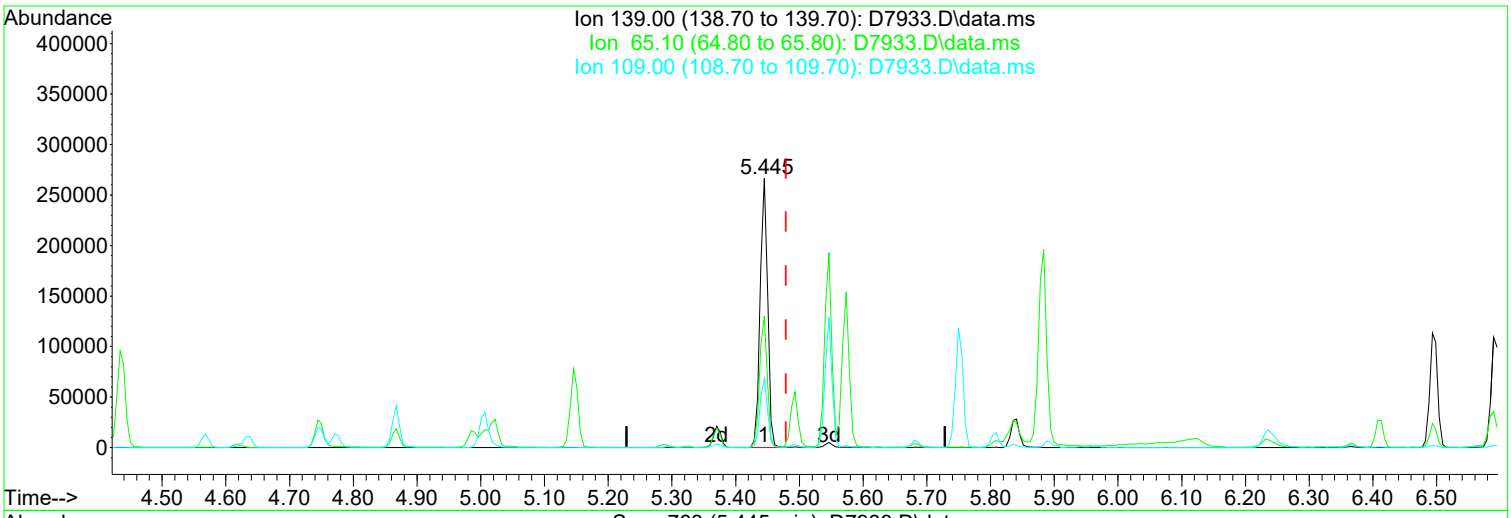

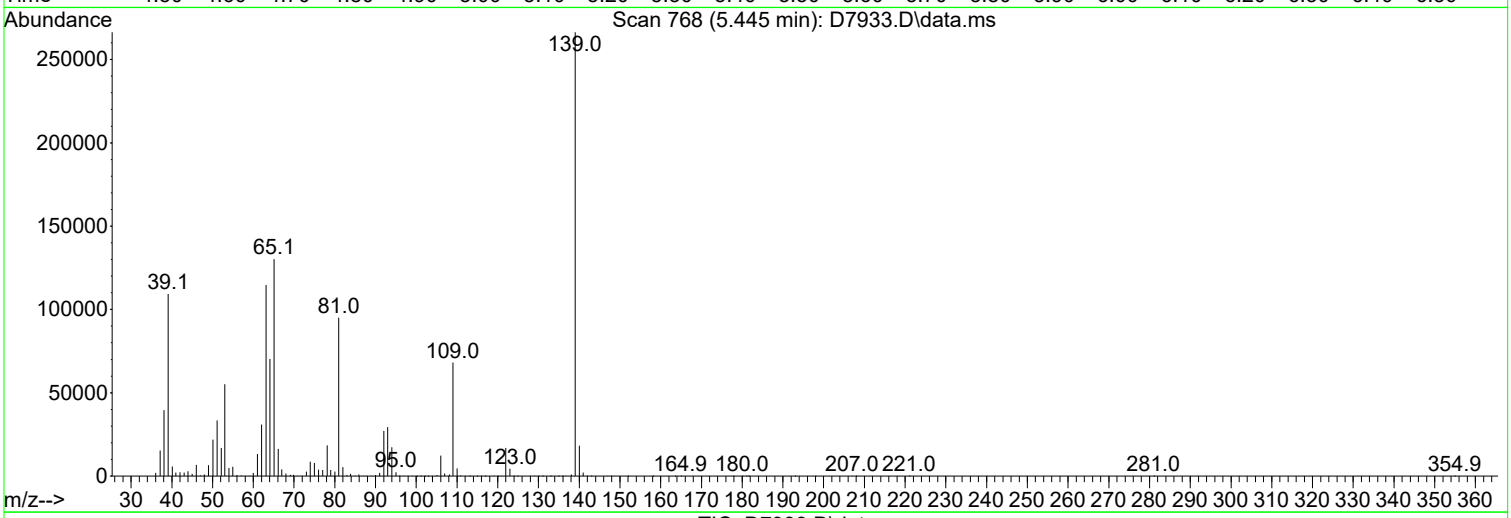

TIC: D7933.D\data.ms

(39) 2-Nitrophenol (TCM)

5.445min (-0.034) 30.34 ppm m

response 217739

Ion	Exp%	Act%
139.00	100.00	100.00
65.10	47.60	48.89
109.00	26.50	25.59
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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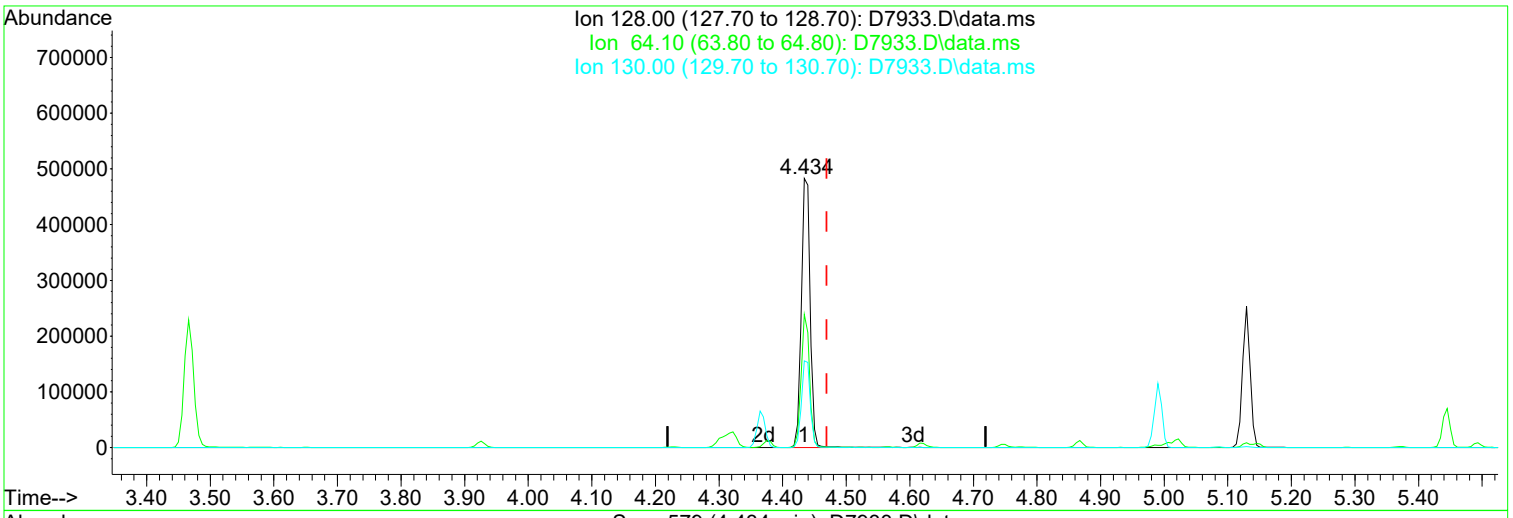

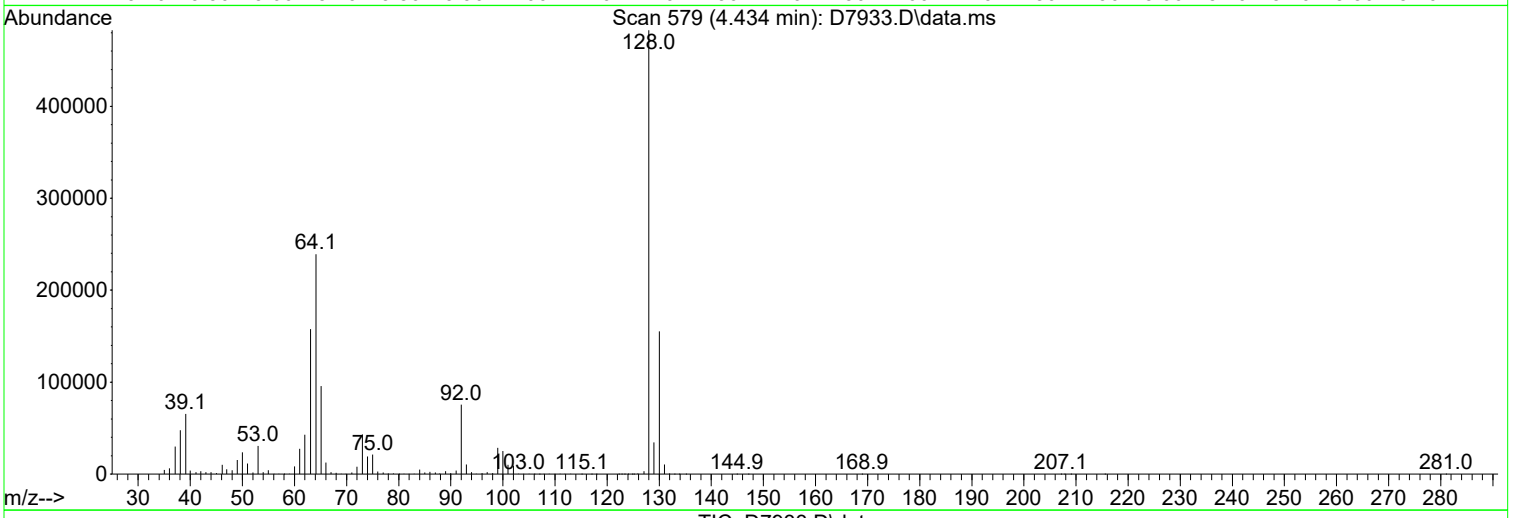

TIC: D7933.D\data.ms

(17) 2-Chlorophenol (TM)

4.434min (-0.035) 32.71 ppm m

response 461734

Ion	Exp%	Act%
128.00	100.00	100.00
64.10	41.20	49.52
130.00	32.60	32.19
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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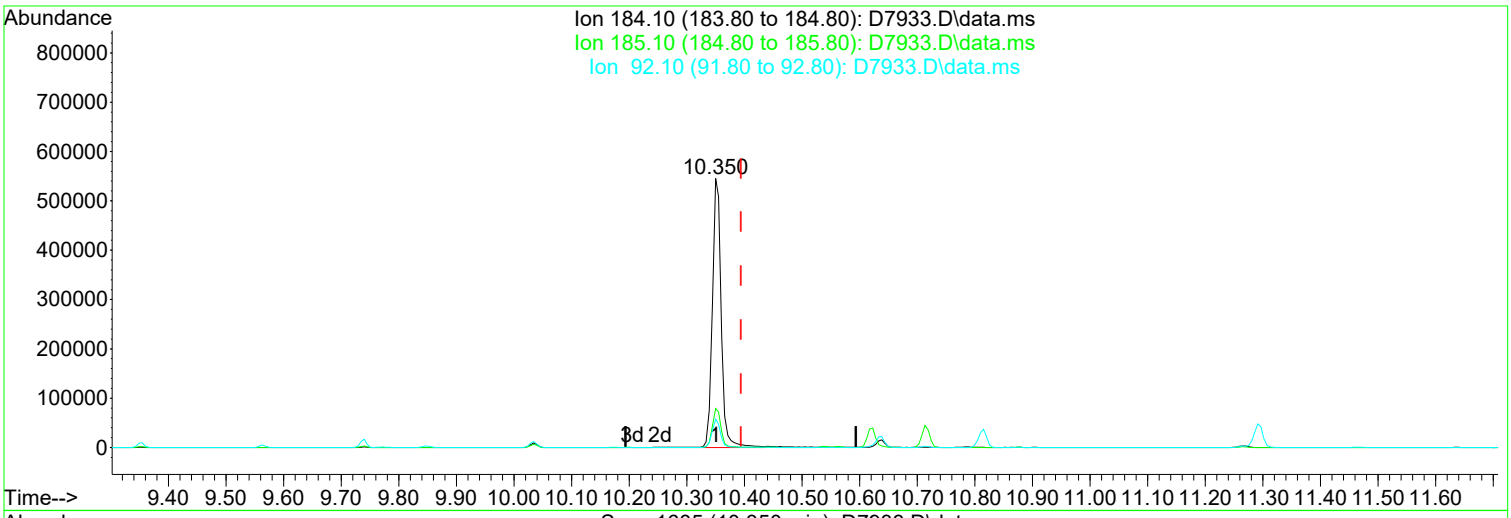

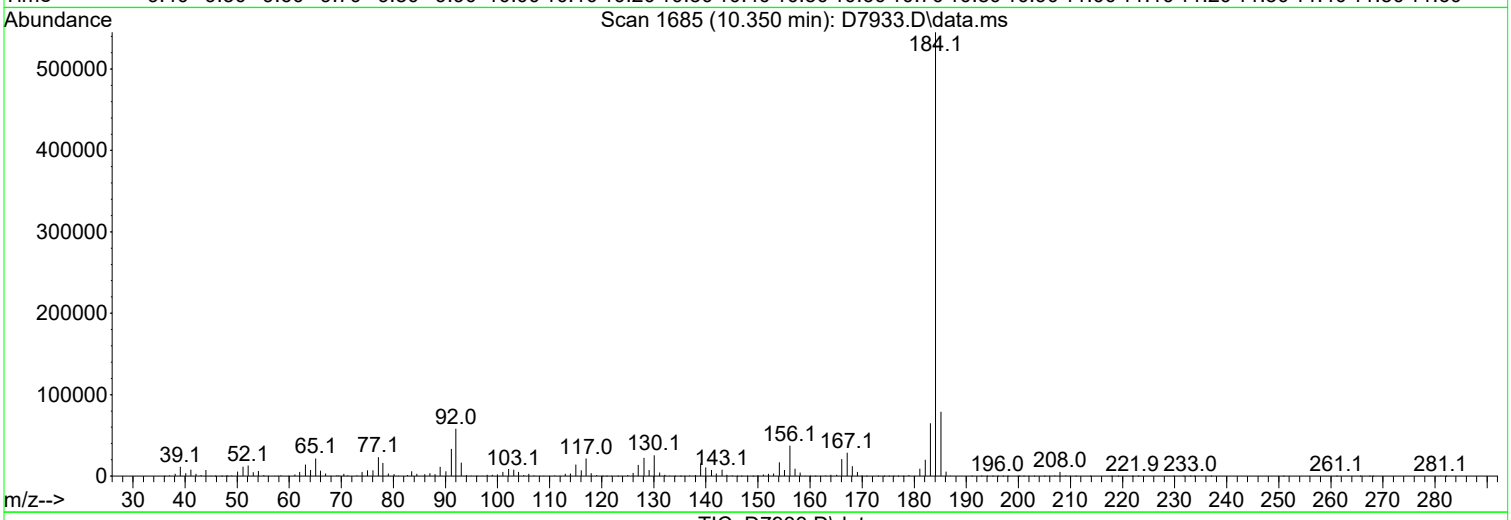

TIC: D7933.D\data.ms

(123) Benzidine (TM)

10.350min (-0.045) 22.85 ppm m

response 581298

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	14.00	14.46
92.10	9.00	10.64
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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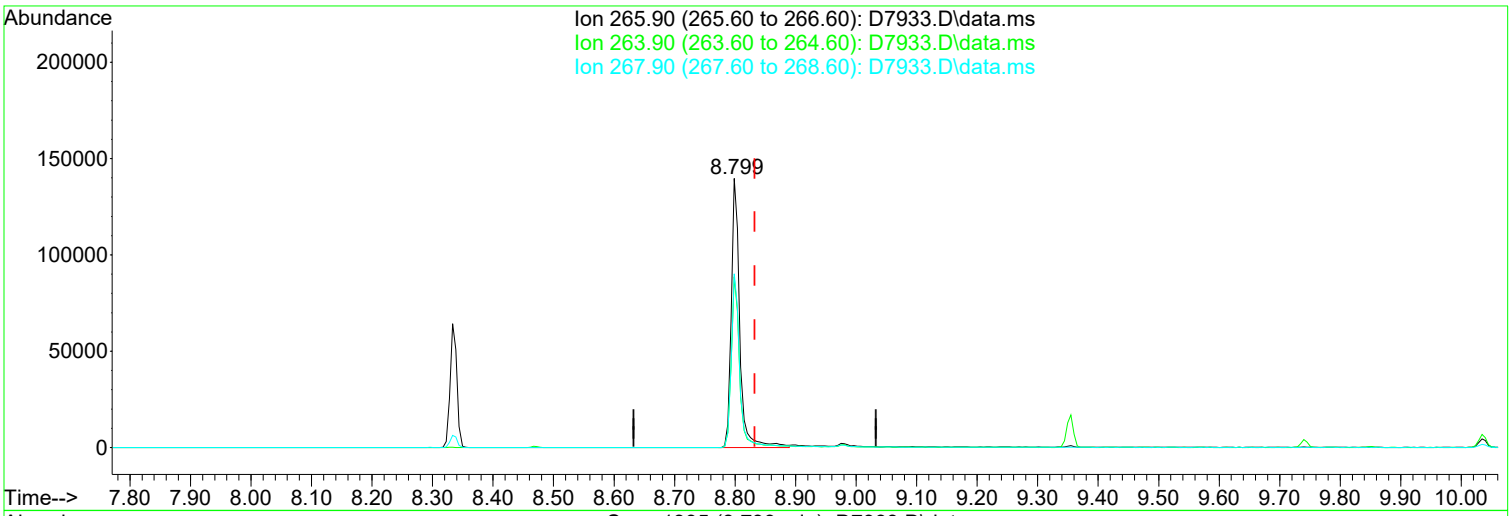

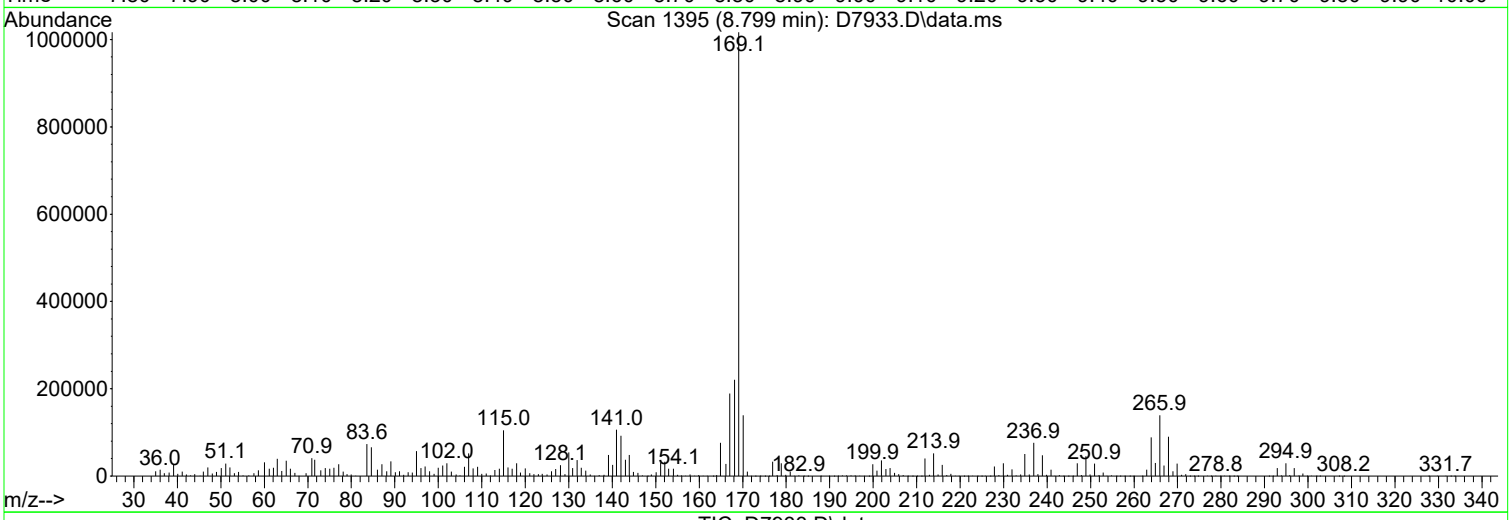

TIC: D7933.D\data.ms

(106) Pentachlorophenol (TCM)

8.799min (-0.034) 27.90 ppm m

response 136750

Ion	Exp%	Act%
265.90	100.00	100.00
263.90	64.80	63.55
267.90	66.30	64.59
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7932.D
Acq On : 05 Aug 2024 11:18 am
Operator : EDeGray
Sample : 20 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 05 12:28:52 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
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Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.621	152	298823	40.00	ppm	-0.04
34) d8-Naphthalene	5.808	136	1195909	40.00	ppm	-0.03
58) d10-Acenaphthene	7.515	164	657560	40.00	ppm	-0.04
92) d10-Phenanthrene	8.980	188	1117343	40.00	ppm	-0.04
118) d12-Chrysene	12.136	240	974944	40.00	ppm	-0.06
136) d12-Perylene	14.944	264	973790	40.00	ppm	-0.08
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	3.466	112	195693m	17.24	ppm	-0.03
Spiked Amount 20.000	Range 10 - 70		Recovery = 86.20%#			
13) SURR2,PHENOL-D6	4.300	99	259009	17.45	ppm	-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery = 87.25%			
35) SURR4,NITROBENZENE-D5	5.124	82	222285	19.41	ppm	-0.04
Spiked Amount 10.000	Range 31 - 110		Recovery = 194.10%#			
64) SURR5,2-FLUOROBIPHENYL	6.851	172	429943m	20.18	ppm	-0.04
Spiked Amount 10.000	Range 31 - 118		Recovery = 201.80%#			
89) SURR3,2,4,6-TRIBROMOPH...	8.296	330	52195	18.66	ppm	-0.04
Spiked Amount 20.000	Range 35 - 141		Recovery = 93.30%			
125) SURR6,TERPHENYL-D14	10.633	244	426124	19.43	ppm	-0.05
Spiked Amount 10.000	Range 10 - 165		Recovery = 194.30%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.679	88	85831	18.456	ppm	96
3) Pyridine	2.102	79	228581	19.368	ppm	97
4) N-Nitrosodimethylamine	2.059	74	147857	18.278	ppm	97
5) 2-Picoline	2.893	93	244065	18.670	ppm	98
6) N-Nitrosomethylamine	3.006	42	77378m	22.782	ppm	
7) Methyl Methansulfonate	3.289	80	118623	23.162	ppm	98
9) N-Nitrosodiethylamine	3.653	102	104252m	16.954	ppm	
10) Ethyl Mathanesulfonate	3.920	79	166673	18.968	ppm	95
11) Benzaldehyde	4.225	106	162079	18.465	ppm	98
12) Aniline	4.322	93	327031	17.817	ppm	83
14) Phenol	4.311	94	296774	18.313	ppm	84
15) bis(2-Clethyl)Ether	4.375	93	222437	18.422	ppm	94
16) Pentachloroethane	4.364	117	73620	18.298	ppm	98
17) 2-Chlorophenol	4.434	128	215113	17.481	ppm	95
18) 1,3-Diclbenzene	4.568	146	224580	18.677	ppm	99
19) 1,4-Dichlorobenzene	4.632	146	231045	18.805	ppm	97
20) 1,2-Diclbenzene	4.771	146	218158	18.821	ppm	98
21) Benzyl Alcohol	4.744	79	161472m	16.817	ppm	
22) 1-Methyl-2-pyrrolidinone	4.755	99	142299	16.287	ppm	96
23) 2,2'-oxybis(1-Chloropr...	4.867	45	273176	21.079	ppm	90
24) 2-Methylphenol	4.856	108	197419	17.293	ppm	95
25) 3+4-Methylphenol	5.001	108	222062	19.253	ppm	98
26) Acetophenone	4.985	105	313397	19.534	ppm	94
27) N-Nitroso-Di-n-propyla...	4.985	70	179263	20.079	ppm	97
28) N-Nitrosopyrrolidine	4.963	100	118659	17.448	ppm	94
29) N-Nitrosomorpholine	5.001	56	146035	21.754	ppm	96
30) o-Toluidine	5.017	106	344471m	18.986	ppm	
31) Hexachloroethane	5.081	117	94786	19.157	ppm	88
32) o,o,o-Triethylphosphor...	5.546	198	102635	21.091	ppm	96
33) Alpha-terpinol	5.835	121	87198	25.118	ppm	90
36) Nitrobenzene	5.145	77	225422	19.883	ppm	95
37) N-Nitrosopiperidine	5.284	42	148850m	24.963	ppm	
38) Isophorone	5.365	82	430107	19.556	ppm	95

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7932.D
Acq On : 05 Aug 2024 11:18 am
Operator : EDeGray
Sample : 20 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 05 12:28:52 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) 2-Nitrophenol	5.445	139	104029m	16.515	ppm	
40) Benzoic Acid	5.562	105	47266m	10.898	ppm	
41) 2,4-Dimethylphenol	5.488	107	219490m	18.396	ppm	
42) bis(-2-Chloroethoxy)Me...	5.573	93	253060	18.988	ppm	99
43) 2,4-Dichlorophenol	5.680	162	164860	18.913	ppm	98
44) a,a-Dimethylphenethyla...	5.776	58	520345m	19.685	ppm	
45) 1,2,4-Trichlorobenzene	5.750	180	175041	20.834	ppm	98
46) Naphthalene	5.825	128	613940	19.302	ppm	99
47) 4-Chloroaniline	5.878	127	249251	18.802	ppm	98
48) 2,6-Dichlorophenol	5.889	162	160277	19.392	ppm	92
49) Hexachlorobutadiene	5.942	225	98967	23.327	ppm	97
50) Hexachloropropene	5.910	213	108863	22.250	ppm	99
51) 4-Chloro-3-methylphenol	6.365	107	183043	17.198	ppm	97
52) N-N-di-n-butylamine	6.204	84	202323	21.175	ppm	95
53) Caprolactam	6.215	113	74730m	18.065	ppm	
54) p-Phenylenediamine	6.226	80	74773m	13.758	ppm	
55) Safrole	6.408	162	147458	19.666	ppm	91
56) 2-Methylnaphthalene	6.493	142	413316	19.189	ppm	99
57) 1-Methylnaphthalene	6.589	142	384739	19.235	ppm	99
59) Hexachlorocyclopentadiene	6.648	237	72839	19.770	ppm	99
60) 1,2,4,5-Tetrachloroben...	6.659	216	167477	21.768	ppm	99
61) 1,2,3,4-Tetrachloroben...	6.937	216	169486	21.748	ppm	97
62) 2,4,6-Trichlorophenol	6.777	196	104322m	17.602	ppm	
63) 2,4,5-Trichlorophenol	6.825	196	112382	17.995	ppm	99
65) Isosafrole	6.916	104	76823	20.085	ppm	98
66) 1,1'-Biphenyl	6.953	154	510079	19.514	ppm	98
67) 2-Chloronaphthalene	6.969	162	368250	19.294	ppm	99
68) 2-Nitroaniline	7.076	65	116243	17.851	ppm	94
69) 1,4-Naphthoquinone	7.146	158	141433	24.126	ppm	92
70) m-Dinitrobenzene	7.285	168	56213m	14.421	ppm	
71) Acenaphthylene	7.376	152	543756	18.583	ppm	100
72) Dimethyl phthalate	7.253	163	426420	19.185	ppm	100
73) 2,6-Dinitrotoluene	7.311	165	91160	17.640	ppm	97
74) Acenaphthene	7.547	153	382064	18.579	ppm	97
75) 3-Nitroaniline	7.477	138	108663	16.069	ppm	91
76) 2,4-Dinitrophenol	7.584	184	19028m	6.240	ppm	
77) Dibenzofuran	7.718	168	521459	19.339	ppm	96
78) 2,4-Dinitrotoluene	7.707	165	113043	16.703	ppm	88
79) 4-Nitrophenol	7.675	65	66688	13.036	ppm	86
80) Pentachlorobenzene	7.675	250	148672	21.757	ppm	99
81) 1-Napthylamine	7.793	143	310371m	17.474	ppm	
82) 2-Napthylamine	7.873	143	255972	13.779	ppm	98
83) 2,3,4,6-Tetrachlorophenol	7.846	232	71122	16.221	ppm	94
84) Fluorene	8.055	166	439168	20.123	ppm	99
85) 4-Chlorophenyl-phenyle...	8.055	204	203232	21.411	ppm	97
86) Diethylphthalate	7.948	149	424542	18.748	ppm	99
87) 4-Nitroaniline	8.076	138	121111	17.225	ppm	97
88) 5-Nitro-o-toluidine	8.071	152	119835	17.054	ppm	95
90) Sulfotepp	8.333	322	69532	20.555	ppm	98
91) Octachlorocyclopentene	8.301	307	45290	16.854	ppm	98
93) Thionazin	8.028	107	77094	16.094	ppm	96
94) 4,6-Dinitro-2-methylph...	8.108	198	40609	9.116	ppm	97
95) Diphenylamine	8.173	169	710354	38.026	ppm	98
96) 1,2 Diphenylhydrazine	8.210	77	514718	19.104	ppm	94
97) N-Nitrosodiphenylamine	8.173	169	710354	38.018	ppm	98
98) 1,3,5-Trinirobenzene	8.451	213	28507m	11.562	ppm	

1st BA 08/07/24
2nd MP 08/07/24

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Operator : EDeGray
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Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
99)	Diallate	8.456	86	178266	17.958	ppm	98
100)	Phorate	8.467	121	95171	16.948	ppm	85
101)	Phenacetin	8.483	108	233219	16.892	ppm	97
102)	4-Bromophenyl-phenylether	8.536	248	114353	20.054	ppm	99
103)	Hexachlorobenzene	8.595	284	127378	20.117	ppm	97
104)	Dimethoate	8.633	87	160670	17.681	ppm	97
105)	Atrazine	8.702	215	59981	20.067	ppm	92
106)	Pentachlorophenol	8.798	266	56136m	13.123	ppm	
107)	4-Aminobiphenyl	8.793	169	397505m	16.970	ppm	
108)	Pentachloronitrobenzene	8.804	237	45848	20.121	ppm	92
109)	Pronamide	8.857	173	205683	19.519	ppm	99
110)	Dinoseb	8.975	211	58511m	10.664	ppm	
111)	Disulfoton	8.980	88	268644	16.551	ppm	92
112)	Phenanthrene	9.002	178	589194	17.678	ppm	99
113)	Anthracene	9.050	178	581919	17.504	ppm	99
114)	Carbazole	9.216	167	564378	16.792	ppm	99
115)	Di-n-butylphthalate	9.563	149	729869	17.584	ppm	99
116)	4-Nitroquinonline-1-oxide	9.766	190	31701m	10.666	ppm	
117)	Fluoranthene	10.194	202	619729	18.392	ppm	98
119)	Methyl Parathion	9.349	109	111733	16.278	ppm	98
120)	Ethyl Parathion	9.734	97	85905	15.094	ppm	94
121)	Methapyrilene	9.847	58	269532	18.660	ppm	98
122)	Isodrin	10.034	193	60254	17.231	ppm	96
123)	Benzidine	10.349	184	263020m	12.086	ppm	
124)	Pyrene	10.446	202	642969	18.142	ppm	98
126)	Aramite	10.713	185	37803m	13.083	ppm	
127)	p-(Dimethylamino)azobe...	10.809	120	205831	16.109	ppm	93
128)	Chlorobenzilate	10.874	139	230258	17.341	ppm	91
129)	Butyl benzyl phthalate	11.291	149	330850	16.658	ppm	96
130)	3,3-Dimethylbenzidine	11.264	212	317599	15.054	ppm	98
131)	2-Acetylaminofluorene	11.633	181	225522	14.411	ppm	97
132)	3,3'-Dichlorobenzidine	12.093	252	197330	16.297	ppm	98
133)	Benzo(a)anthracene	12.115	228	599721	18.629	ppm	99
134)	Chrysene	12.179	228	560526	18.612	ppm	99
135)	bis(2-Ethylhexyl)phtha...	12.238	149	450776	16.400	ppm	99
137)	Di-n-octyl phthalate	13.505	149	716593	16.322	ppm	98
138)	7,12-Dimethylbenz(a)an...	14.142	256	281449	20.361	ppm	100
139)	Benzo(b)Fluoranthene	14.142	252	561573	19.459	ppm	99
140)	Benzo(k)fluoranthene	14.201	252	554927	19.978	ppm	97
141)	Benzo(a)pyrene	14.816	252	479958	18.879	ppm	99
142)	3-Methylcholanthrene	15.602	268	294240	18.646	ppm	98
143)	Indeno(1,2,3-cd)Pyrene	16.934	276	435555	17.864	ppm	97
144)	Dibenz(a,h)anthracene	16.987	278	456512	18.034	ppm	98
145)	Benzo(g,h,i)perylene	17.356	276	460527	18.511	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

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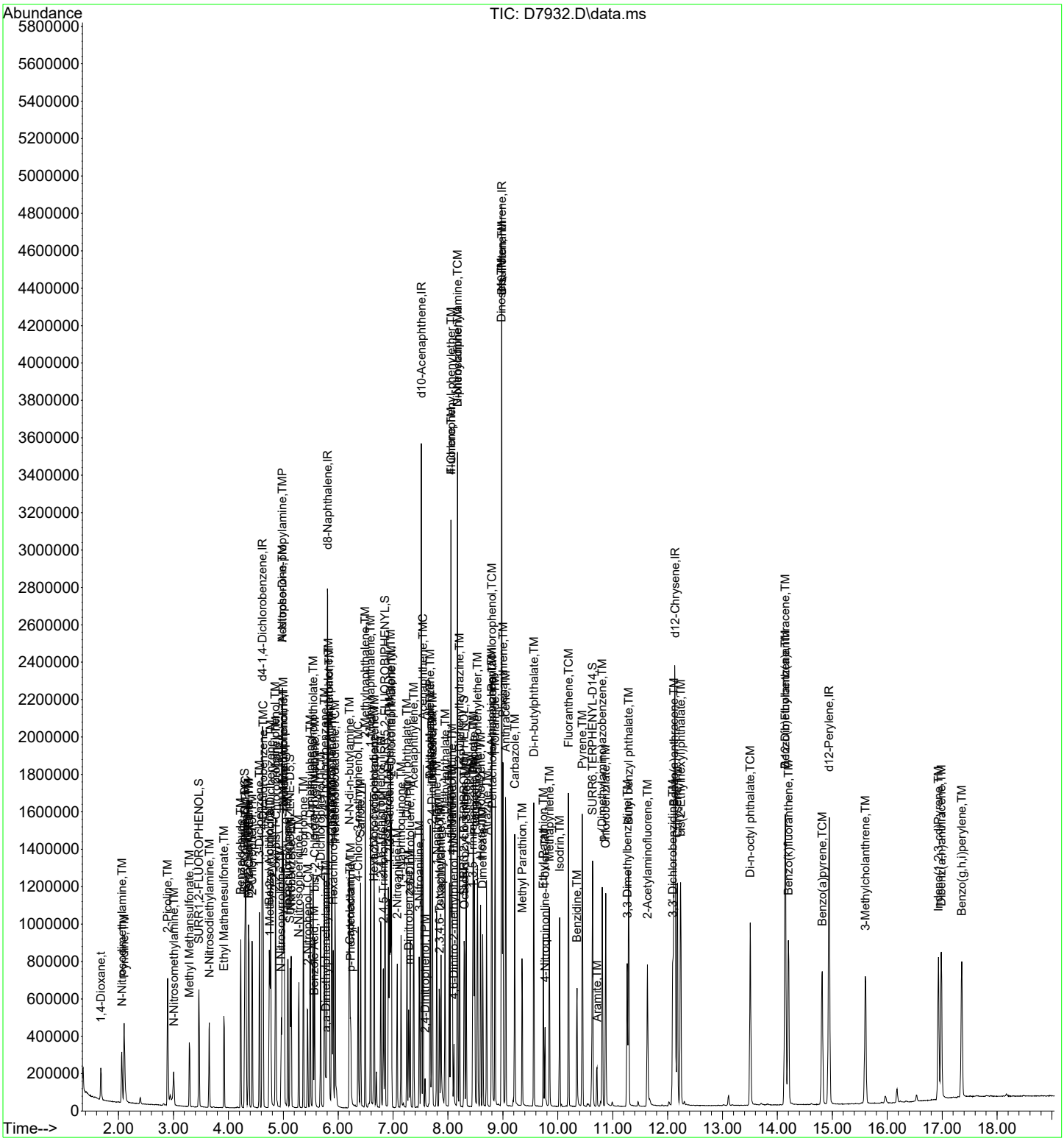
Data File : D7932.D
Acq On : 05 Aug 2024 11:18 am
Operator : EDeGray
Sample : 20 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 05 12:28:52 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration



Quantitation Report (Qedit)

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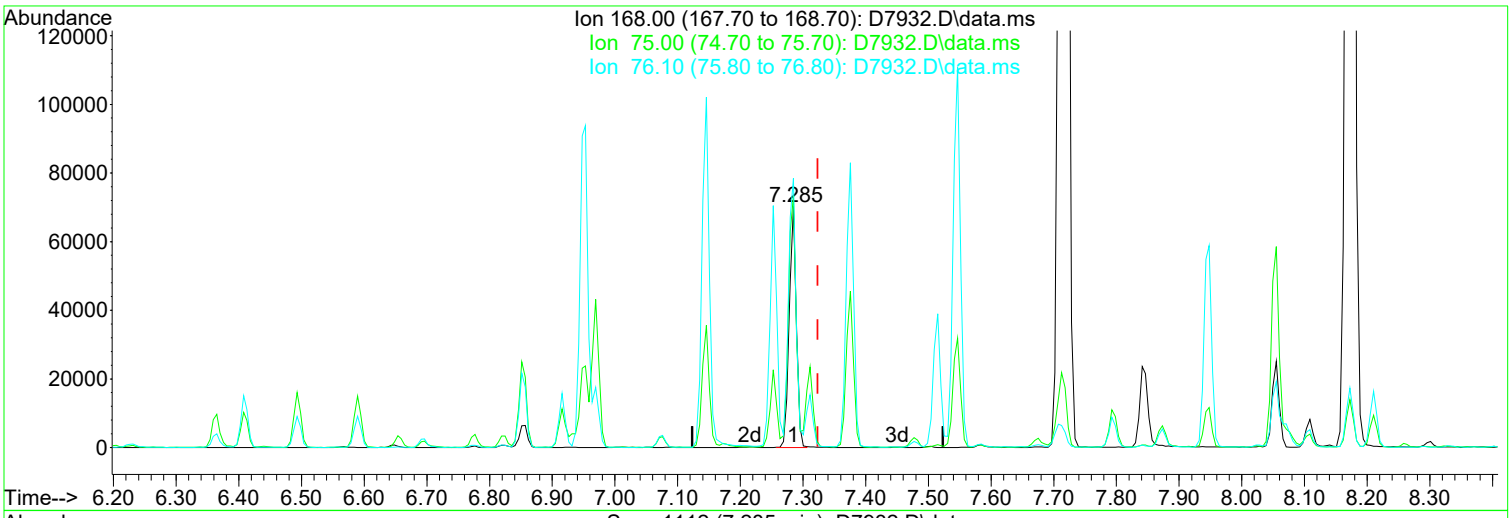

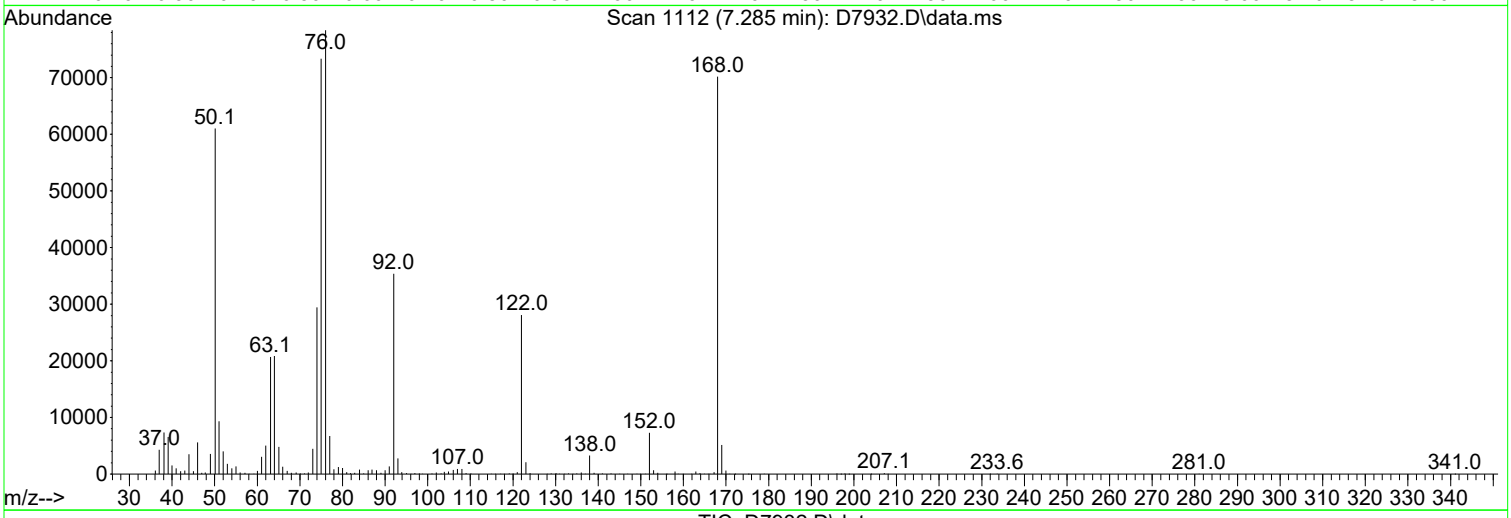

TIC: D7932.D\data.ms

(70) m-Dinitrobenzene (TM)

7.285min (-0.039) 14.42 ppm m

response 56213

Ion	Exp%	Act%
168.00	100.00	100.00
75.00	89.00	104.56
76.10	87.30	111.71
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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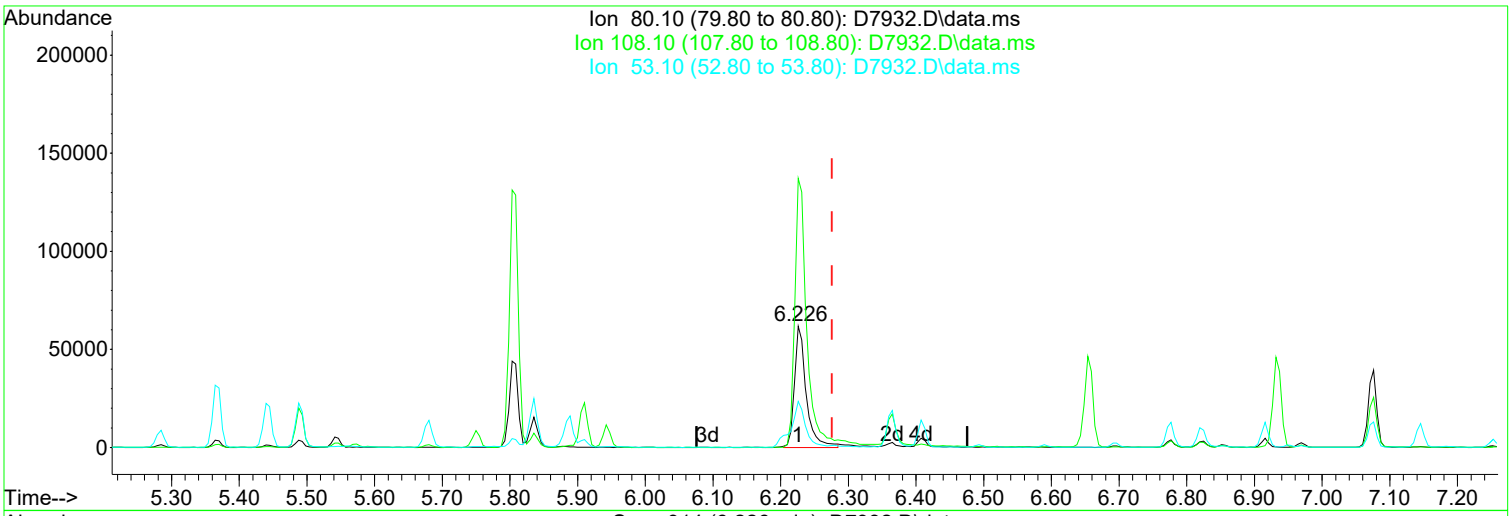

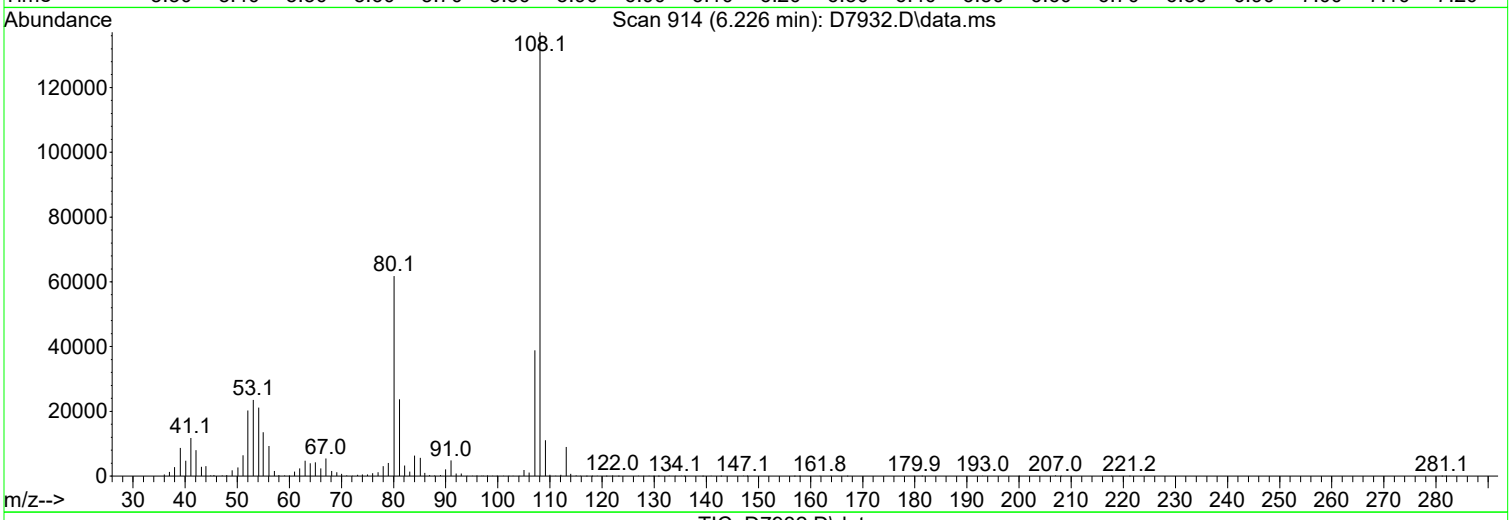

TIC: D7932.D\data.ms

(54) p-Phenylenediamine (TM)

6.226min (-0.050) 13.76 ppm m

response 74773

Ion	Exp%	Act%
80.10	100.00	100.00
108.10	237.80	221.85
53.10	40.00	38.09
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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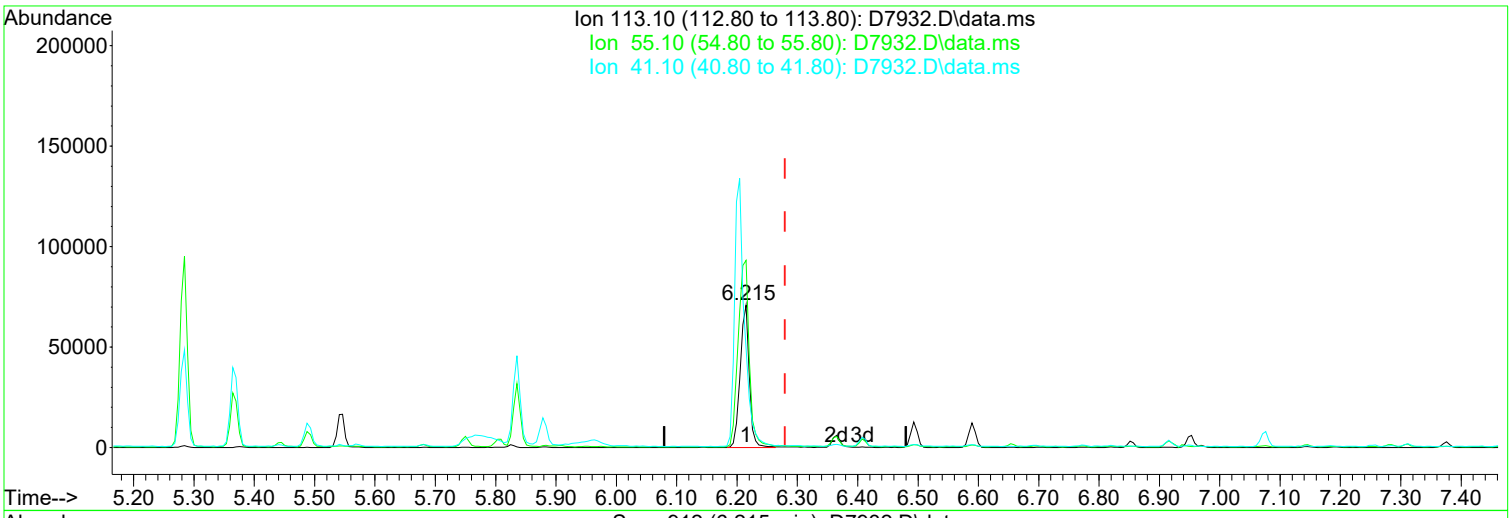

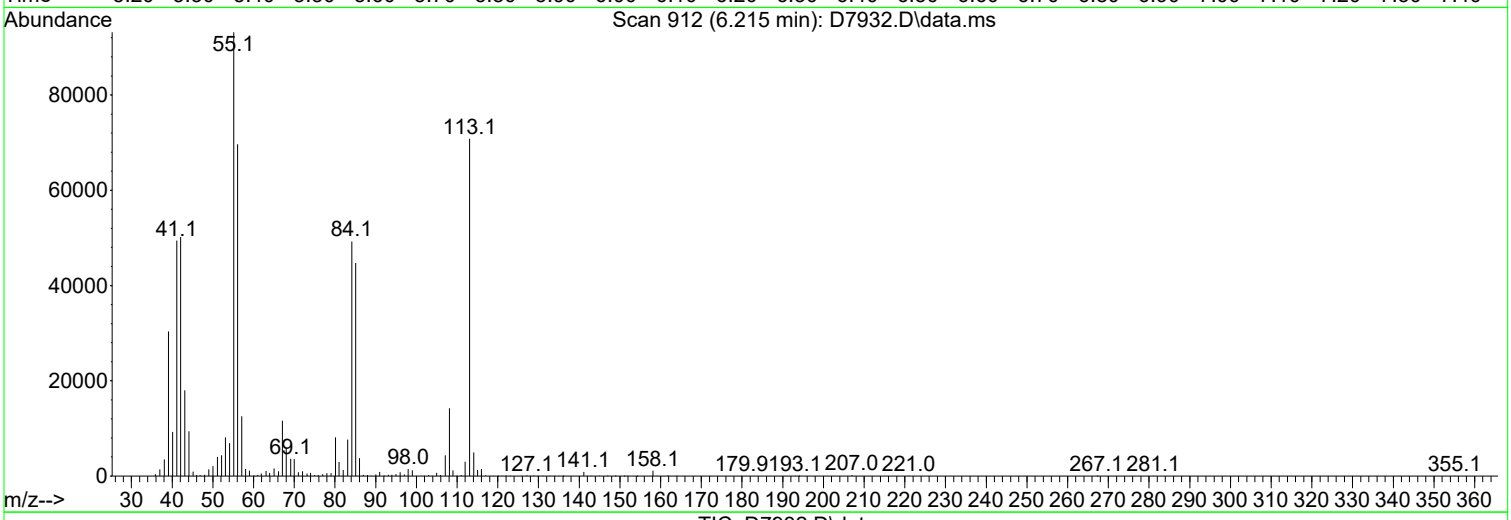

TIC: D7932.D\data.ms

(53) Caprolactam (TM)

6.215min (-0.065) 18.07 ppm m

response 74730

Ion	Exp%	Act%
113.10	100.00	100.00
55.10	128.60	131.55
41.10	71.40	69.80
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

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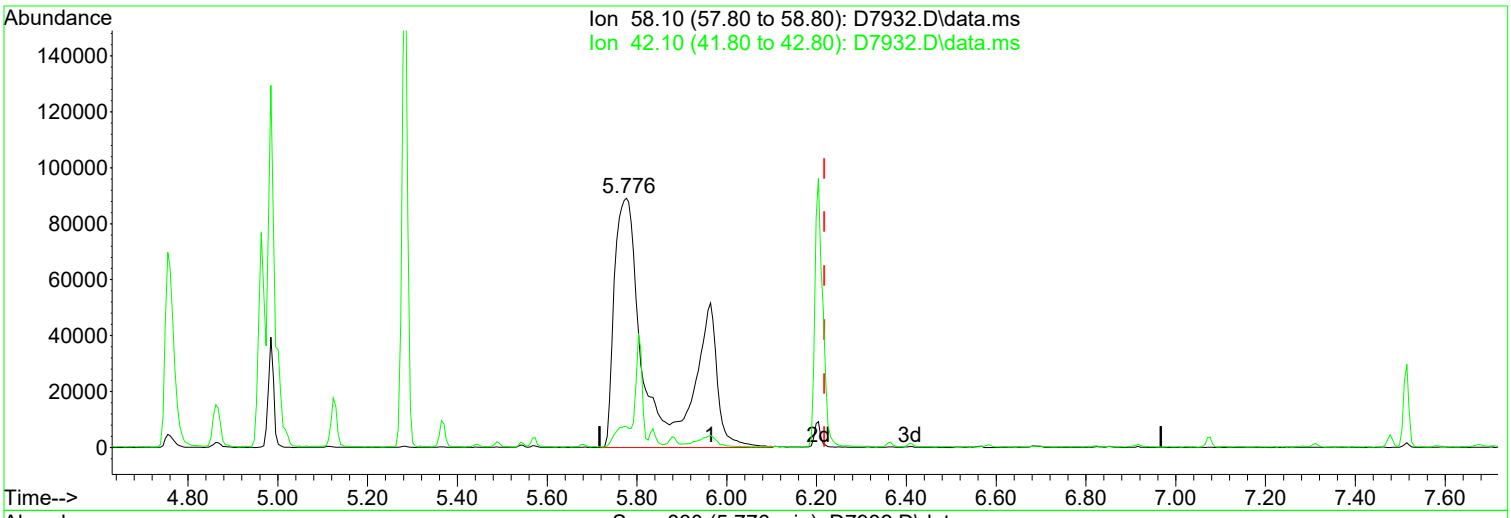

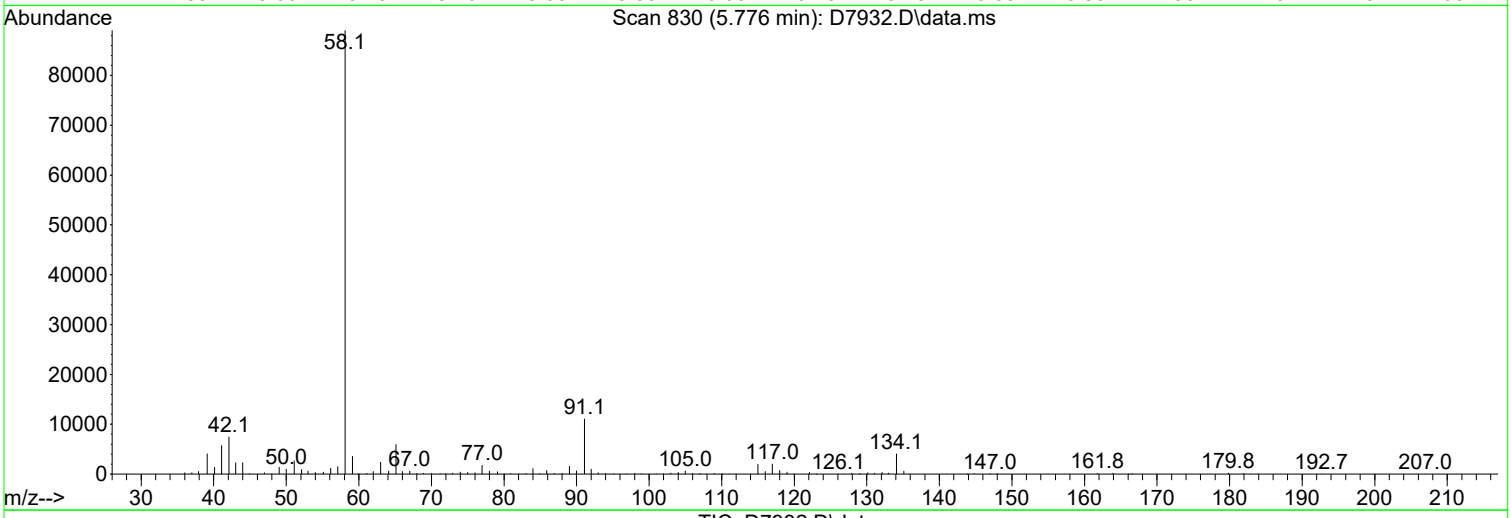

TIC: D7932.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

5.776min (-0.442) 19.68 ppm m

response 520345

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.00	8.44
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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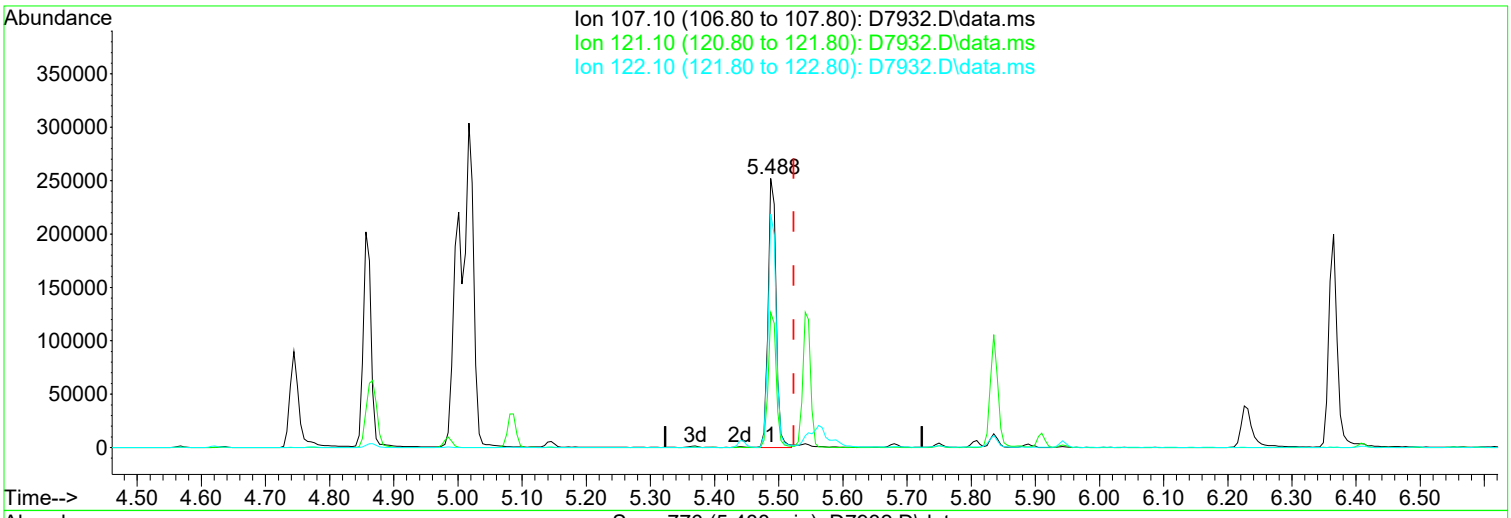

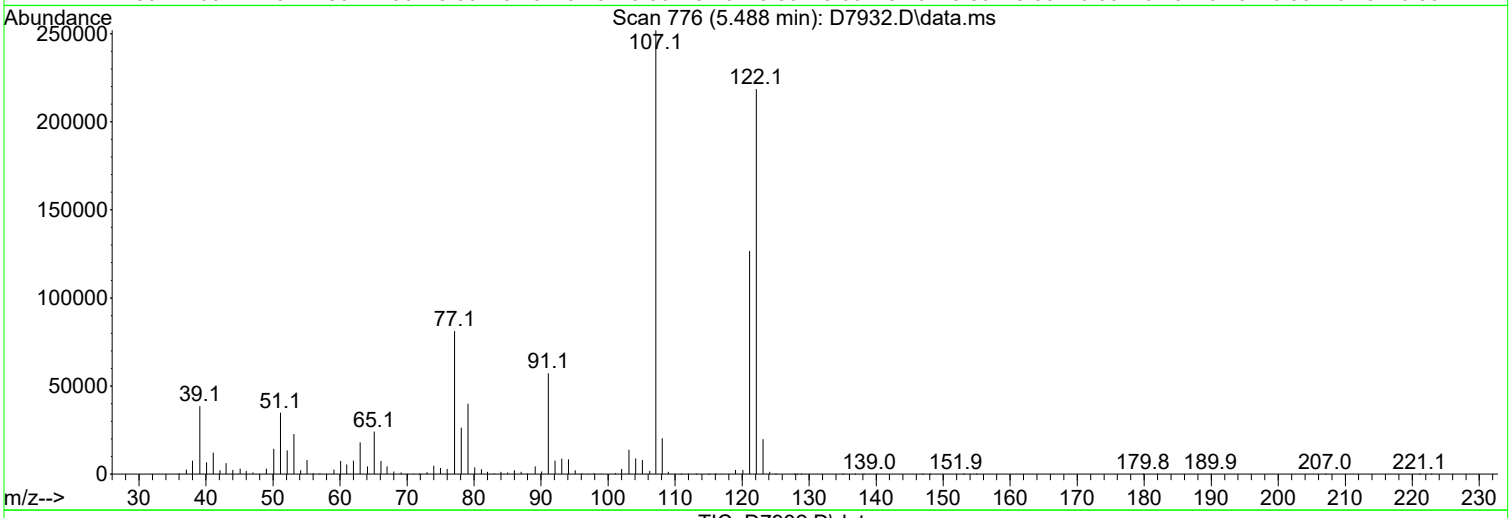

TIC: D7932.D\data.ms

(41) 2,4-Dimethylphenol (TM)

5.488min (-0.036) 18.40 ppm m

response 219490

Ion	Exp%	Act%
107.10	100.00	100.00
121.10	51.40	50.23
122.10	84.40	86.72
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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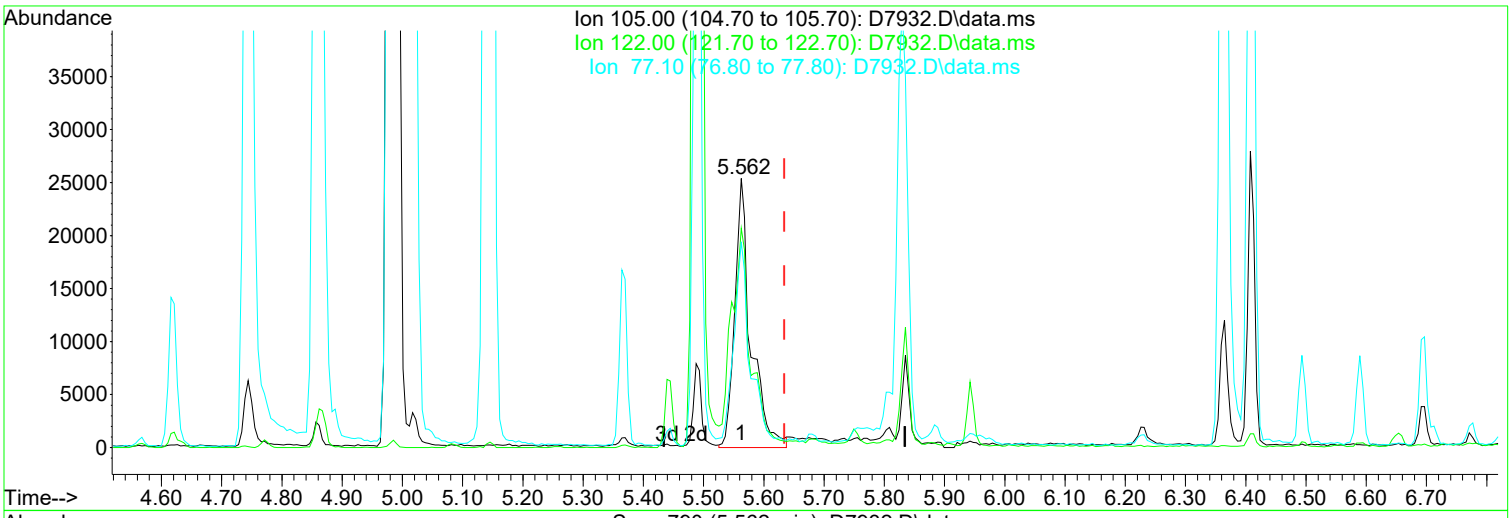

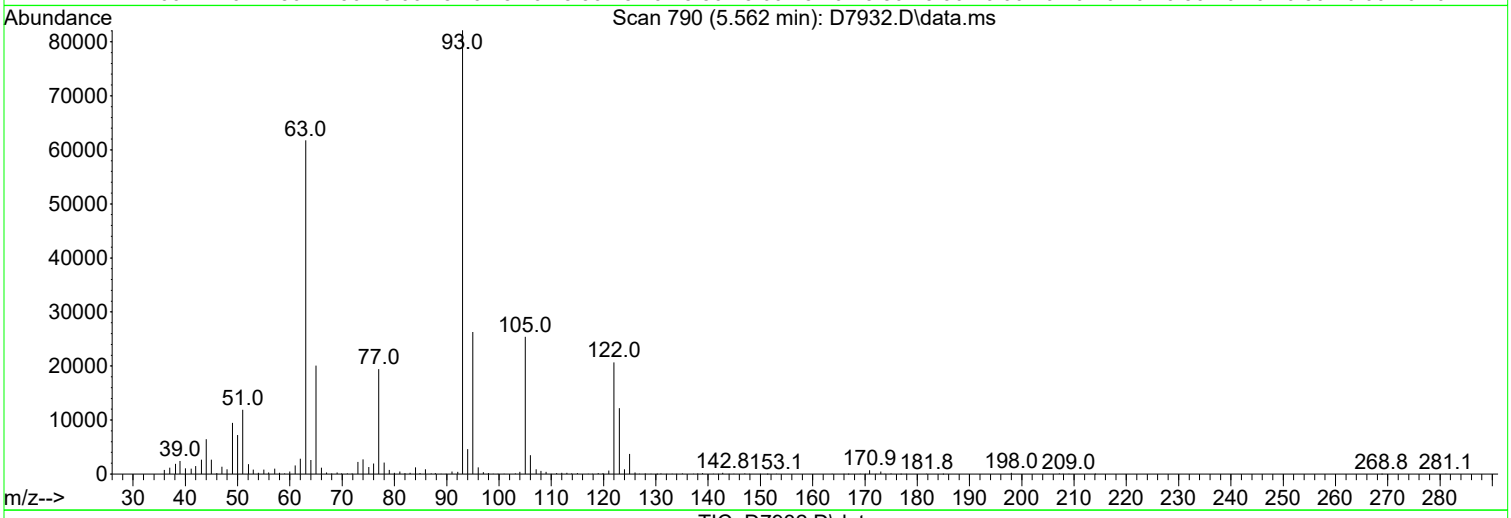

TIC: D7932.D\data.ms

(40) Benzoic Acid (TM)

5.562min (-0.072) 10.90 ppm m

response 47266

Ion	Exp%	Act%
105.00	100.00	100.00
122.00	80.40	81.50
77.10	70.70	76.52
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7931.D
Acq On : 05 Aug 2024 10:54 am
Operator : EDeGray
Sample : 10 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 05 12:28:43 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
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Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.616	152	308967	40.00	ppm		-0.04
34) d8-Naphthalene	5.803	136	1246234	40.00	ppm		-0.04
58) d10-Acenaphthene	7.515	164	689442	40.00	ppm		-0.04
92) d10-Phenanthrene	8.980	188	1187454	40.00	ppm		-0.04
118) d12-Chrysene	12.131	240	987036	40.00	ppm		-0.07
136) d12-Perylene	14.944	264	1021326	40.00	ppm		-0.08
System Monitoring Compounds							
8) SURR1,2-FLUOROPHENOL	3.466	112	96985	8.26	ppm		-0.03
Spiked Amount 20.000	Range 10 - 70		Recovery = 41.30%				
13) SURR2,PHENOL-D6	4.300	99	125945	8.21	ppm		-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery = 41.05%				
35) SURR4,NITROBENZENE-D5	5.124	82	109027	9.13	ppm		-0.04
Spiked Amount 10.000	Range 31 - 110		Recovery = 91.30%				
64) SURR5,2-FLUOROBIPHENYL	6.852	172	214744	9.61	ppm		-0.04
Spiked Amount 10.000	Range 31 - 118		Recovery = 96.10%				
89) SURR3,2,4,6-TRIBROMOPH...	8.290	330	23842	8.13	ppm		-0.04
Spiked Amount 20.000	Range 35 - 141		Recovery = 40.65%				
125) SURR6,TERPHENYL-D14	10.633	244	209435	9.43	ppm		-0.05
Spiked Amount 10.000	Range 10 - 165		Recovery = 94.30%				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.679	88	43588	9.065	ppm		99
3) Pyridine	2.102	79	114175	9.357	ppm		98
4) N-Nitrosodimethylamine	2.059	74	74138	8.864	ppm		99
5) 2-Picoline	2.894	93	121612	8.997	ppm		96
6) N-Nitrosomethylamine	3.001	42	42135	11.998	ppm		97
7) Methyl Methansulfonate	3.289	80	60054	11.341	ppm		99
9) N-Nitrosodiethylamine	3.648	102	51065	8.032	ppm		90
10) Ethyl Mathanesulfonate	3.921	79	82527	9.083	ppm		97
11) Benzaldehyde	4.225	106	84049	8.815	ppm		98
12) Aniline	4.322	93	162813	8.579	ppm		86
14) Phenol	4.311	94	143905	8.589	ppm		80
15) bis(2-Clethyl)Ether	4.375	93	109154	8.743	ppm		95
16) Pentachloroethane	4.364	117	37152	8.931	ppm		95
17) 2-Chlorophenol	4.434	128	105072	8.258	ppm		95
18) 1,3-Diclbenzene	4.568	146	111855	8.997	ppm		99
19) 1,4-Dichlorobenzene	4.632	146	115767	9.113	ppm		97
20) 1,2-Diclbenzene	4.771	146	109016	9.096	ppm		98
21) Benzyl Alcohol	4.744	79	77539	7.811	ppm		97
22) 1-Methyl-2-pyrrolidinone	4.750	99	70941	7.853	ppm		95
23) 2,2'-oxybis(1-Chloropr...	4.862	45	138185	10.313	ppm	#	84
24) 2-Methylphenol	4.857	108	96335	8.161	ppm		95
25) 3+4-Methylphenol	4.996	108	107467	9.012	ppm		93
26) Acetophenone	4.985	105	156263	9.420	ppm		96
27) N-Nitroso-Di-n-propyla...	4.985	70	88719	9.611	ppm		97
28) N-Nitrosopyrrolidine	4.964	100	57767	8.215	ppm		94
29) N-Nitrosomorpholine	5.001	56	71893	10.358	ppm		98
30) o-Toluidine	5.017	106	185908m	9.910	ppm		
31) Hexachloroethane	5.087	117	47327	9.251	ppm		97
32) o,o,o-Triethylphosphor...	5.541	198	51885	10.312	ppm		95
33) Alpha-terpinol	5.835	121	42046m	11.714	ppm		
36) Nitrobenzene	5.140	77	110393	9.344	ppm		88
37) N-Nitrosopiperidine	5.279	42	75105	12.087	ppm		91
38) Isophorone	5.365	82	216766	9.458	ppm		94

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7931.D
Acq On : 05 Aug 2024 10:54 am
Operator : EDeGray
Sample : 10 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 05 12:28:43 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) 2-Nitrophenol	5.445	139	40825m	6.219	ppm		
40) Benzoic Acid	5.557	105	19045m	6.795	ppm		
41) 2,4-Dimethylphenol	5.488	107	109553	8.811	ppm		97
42) bis(-2-Chloroethoxy)Me...	5.568	93	125201	9.015	ppm		98
43) 2,4-Dichlorophenol	5.680	162	79450	8.747	ppm		96
44) a,a-Dimethylphenethyla...	5.734	58	254300m	9.232	ppm		
45) 1,2,4-Trichlorobenzene	5.750	180	87097	9.948	ppm		96
46) Naphthalene	5.825	128	309789	9.346	ppm		99
47) 4-Chloroaniline	5.878	127	122310	8.854	ppm		98
48) 2,6-Dichlorophenol	5.889	162	78228	9.083	ppm		92
49) Hexachlorobutadiene	5.942	225	49831	11.271	ppm		96
50) Hexachloropropene	5.910	213	53076	10.410	ppm		100
51) 4-Chloro-3-methylphenol	6.365	107	88925	8.018	ppm	#	27
52) N-N-di-n-butylamine	6.199	84	100425	10.086	ppm		94
53) Caprolactam	6.204	113	35996	8.350	ppm	#	36
54) p-Phenylenediamine	6.226	80	34646m	6.117	ppm		
55) Safrole	6.408	162	73621	9.422	ppm		93
56) 2-Methylnaphthalene	6.493	142	206321	9.192	ppm		99
57) 1-Methylnaphthalene	6.590	142	192638	9.242	ppm		99
59) Hexachlorocyclopentadiene	6.648	237	32530	8.421	ppm		97
60) 1,2,4,5-Tetrachloroben...	6.654	216	83708	10.377	ppm		96
61) 1,2,3,4-Tetrachloroben...	6.932	216	85523	10.467	ppm		99
62) 2,4,6-Trichlorophenol	6.777	196	48696m	7.836	ppm		
63) 2,4,5-Trichlorophenol	6.819	196	50903	7.774	ppm		99
65) Isosafrole	6.916	104	37672	9.394	ppm		97
66) 1,1'-Biphenyl	6.948	154	255448	9.321	ppm		97
67) 2-Chloronaphthalene	6.969	162	184169	9.203	ppm		100
68) 2-Nitroaniline	7.071	65	53766	7.875	ppm		85
69) 1,4-Naphthoquinone	7.146	158	67634	11.004	ppm		99
70) m-Dinitrobenzene	7.279	168	24470m	5.987	ppm		
71) Acenaphthylene	7.376	152	274371	8.943	ppm		99
72) Dimethyl phthalate	7.253	163	212028	9.098	ppm		99
73) 2,6-Dinitrotoluene	7.312	165	42429	7.831	ppm		93
74) Acenaphthene	7.547	153	192695	8.937	ppm		99
75) 3-Nitroaniline	7.477	138	50541	7.128	ppm		93
76) 2,4-Dinitrophenol	7.579	184	7088m	2.217	ppm		
77) Dibenzofuran	7.713	168	262590	9.288	ppm		98
78) 2,4-Dinitrotoluene	7.707	165	52191	7.355	ppm		86
79) 4-Nitrophenol	7.670	65	35395m	6.599	ppm		
80) Pentachlorobenzene	7.675	250	74333	10.375	ppm		100
81) 1-Napthylamine	7.793	143	156300m	8.393	ppm		
82) 2-Napthylamine	7.873	143	130361m	6.693	ppm		
83) 2,3,4,6-Tetrachlorophenol	7.841	232	32164	6.997	ppm		99
84) Fluorene	8.055	166	218663	9.556	ppm		99
85) 4-Chlorophenyl-phenyle...	8.055	204	100818	10.130	ppm		98
86) Diethylphthalate	7.943	149	216789	9.131	ppm		99
87) 4-Nitroaniline	8.076	138	56881	7.716	ppm		99
88) 5-Nitro-o-toluidine	8.066	152	56234	7.633	ppm		91
90) Sulfotepp	8.333	322	35156	9.912	ppm		93
91) Octachlorocyclopentene	8.301	307	21177m	7.516	ppm		
93) Thionazin	8.023	107	38909	7.643	ppm		99
94) 4,6-Dinitro-2-methylph...	8.103	198	15096m	3.189	ppm		
95) Diphenylamine	8.173	169	353221	17.792	ppm		98
96) 1,2 Diphenylhydrazine	8.210	77	257454	8.991	ppm		97
97) N-Nitrosodiphenylamine	8.173	169	353439	17.799	ppm		98
98) 1,3,5-Trinirobenzene	8.445	213	10828m	4.132	ppm		

1st BA 08/07/24
2nd MP 08/07/24

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QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

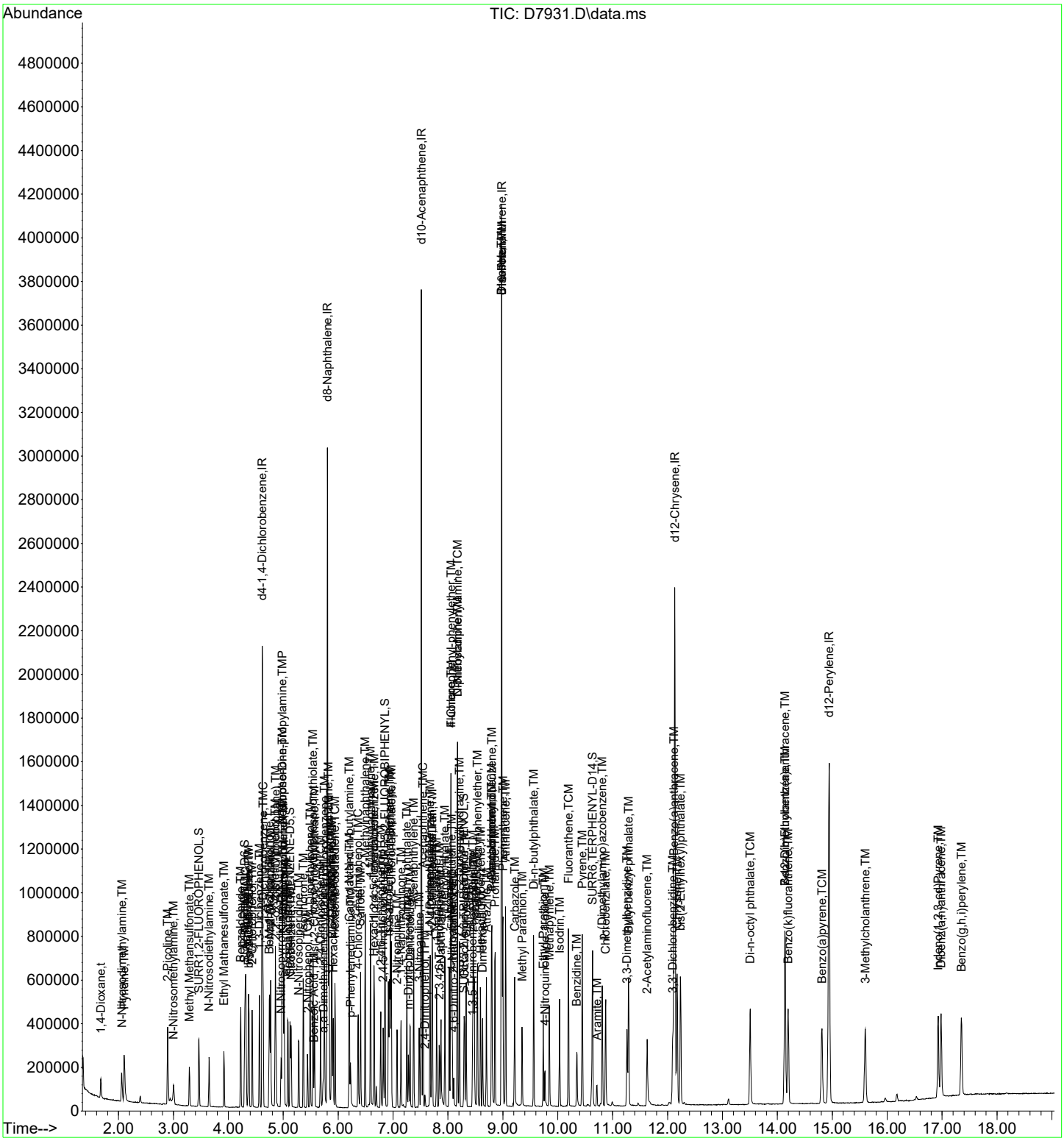
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
99) Diallate	8.456	86	89491m	8.483	ppm	
100) Phorate	8.467	121	46683	7.822	ppm	83
101) Phenacetin	8.478	108	110579	7.536	ppm	96
102) 4-Bromophenyl-phenylether	8.536	248	57241	9.446	ppm	98
103) Hexachlorobenzene	8.595	284	63407	9.423	ppm	96
104) Dimethoate	8.633	87	78792	8.159	ppm	99
105) Atrazine	8.702	215	29930	9.422	ppm	99
106) Pentachlorophenol	8.793	266	22954m	5.049	ppm	
107) 4-Aminobiphenyl	8.793	169	174366	7.005	ppm	98
108) Pentachloronitrobenzene	8.799	237	22652	9.354	ppm	87
109) Pronamide	8.857	173	97668	8.721	ppm	99
110) Dinoseb	8.975	211	22268	3.819	ppm	92
111) Disulfoton	8.980	88	160610m	8.689	ppm	
112) Phenanthrene	9.002	178	304329	8.592	ppm	98
113) Anthracene	9.050	178	300811	8.514	ppm	99
114) Carbazole	9.216	167	259490	7.265	ppm	99
115) Di-n-butylphthalate	9.558	149	349170	7.916	ppm	99
116) 4-Nitroquinonline-1-oxide	9.767	190	12131m	3.840	ppm	
117) Fluoranthene	10.194	202	302431	8.446	ppm	99
119) Methyl Parathion	9.349	109	49039	7.057	ppm	97
120) Ethyl Parathion	9.735	97	37206	6.457	ppm	97
121) Methapyrilene	9.847	58	131007	8.959	ppm	100
122) Isodrin	10.034	193	30465	8.605	ppm	93
123) Benzidine	10.344	184	109873	4.987	ppm	97
124) Pyrene	10.446	202	315370	8.790	ppm	97
126) Aramite	10.713	185	17456m	5.967	ppm	
127) p-(Dimethylamino)azobe...	10.810	120	97015	7.500	ppm	95
128) Chlorobenzilate	10.874	139	107275	7.980	ppm	84
129) Butyl benzyl phthalate	11.291	149	157886	7.852	ppm	98
130) 3,3-Dimethylbenzidine	11.259	212	144716m	6.776	ppm	
131) 2-Acetylaminofluorene	11.628	181	96348	6.081	ppm	98
132) 3,3'-Dichlorobenzidine	12.093	252	81501	6.648	ppm	99
133) Benzo(a)anthracene	12.115	228	295307	9.060	ppm	98
134) Chrysene	12.173	228	272572	8.940	ppm	99
135) bis(2-Ethylhexyl)phtha...	12.232	149	216958	7.797	ppm	99
137) Di-n-octyl phthalate	13.505	149	339258	7.368	ppm	99
138) 7,12-Dimethylbenz(a)an...	14.136	256	135639	9.356	ppm	99
139) Benzo(b)Fluoranthene	14.136	252	278738	9.209	ppm	99
140) Benzo(k)fluoranthene	14.195	252	266554	9.150	ppm	97
141) Benzo(a)pyrene	14.810	252	232476	8.719	ppm	99
142) 3-Methylcholanthrene	15.602	268	142903	8.634	ppm	98
143) Indeno(1,2,3-cd)Pyrene	16.928	276	219599	8.587	ppm	92
144) Dibenz(a,h)anthracene	16.982	278	223259	8.409	ppm	98
145) Benzo(g,h,i)perylene	17.351	276	231781	8.883	ppm	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7931.D
Acq On : 05 Aug 2024 10:54 am
Operator : EDeGray
Sample : 10 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 05 12:28:43 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration



Quantitation Report (Qedit)

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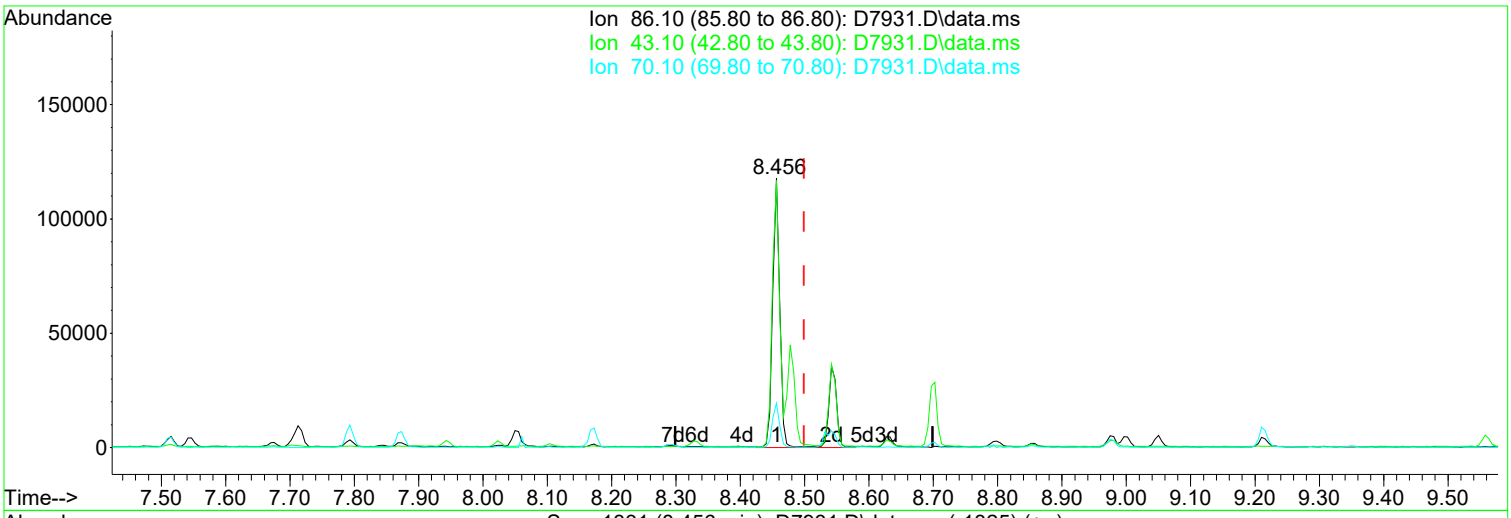

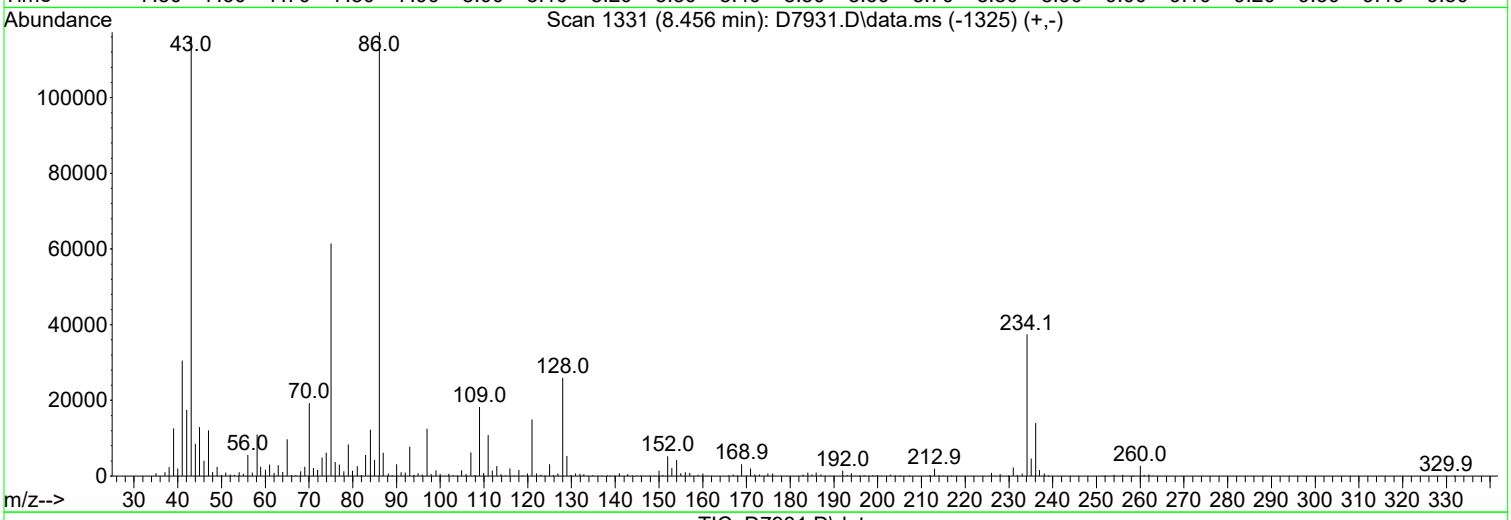

TIC: D7931.D\data.ms

(99) Diallate (TM)

8.456min (-0.043) 11.40 ppm m

response 120266

Ion	Exp%	Act%
86.10	100.00	100.00
43.10	98.60	99.16
70.10	15.70	16.49
0.00	0.00	0.00

Manual Integration:

Before

08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
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Acq On : 05 Aug 2024 10:54 am
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QLast Update : Tue Jul 02 09:22:19 2024
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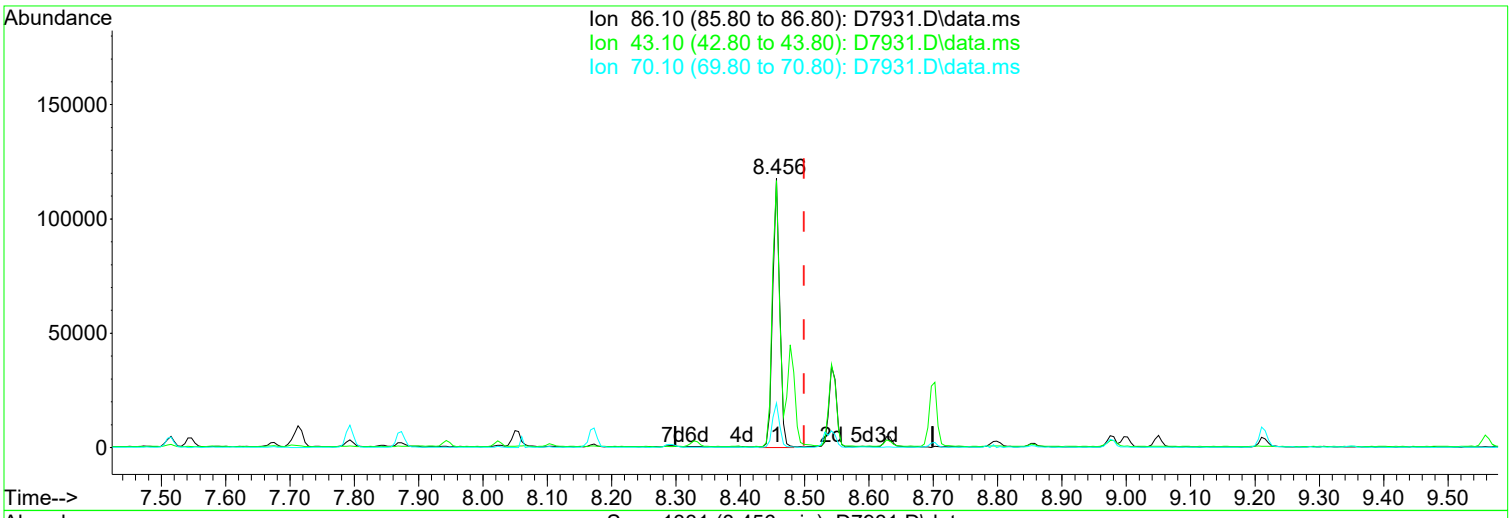

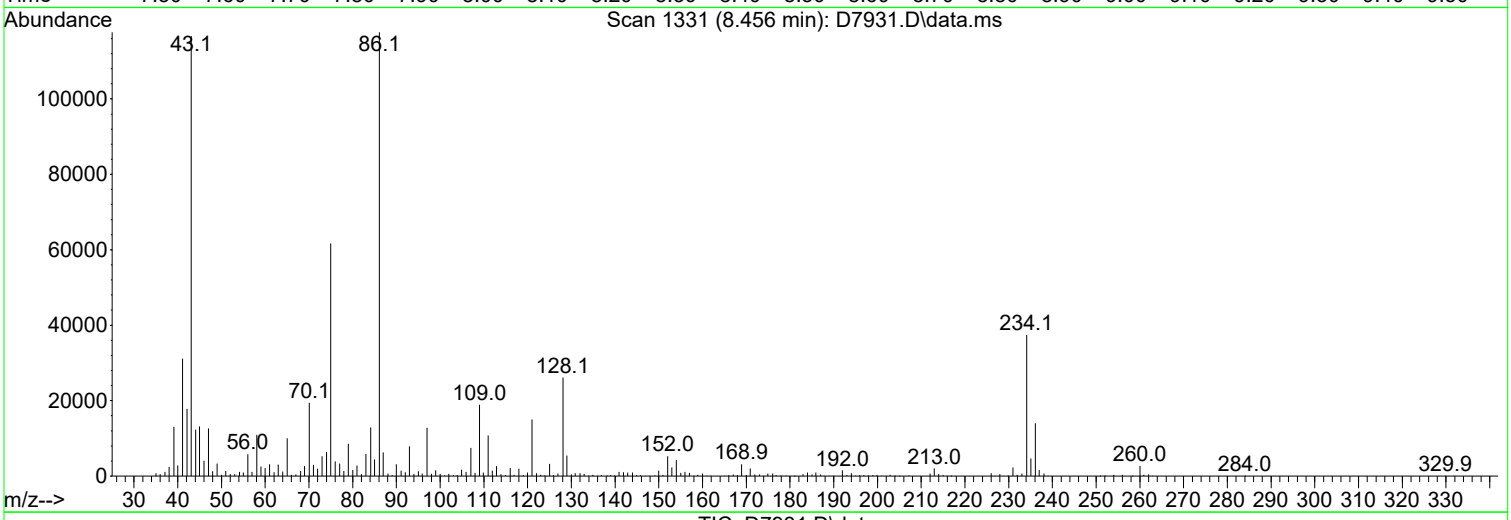

TIC: D7931.D\data.ms

(99) Diallate (TM)

8.456min (-0.043) 8.48 ppm m

response 89491

Ion	Exp%	Act%
86.10	100.00	100.00
43.10	98.60	99.16
70.10	15.70	16.49
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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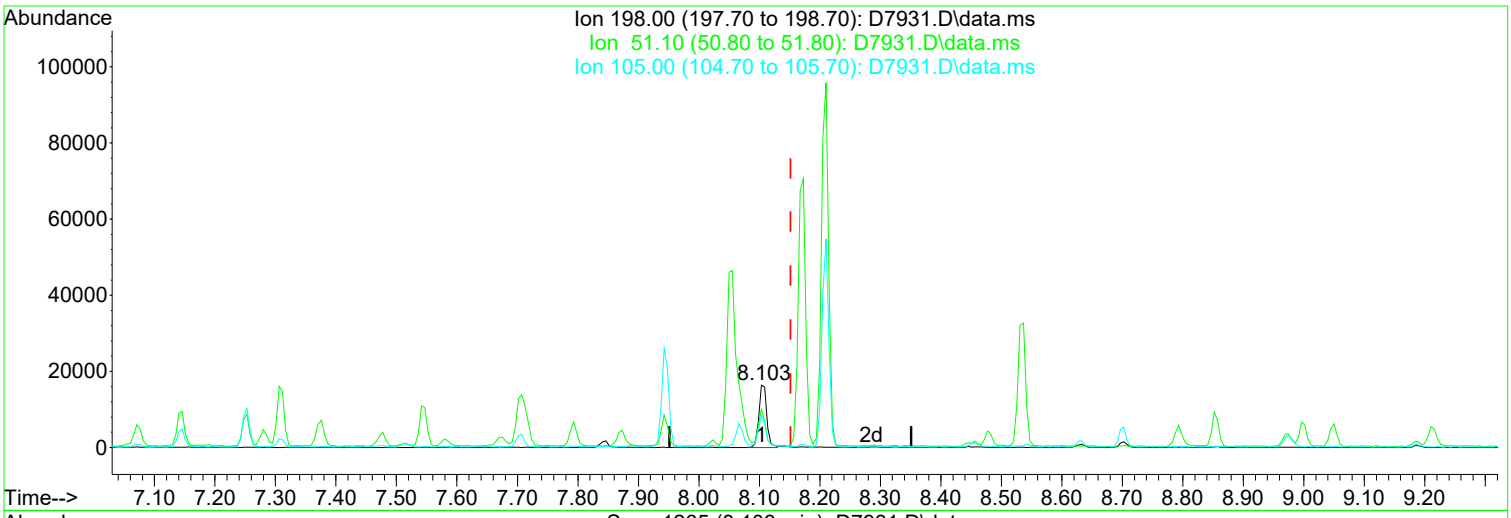

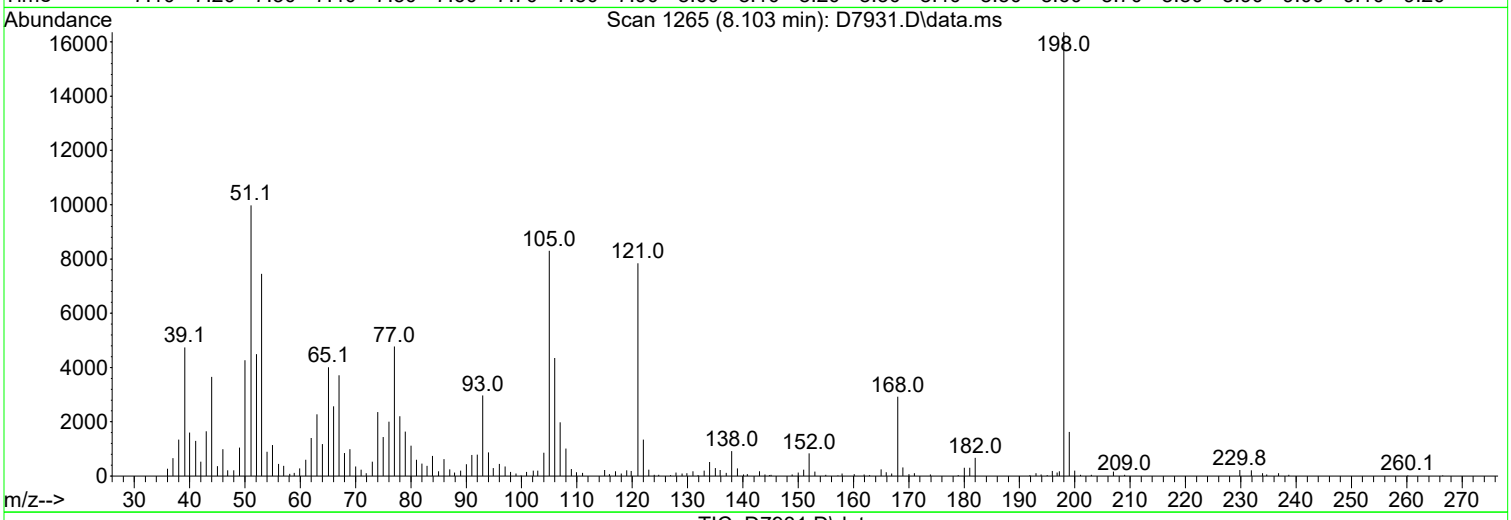

TIC: D7931.D\data.ms

(94) 4,6-Dinitro-2-methylphenol (TM)

8.103min (-0.049) 3.19 ppm m

response 15096

Ion	Exp%	Act%
198.00	100.00	100.00
51.10	43.70	61.00
105.00	44.70	50.76
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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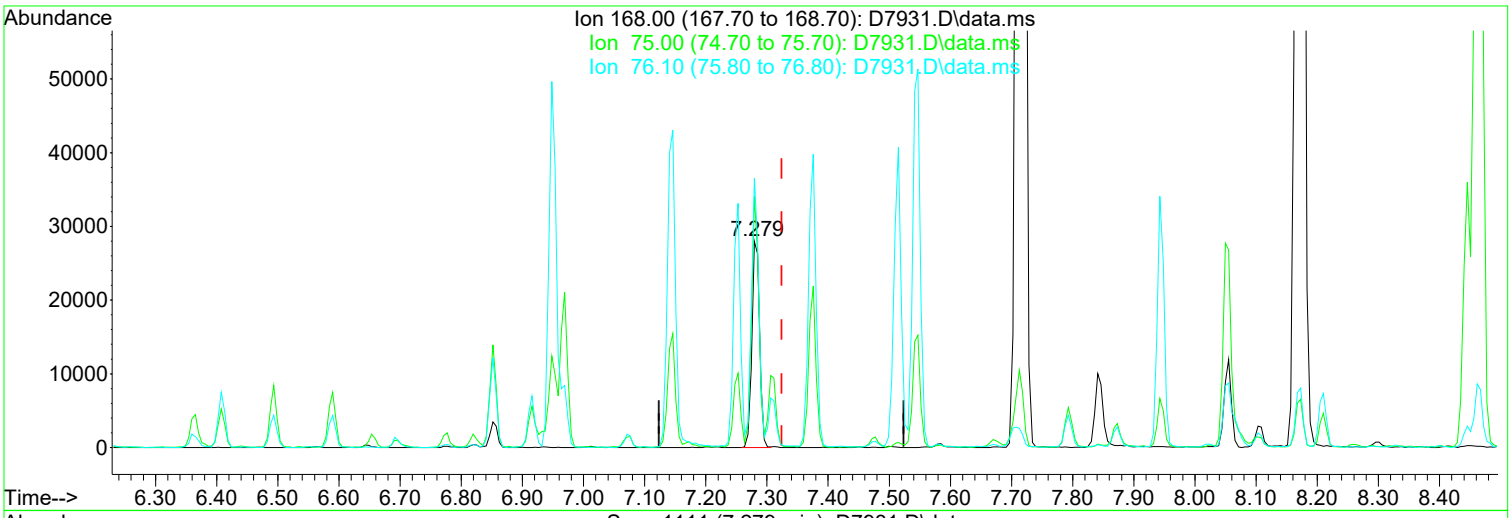

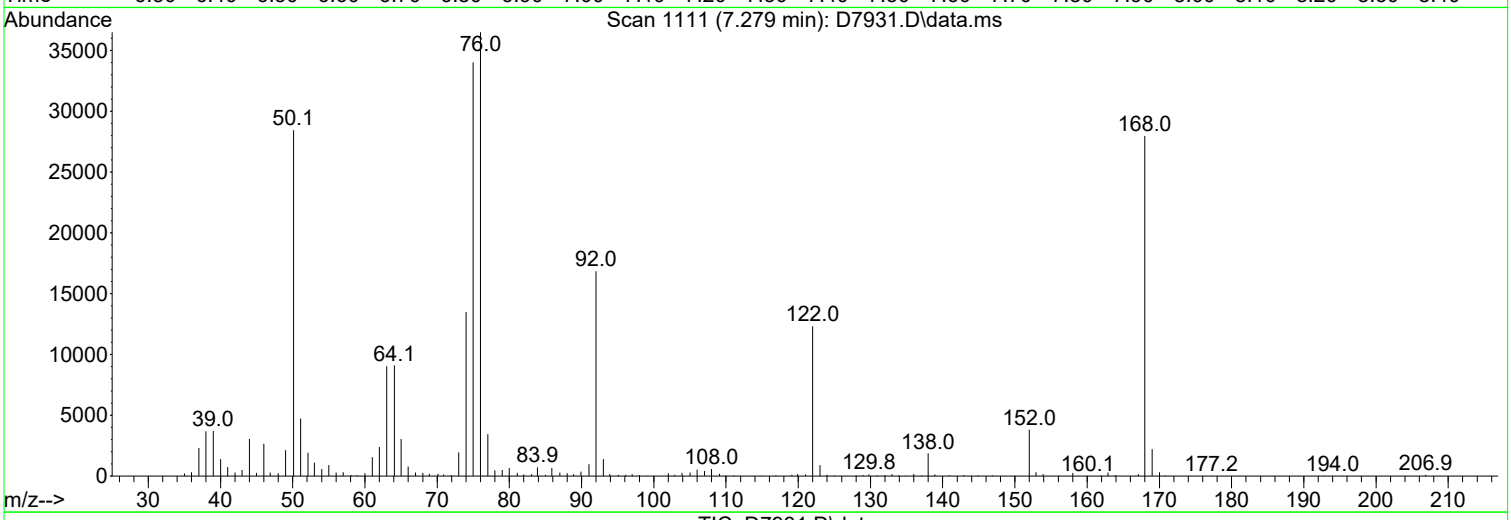

TIC: D7931.D\data.ms

(70) m-Dinitrobenzene (TM)

7.279min (-0.044) 5.99 ppm m

response 24470

Ion	Exp%	Act%
168.00	100.00	100.00
75.00	89.00	121.72
76.10	87.30	130.53#
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

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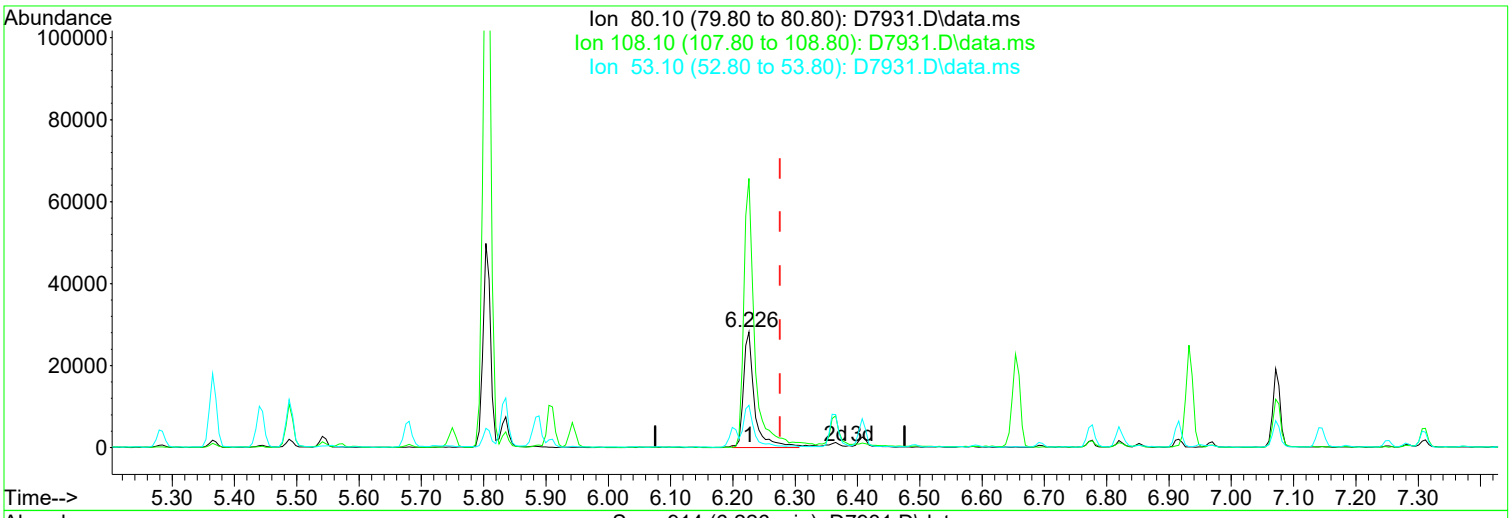

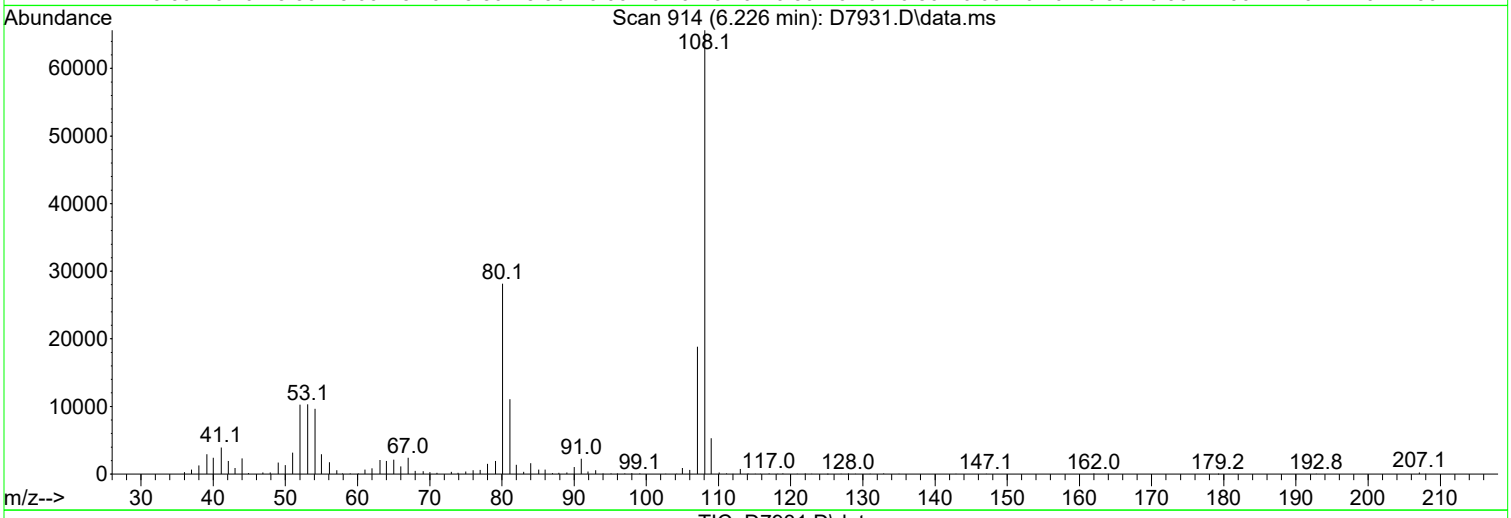

TIC: D7931.D\data.ms

(54) p-Phenylenediamine (TM)

6.226min (-0.050) 6.12 ppm m

response 34646

Ion	Exp%	Act%
80.10	100.00	100.00
108.10	237.80	233.12
53.10	40.00	36.62
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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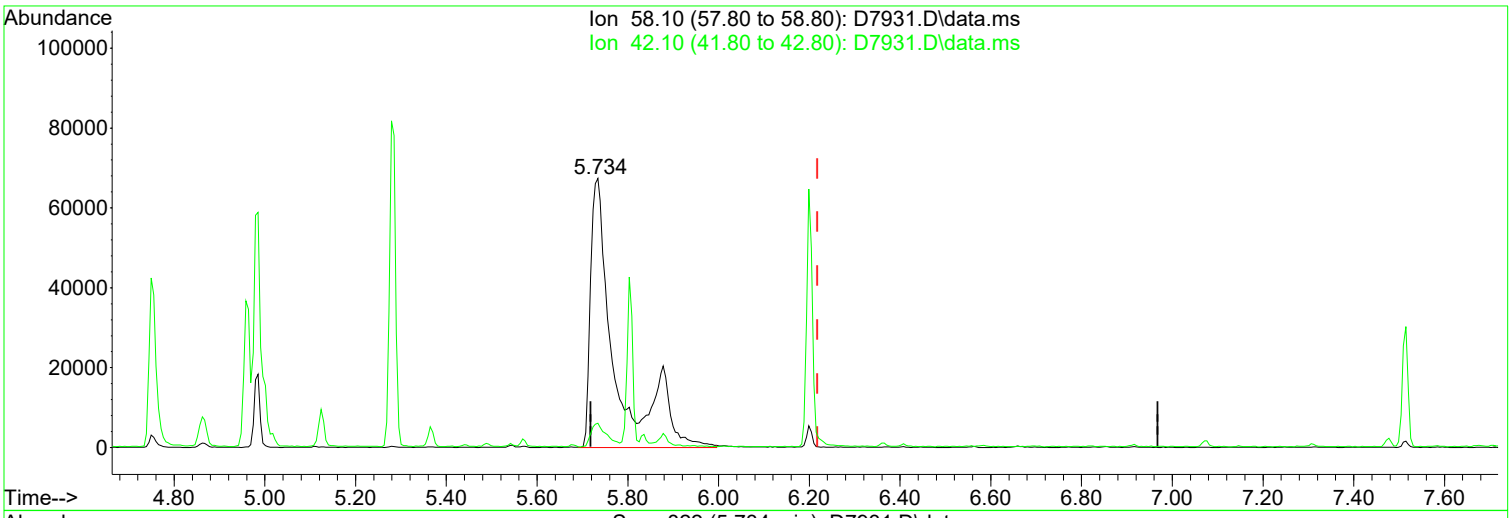

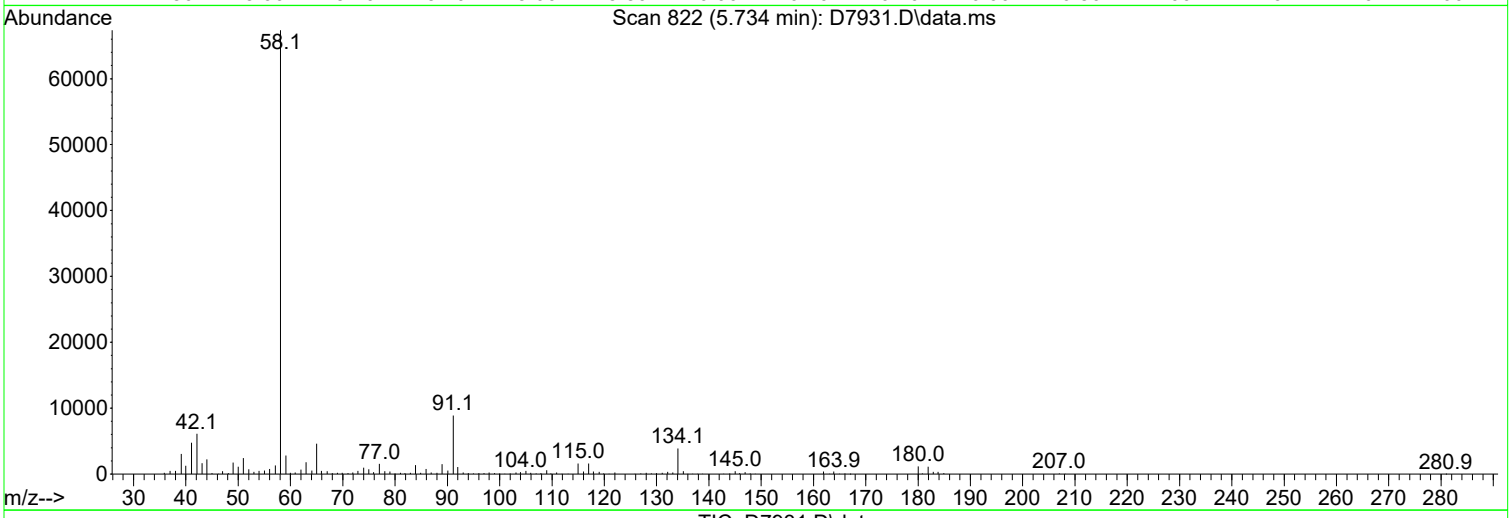

TIC: D7931.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

5.734min (-0.484) 9.23 ppm m

response 254300

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.00	9.08
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

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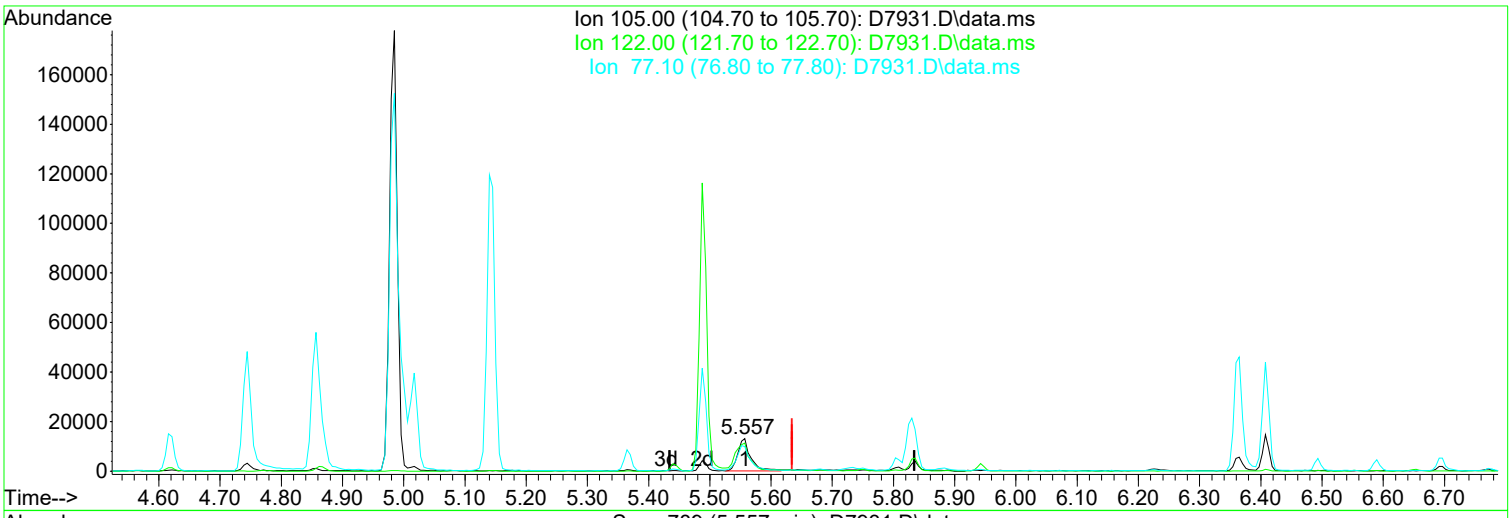
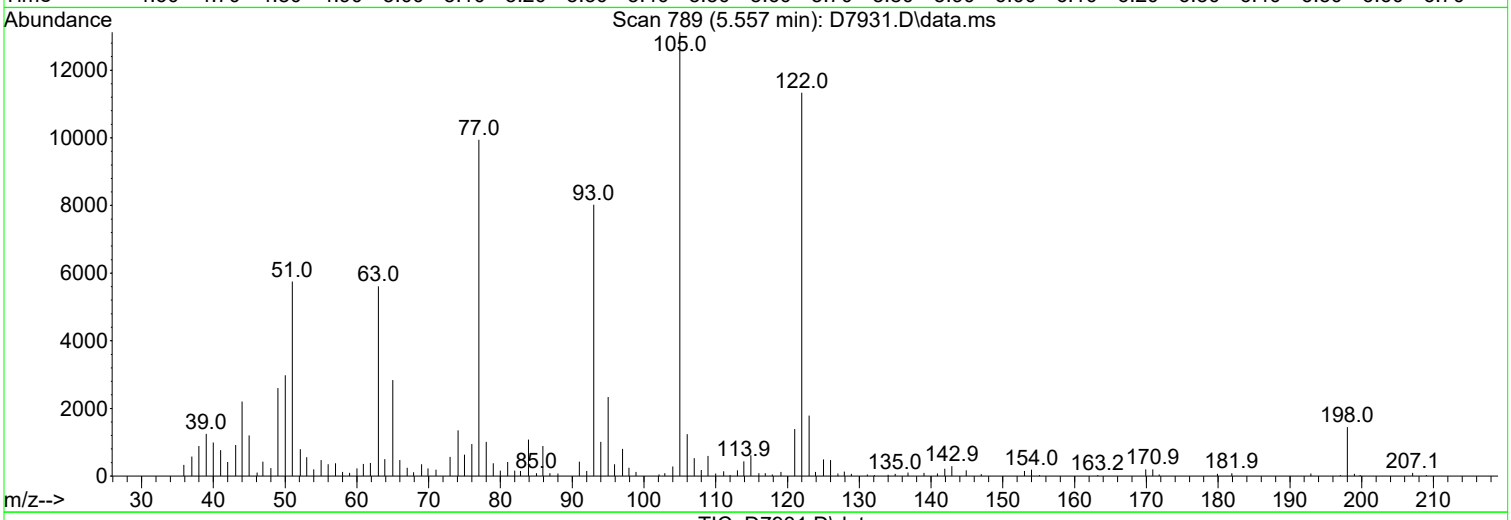




TIC: D7931.D\data.ms

(40) Benzoic Acid (TM)

5.557min (-0.077) 6.79 ppm m

response 19045

Ion	Exp%	Act%
105.00	100.00	100.00
122.00	80.40	86.40
77.10	70.70	75.80
0.00	0.00	0.00

Manual Integration:

After

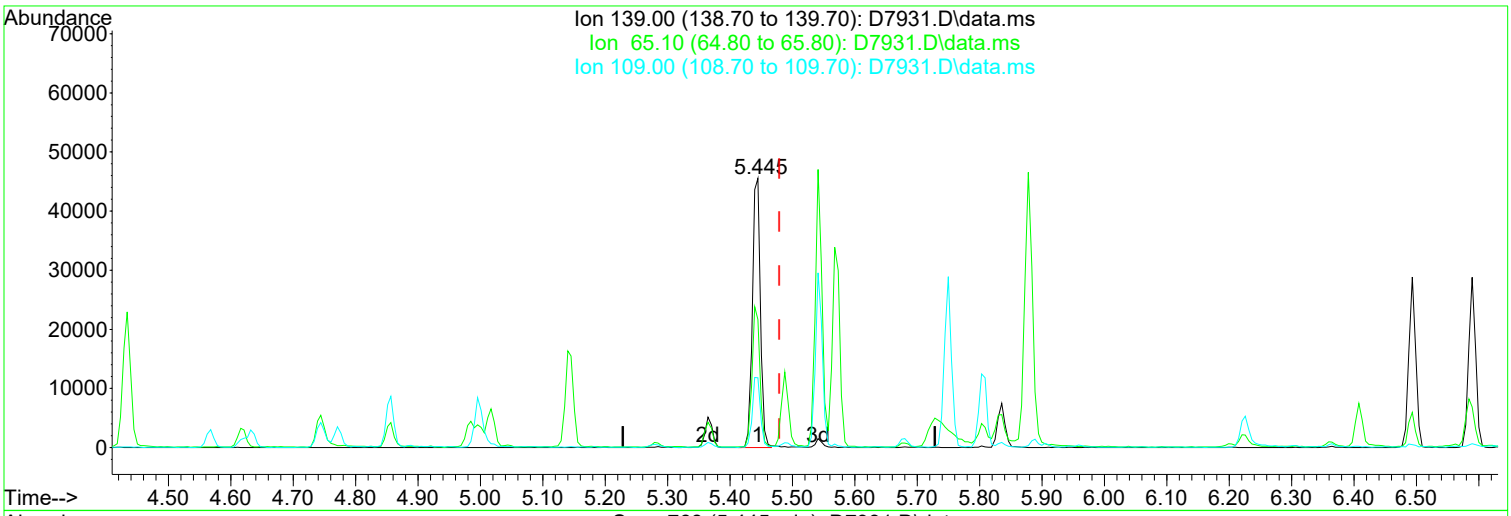
Poor integration.

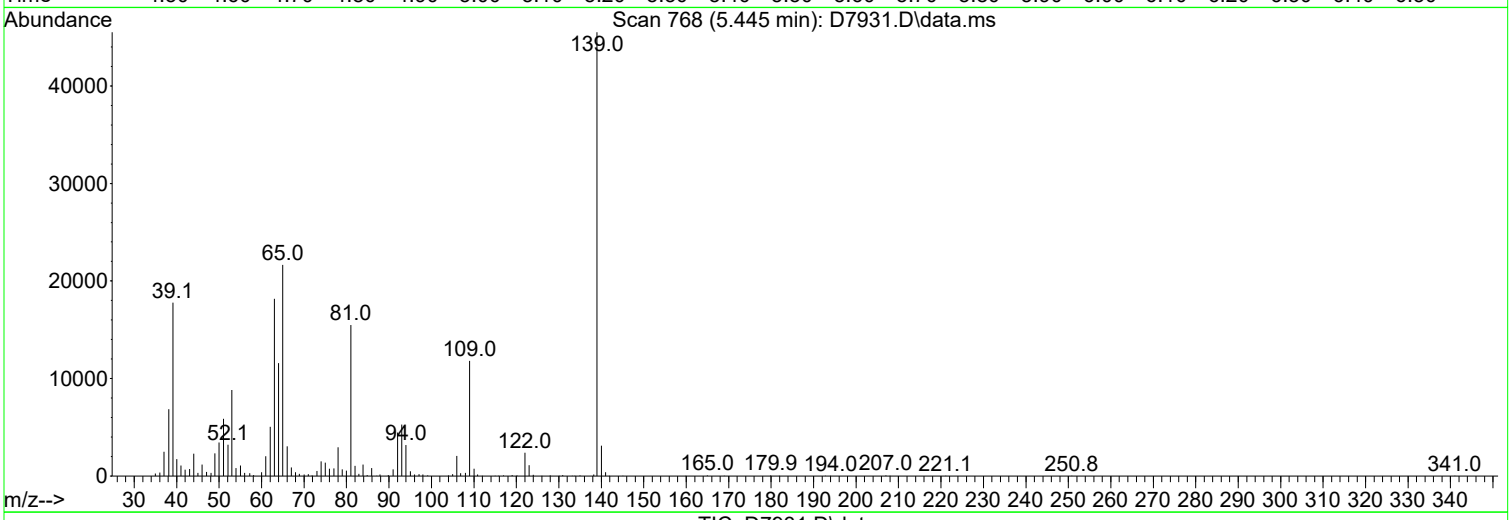
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7931.D
Acq On : 05 Aug 2024 10:54 am
Operator : EDeGray
Sample : 10 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 05 12:28:43 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7931.D\data.ms

(39) 2-Nitrophenol (TCM)

5.445min (-0.034) 6.22 ppm m

response 40825

Ion	Exp%	Act%
139.00	100.00	100.00
65.10	47.60	47.61
109.00	26.50	25.94
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
Operator : EDeGray
Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.616	152	289408	40.00	ppm	-0.04
34) d8-Naphthalene	5.803	136	1166215	40.00	ppm	-0.04
58) d10-Acenaphthene	7.515	164	632470	40.00	ppm	-0.04
92) d10-Phenanthrene	8.975	188	1087952	40.00	ppm	-0.04
118) d12-Chrysene	12.131	240	815249	40.00	ppm	-0.07
136) d12-Perylene	14.939	264	804736	40.00	ppm	-0.09
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	3.461	112	45885	4.17	ppm	-0.04
Spiked Amount 20.000	Range 10 - 70		Recovery = 20.85%			
13) SURR2,PHENOL-D6	4.300	99	60133m	4.18	ppm	-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery = 20.90%			
35) SURR4,NITROBENZENE-D5	5.124	82	50393	4.51	ppm	-0.04
Spiked Amount 10.000	Range 31 - 110		Recovery = 45.10%			
64) SURR5,2-FLUOROBIPHENYL	6.852	172	102231	4.99	ppm	-0.04
Spiked Amount 10.000	Range 31 - 118		Recovery = 49.90%			
89) SURR3,2,4,6-TRIBROMOPH...	8.290	330	9847	3.66	ppm	-0.04
Spiked Amount 20.000	Range 35 - 141		Recovery = 18.30%#			
125) SURR6,TERPHENYL-D14	10.633	244	90456	4.93	ppm	-0.05
Spiked Amount 10.000	Range 10 - 165		Recovery = 49.30%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.679	88	21055m	4.675	ppm	
3) Pyridine	2.107	79	50997m	4.462	ppm	
4) N-Nitrosodimethylamine	2.059	74	34667m	4.425	ppm	
5) 2-Picoline	2.894	93	57450	4.538	ppm	98
6) N-Nitrosomethylamine	3.006	42	19286m	5.863	ppm	
7) Methyl Methansulfonate	3.289	80	28311m	5.708	ppm	
9) N-Nitrosodiethylamine	3.648	102	25022m	4.202	ppm	
10) Ethyl Mathanesulfonate	3.921	79	40754m	4.789	ppm	
11) Benzaldehyde	4.225	106	40832m	4.453	ppm	
12) Aniline	4.322	93	75415	4.242	ppm	87
14) Phenol	4.311	94	74200m	4.728	ppm	
15) bis(2-Clethyl)Ether	4.375	93	54737	4.681	ppm	94
16) Pentachloroethane	4.364	117	18295	4.695	ppm	94
17) 2-Chlorophenol	4.434	128	49627	4.164	ppm	95
18) 1,3-Diclbenzene	4.568	146	54320	4.664	ppm	99
19) 1,4-Dichlorobenzene	4.632	146	57687	4.848	ppm	96
20) 1,2-Diclbenzene	4.771	146	53285	4.747	ppm	98
21) Benzyl Alcohol	4.744	79	35455	3.813	ppm	96
22) 1-Methyl-2-pyrrolidinone	4.750	99	33022	3.903	ppm	95
23) 2,2'-oxybis(1-Chloropr...	4.862	45	68060	5.423	ppm	89
24) 2-Methylphenol	4.851	108	45580	4.122	ppm	96
25) 3+4-Methylphenol	4.996	108	49154	4.400	ppm	97
26) Acetophenone	4.985	105	74731	4.810	ppm	94
27) N-Nitroso-Di-n-propyla...	4.980	70	41828	4.837	ppm	96
28) N-Nitrosopyrrolidine	4.958	100	26776	4.065	ppm	82
29) N-Nitrosomorpholine	4.996	56	33778	5.195	ppm	98
30) o-Toluidine	5.017	106	79385	4.518	ppm	75
31) Hexachloroethane	5.081	117	22680	4.733	ppm	91
32) o,o,o-Triethylphosphor...	5.541	198	23946	5.081	ppm	89
33) Alpha-terpinol	5.835	121	20205	6.010	ppm	88
36) Nitrobenzene	5.140	77	52382	4.738	ppm	90
37) N-Nitrosopiperidine	5.279	42	35373	6.083	ppm	91
38) Isophorone	5.365	82	103428	4.822	ppm	96

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
Operator : EDeGray
Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) 2-Nitrophenol	5.440	139	19363m	3.152	ppm		
40) Benzoic Acid	5.547	105	5002m	4.880	ppm		
41) 2,4-Dimethylphenol	5.488	107	51809	4.453	ppm		98
42) bis(-2-Chloroethoxy)Me...	5.568	93	61814	4.756	ppm		99
43) 2,4-Dichlorophenol	5.680	162	36062	4.242	ppm		96
44) a,a-Dimethylphenethyla...	5.707	58	116991m	4.539	ppm		
45) 1,2,4-Trichlorobenzene	5.750	180	42643	5.205	ppm		97
46) Naphthalene	5.825	128	150615	4.856	ppm		100
47) 4-Chloroaniline	5.878	127	58404	4.518	ppm		98
48) 2,6-Dichlorophenol	5.889	162	35999	4.467	ppm		93
49) Hexachlorobutadiene	5.942	225	24261	5.864	ppm		99
50) Hexachloropropene	5.910	213	22554	4.727	ppm		97
51) 4-Chloro-3-methylphenol	6.365	107	42551m	4.100	ppm		
52) N-N-di-n-butylamine	6.199	84	46770	5.019	ppm		95
53) Caprolactam	6.194	113	15720m	3.897	ppm		
54) p-Phenylenediamine	6.220	80	8957m	1.690	ppm		
55) Safrole	6.408	162	34824	4.763	ppm		94
56) 2-Methylnaphthalene	6.493	142	99307	4.728	ppm		100
57) 1-Methylnaphthalene	6.590	142	93522	4.795	ppm		99
59) Hexachlorocyclopentadiene	6.648	237	11985	3.382	ppm		99
60) 1,2,4,5-Tetrachloroben...	6.654	216	40303	5.446	ppm		98
61) 1,2,3,4-Tetrachloroben...	6.932	216	40535	5.408	ppm		99
62) 2,4,6-Trichlorophenol	6.777	196	21515m	3.774	ppm		
63) 2,4,5-Trichlorophenol	6.820	196	22006	3.664	ppm		99
65) Isosafrole	6.916	104	17909	4.868	ppm	#	7
66) 1,1'-Biphenyl	6.948	154	120990	4.812	ppm		97
67) 2-Chloronaphthalene	6.969	162	88969	4.846	ppm		99
68) 2-Nitroaniline	7.071	65	22549	3.600	ppm		85
69) 1,4-Naphthoquinone	7.146	158	28873	5.121	ppm		92
70) m-Dinitrobenzene	7.280	168	10171	2.713	ppm		90
71) Acenaphthylene	7.376	152	129808	4.612	ppm		99
72) Dimethyl phthalate	7.253	163	101492	4.747	ppm		100
73) 2,6-Dinitrotoluene	7.306	165	18340	3.690	ppm		90
74) Acenaphthene	7.547	153	93105	4.707	ppm		99
75) 3-Nitroaniline	7.477	138	19872m	3.055	ppm		
76) 2,4-Dinitrophenol	7.579	184	2538m	0.865	ppm		
77) Dibenzofuran	7.713	168	125781	4.850	ppm		98
78) 2,4-Dinitrotoluene	7.702	165	20129m	3.092	ppm		
79) 4-Nitrophenol	7.670	65	16508m	3.355	ppm		
80) Pentachlorobenzene	7.675	250	36851	5.607	ppm		99
81) 1-Napthylamine	7.873	143	55457	3.246	ppm		96
82) 2-Napthylamine	7.873	143	54174m	3.032	ppm		
83) 2,3,4,6-Tetrachlorophenol	7.841	232	12960	3.073	ppm		97
84) Fluorene	8.050	166	103017	4.908	ppm		99
85) 4-Chlorophenyl-phenyle...	8.055	204	48107	5.269	ppm		98
86) Diethylphthalate	7.943	149	103604	4.757	ppm		99
87) 4-Nitroaniline	8.076	138	21441	3.170	ppm		97
88) 5-Nitro-o-toluidine	8.066	152	22645	3.350	ppm		94
90) Sulfotepp	8.333	322	16460	5.059	ppm		91
91) Octachlorocyclopentene	8.301	307	8246	3.190	ppm		94
93) Thionazin	8.023	107	17503	3.753	ppm		98
94) 4,6-Dinitro-2-methylph...	8.103	198	6098m	1.406	ppm		
95) Diphenylamine	8.173	169	163456	8.986	ppm		97
96) 1,2 Diphenylhydrazine	8.210	77	118547	4.519	ppm		98
97) N-Nitrosodiphenylamine	8.173	169	163456	8.985	ppm		97
98) 1,3,5-Trinirobenzene	8.446	213	3955m	1.647	ppm		

1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
Operator : EDeGray
Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

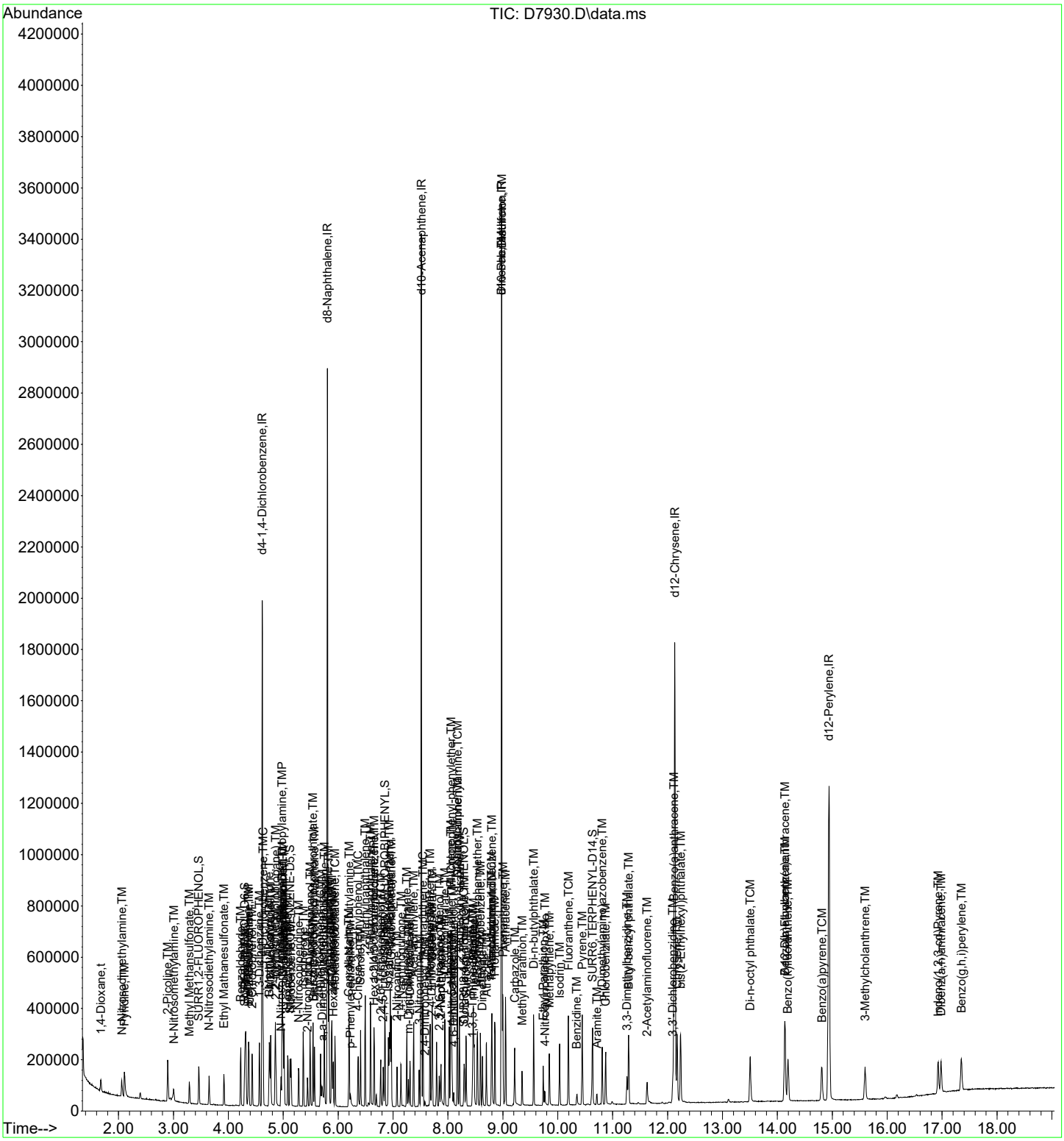
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
99)	Diallate	8.456	86	42025	4.348	ppm		99
100)	Phorate	8.462	121	20803	3.805	ppm	#	76
101)	Phenacetin	8.478	108	45655	3.396	ppm		97
102)	4-Bromophenyl-phenylether	8.536	248	27134	4.887	ppm		96
103)	Hexachlorobenzene	8.590	284	30971	5.023	ppm		93
104)	Dimethoate	8.627	87	33215	3.754	ppm		98
105)	Atrazine	8.702	215	13716	4.713	ppm		96
106)	Pentachlorophenol	8.793	266	7523m	1.806	ppm		
107)	4-Aminobiphenyl	8.793	169	75183m	3.296	ppm		
108)	Pentachloronitrobenzene	8.799	237	9954	4.486	ppm		86
109)	Pronamide	8.852	173	42280	4.121	ppm		99
110)	Dinoseb	8.975	211	7932	1.485	ppm		78
111)	Disulfoton	8.980	88	81266m	4.184	ppm		
112)	Phenanthrene	9.002	178	145648	4.488	ppm		98
113)	Anthracene	9.050	178	139779	4.318	ppm		99
114)	Carbazole	9.216	167	106660	3.259	ppm		98
115)	Di-n-butylphthalate	9.558	149	162352	4.017	ppm		99
116)	4-Nitroquinonline-1-oxide	9.767	190	3566m	1.232	ppm		
117)	Fluoranthene	10.195	202	136954	4.174	ppm		99
119)	Methyl Parathion	9.349	109	18234	3.177	ppm		95
120)	Ethyl Parathion	9.735	97	14191	2.982	ppm		96
121)	Methapyrilene	9.847	58	58195	4.818	ppm		100
122)	Isodrin	10.034	193	15150	5.181	ppm		97
123)	Benzidine	10.344	184	21249	1.168	ppm		98
124)	Pyrene	10.446	202	142069	4.794	ppm		97
126)	Aramite	10.713	185	7033m	2.911	ppm		
127)	p-(Dimethylamino)azobe...	10.810	120	39767	3.722	ppm		96
128)	Chlorobenzilate	10.874	139	44469	4.005	ppm		89
129)	Butyl benzyl phthalate	11.291	149	69430	4.180	ppm		97
130)	3,3-Dimethylbenzidine	11.259	212	47008	2.665	ppm		97
131)	2-Acetylaminofluorene	11.628	181	29932	2.287	ppm		97
132)	3,3'-Dichlorobenzidine	12.093	252	25210	2.490	ppm		96
133)	Benzo(a)anthracene	12.115	228	123681	4.594	ppm		98
134)	Chrysene	12.174	228	116253	4.616	ppm		100
135)	bis(2-Ethylhexyl)phtha...	12.238	149	99438	4.326	ppm		98
137)	Di-n-octyl phthalate	13.505	149	144356	3.979	ppm		98
138)	7,12-Dimethylbenz(a)an...	14.136	256	55706	4.876	ppm		99
139)	Benzo(b)Fluoranthene	14.136	252	109790	4.603	ppm		98
140)	Benzo(k)fluoranthene	14.190	252	107657	4.690	ppm		97
141)	Benzo(a)pyrene	14.810	252	90567	4.311	ppm		98
142)	3-Methylcholanthrene	15.597	268	52630	4.036	ppm		98
143)	Indeno(1,2,3-cd)Pyrene	16.928	276	74181	3.682	ppm		92
144)	Dibenz(a,h)anthracene	16.982	278	73279	3.503	ppm		94
145)	Benzo(g,h,i)perylene	17.351	276	83737	4.073	ppm		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
Operator : EDeGray
Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
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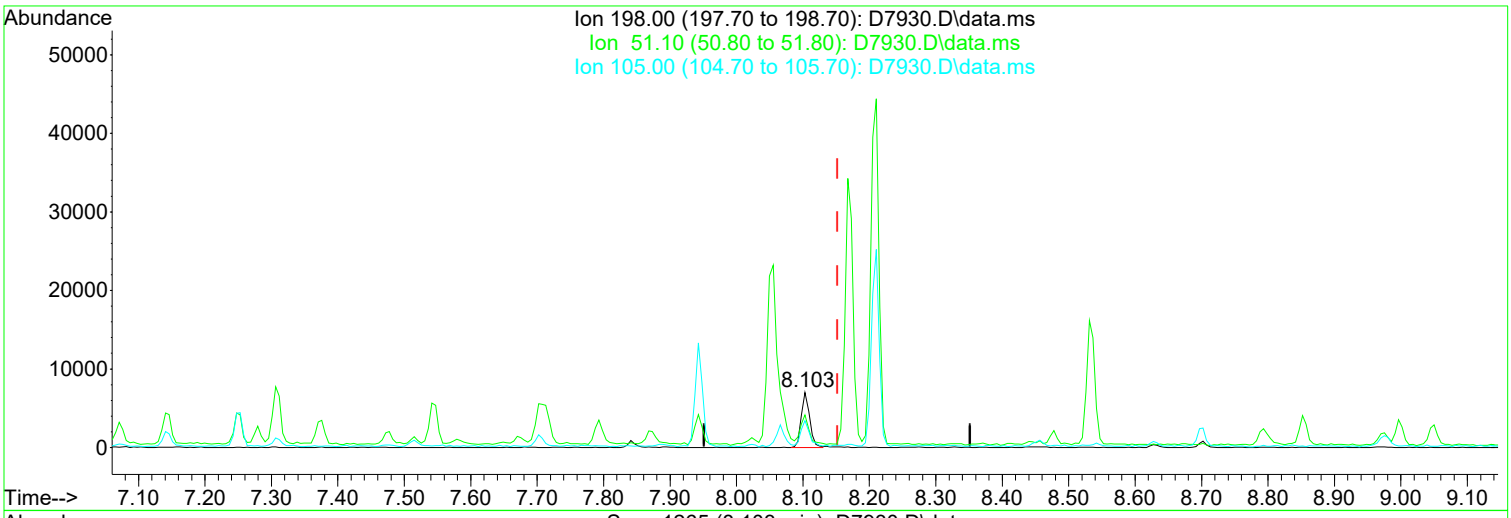

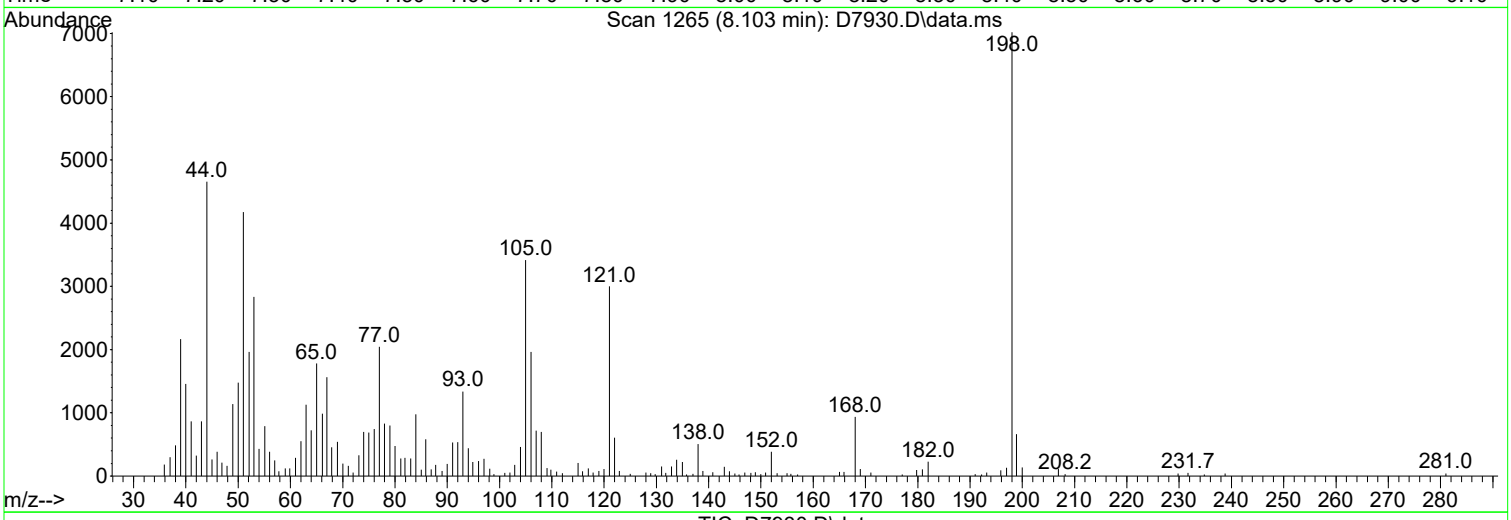

TIC: D7930.D\data.ms

(94) 4,6-Dinitro-2-methylphenol (TM)

8.103min (-0.049) 1.41 ppm m

response 6098

Ion	Exp%	Act%
198.00	100.00	100.00
51.10	43.70	59.45
105.00	44.70	48.64
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
Operator : EDeGray
Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
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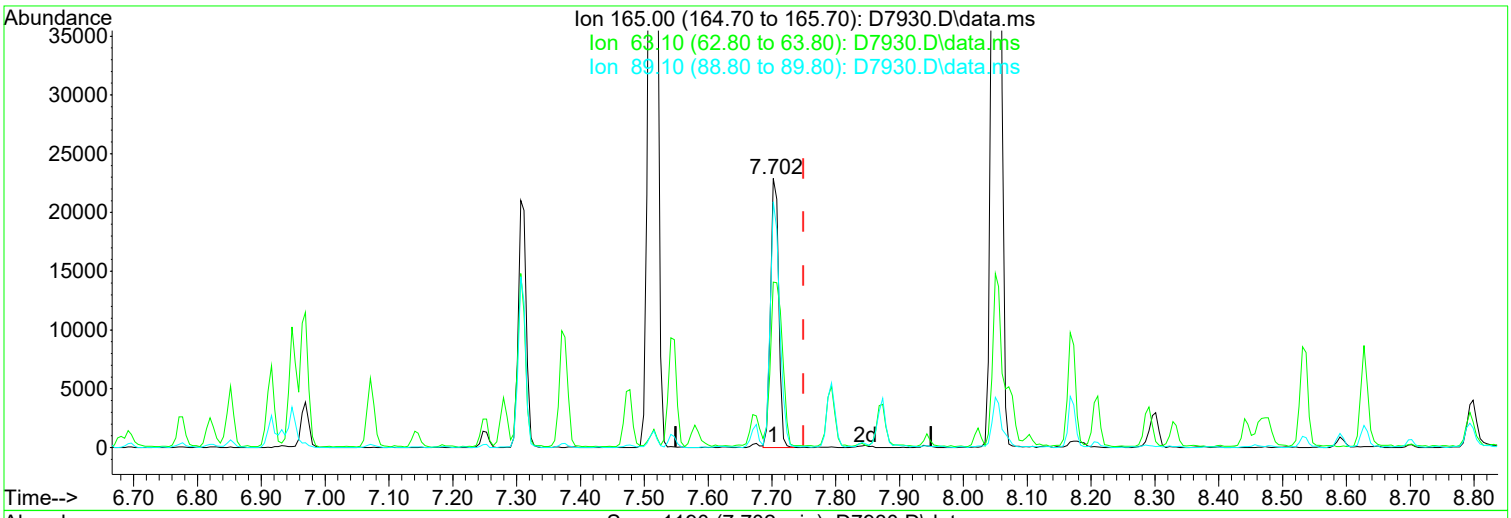

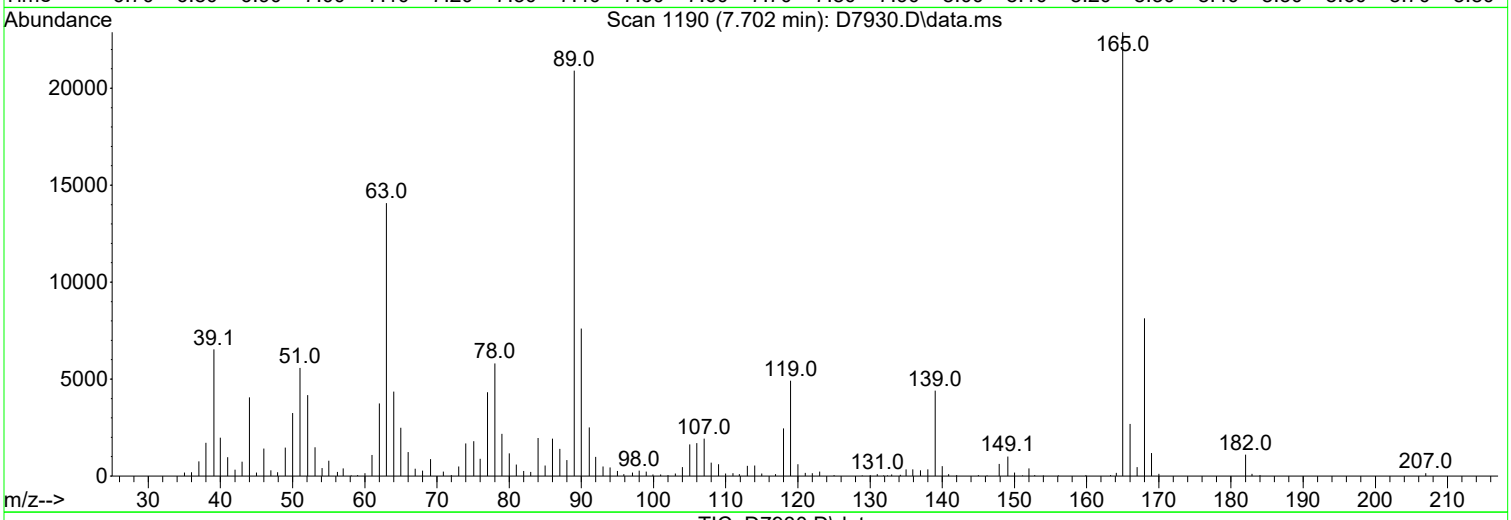

TIC: D7930.D\data.ms

(78) 2,4-Dinitrotoluene (TM)

7.702min (-0.047) 3.09 ppm m

response 20129

Ion	Exp%	Act%
165.00	100.00	100.00
63.10	43.50	61.47
89.10	74.10	91.37
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
Operator : EDeGray
Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
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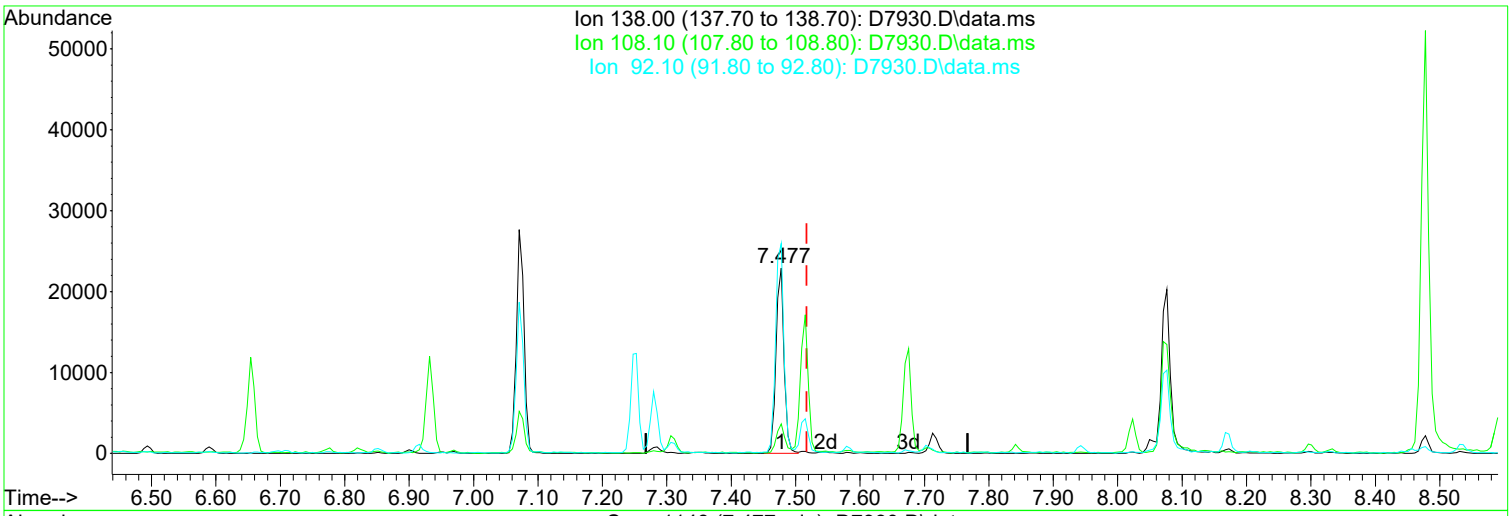
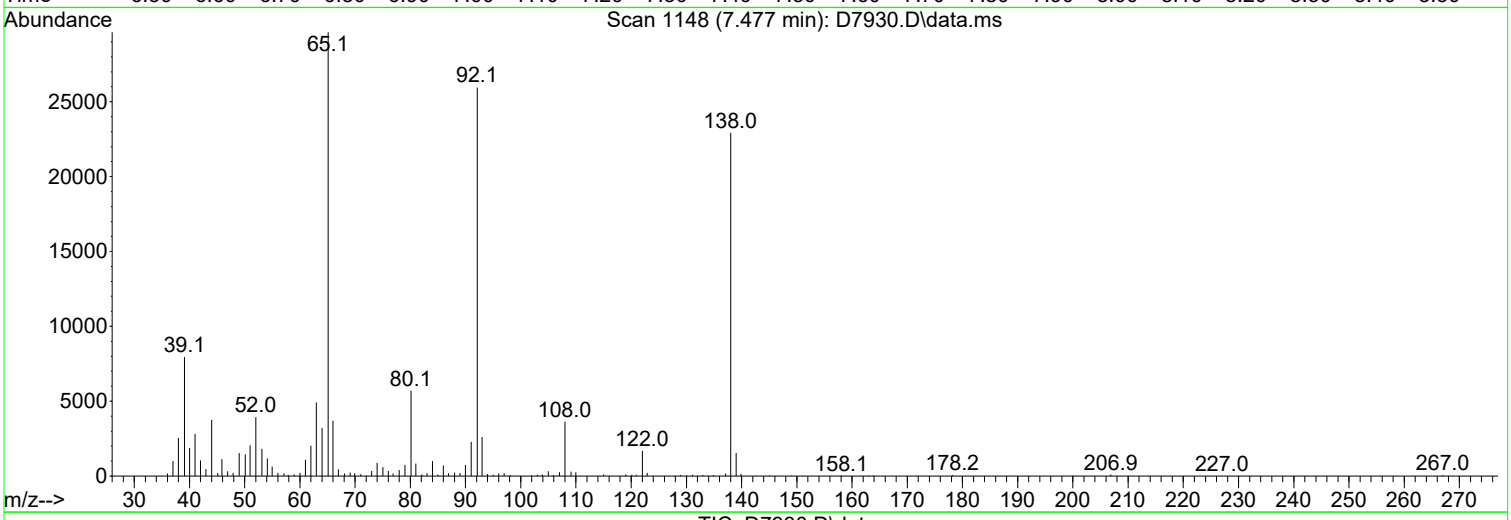
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7930.D\data.ms

(75) 3-Nitroaniline (TM)

7.477min (-0.040) 3.06 ppm m

response 19872

Ion	Exp%	Act%
138.00	100.00	100.00
108.10	9.90	15.86
92.10	105.10	113.15
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
Operator : EDeGray
Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
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Quant Title : 8270 BNA ANALYSIS
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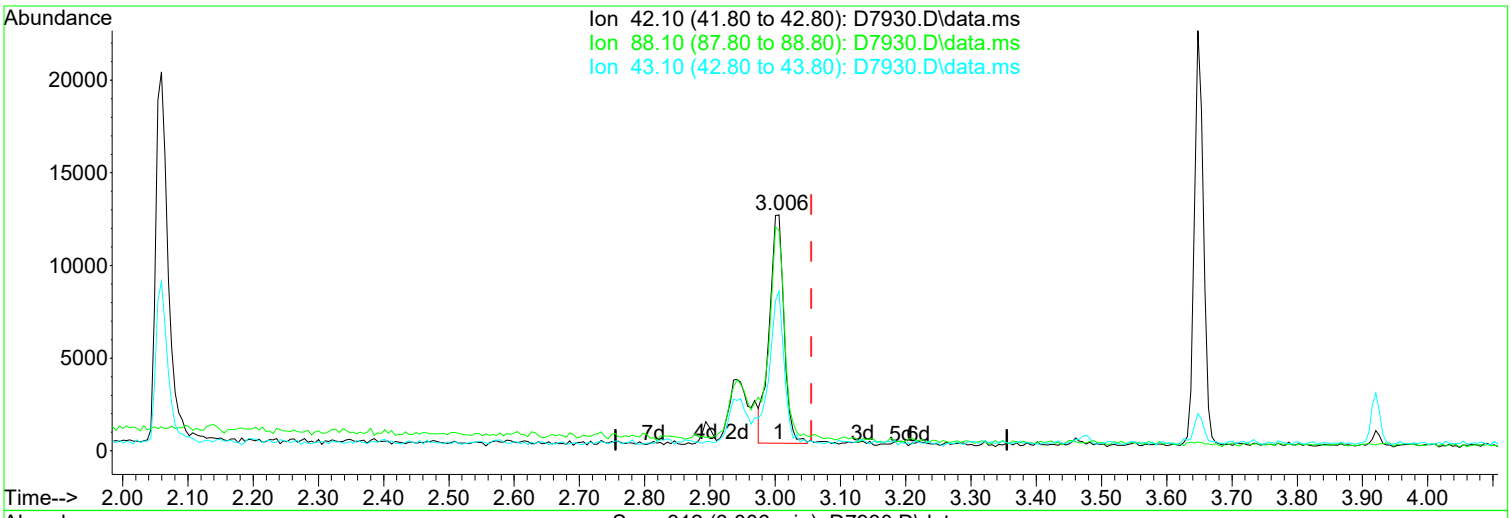
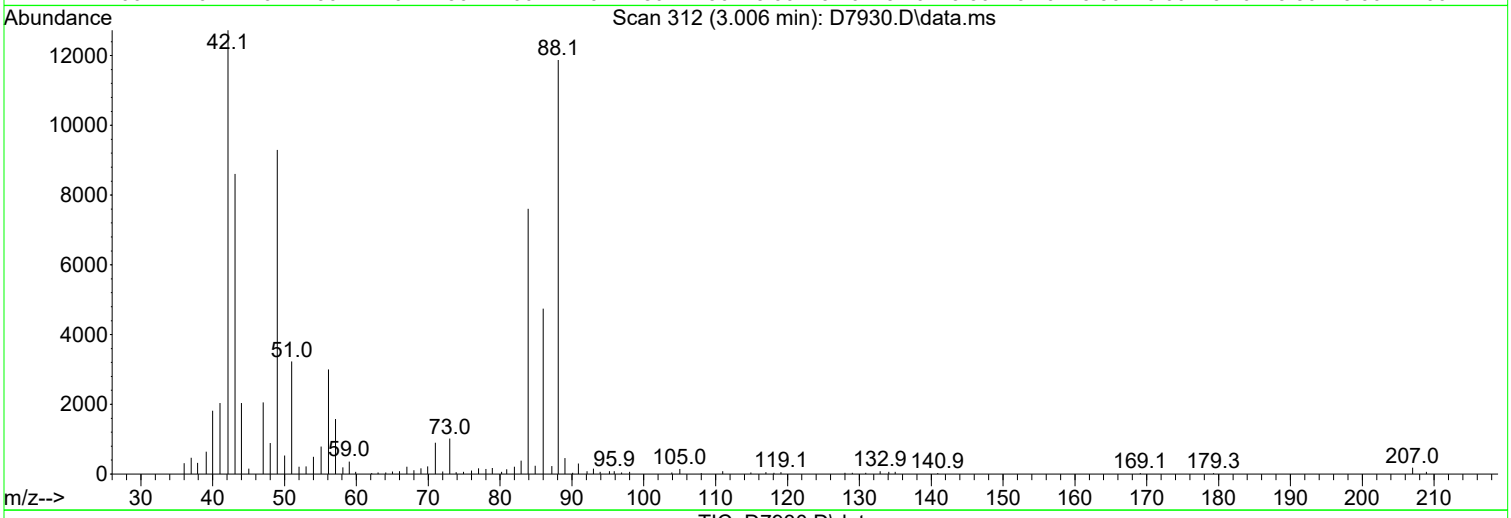




TIC: D7930.D\data.ms

(6) N-Nitrosomethylamine (TM)

3.006min (-0.050) 5.86 ppm m

response 19286

Ion	Exp%	Act%
42.10	100.00	100.00
88.10	98.10	93.32
43.10	65.60	67.61
0.00	0.00	0.00

Manual Integration:

After

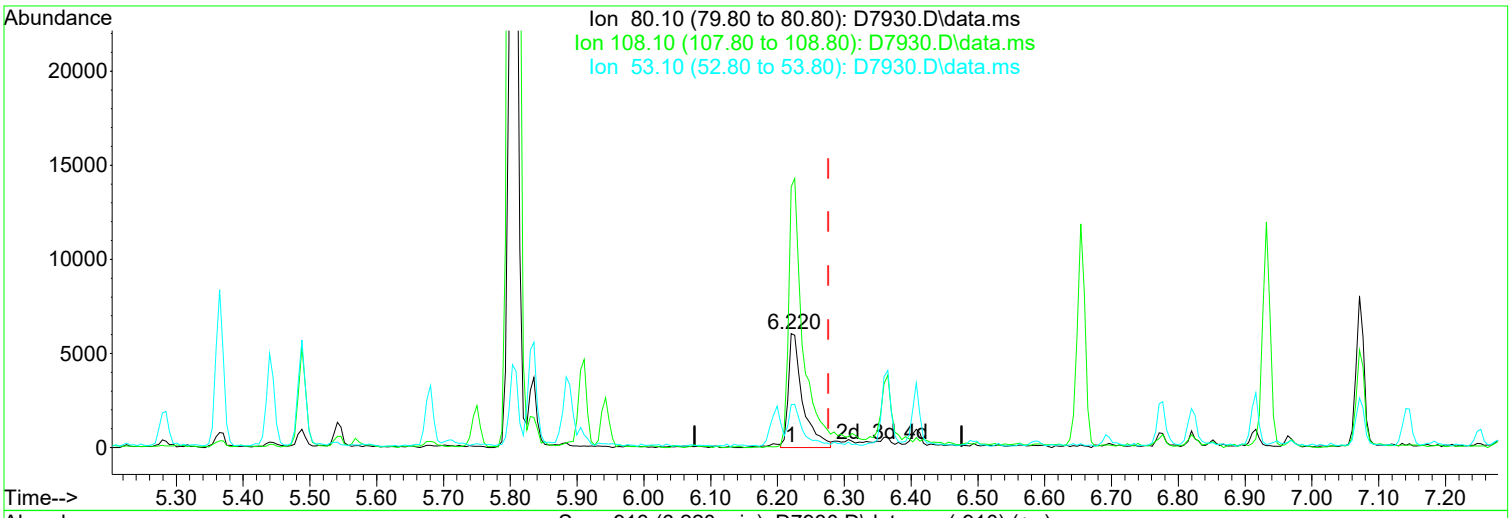
Poor integration.

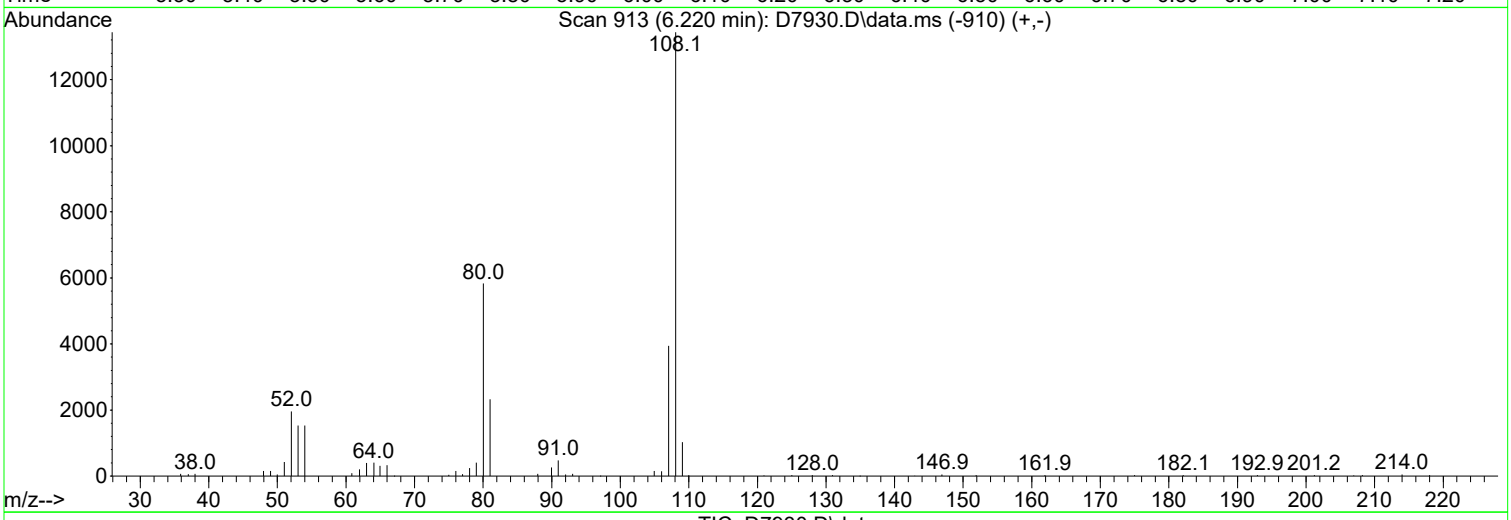
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
Operator : EDeGray
Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7930.D\data.ms

(54) p-Phenylenediamine (TM)

6.220min (-0.056) 1.69 ppm m

response 8957

Ion	Exp%	Act%
80.10	100.00	100.00
108.10	237.80	228.72
53.10	40.00	37.63
0.00	0.00	0.00

Manual Integration:

After

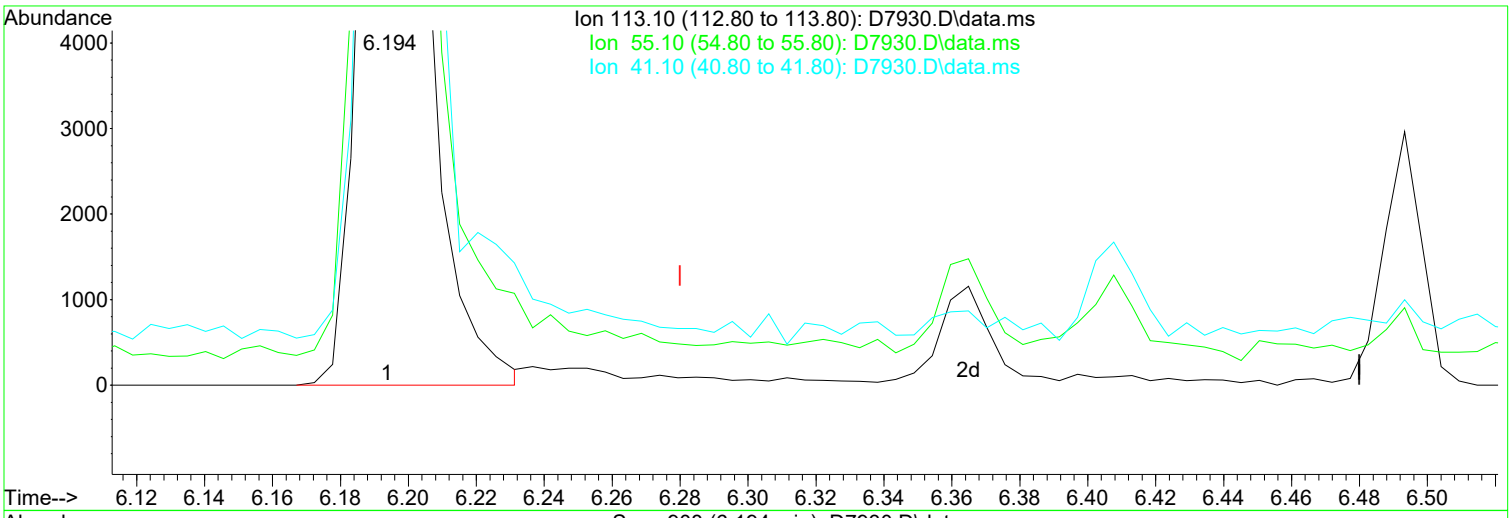
Poor integration.

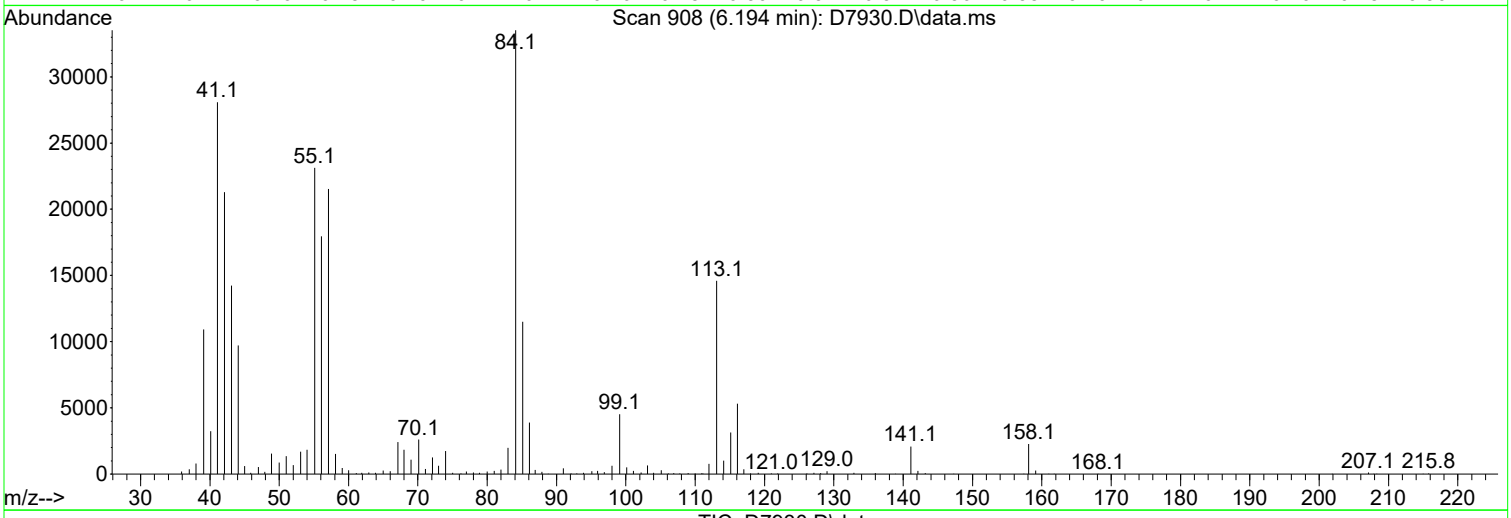
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
Operator : EDeGray
Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7930.D\data.ms

(53) Caprolactam (TM)

6.194min (-0.086) 3.90 ppm m

response 15720

Ion	Exp%	Act%
113.10	100.00	100.00
55.10	128.60	158.44
41.10	71.40	192.36#
0.00	0.00	0.00

Manual Integration:

After

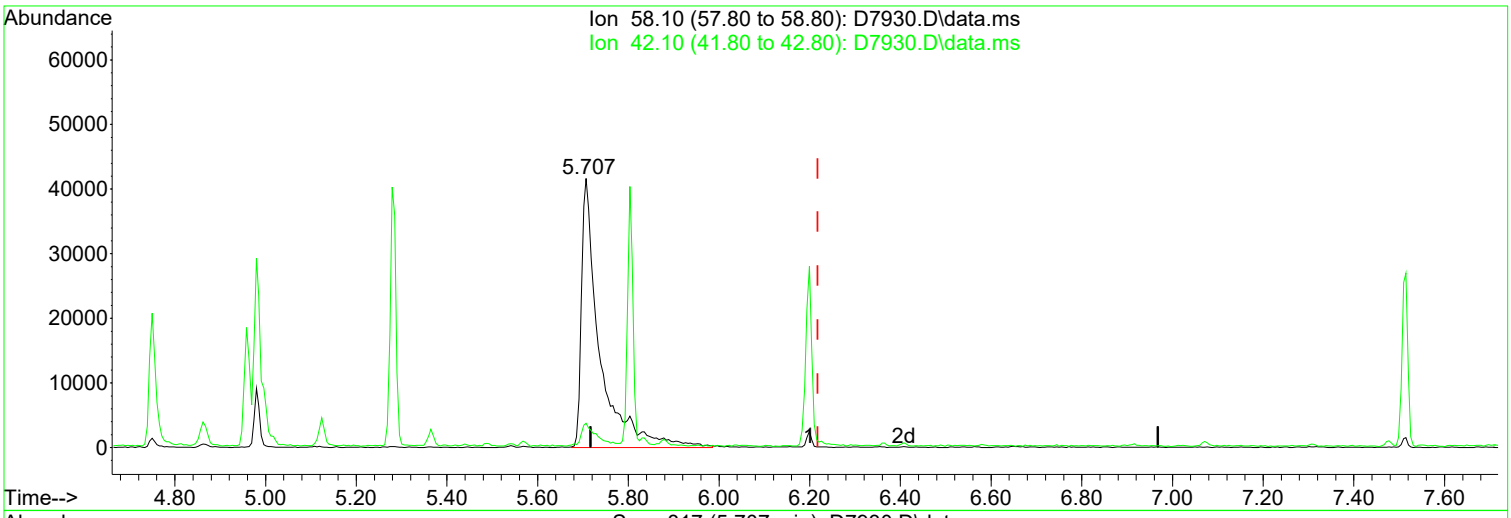
Poor integration.

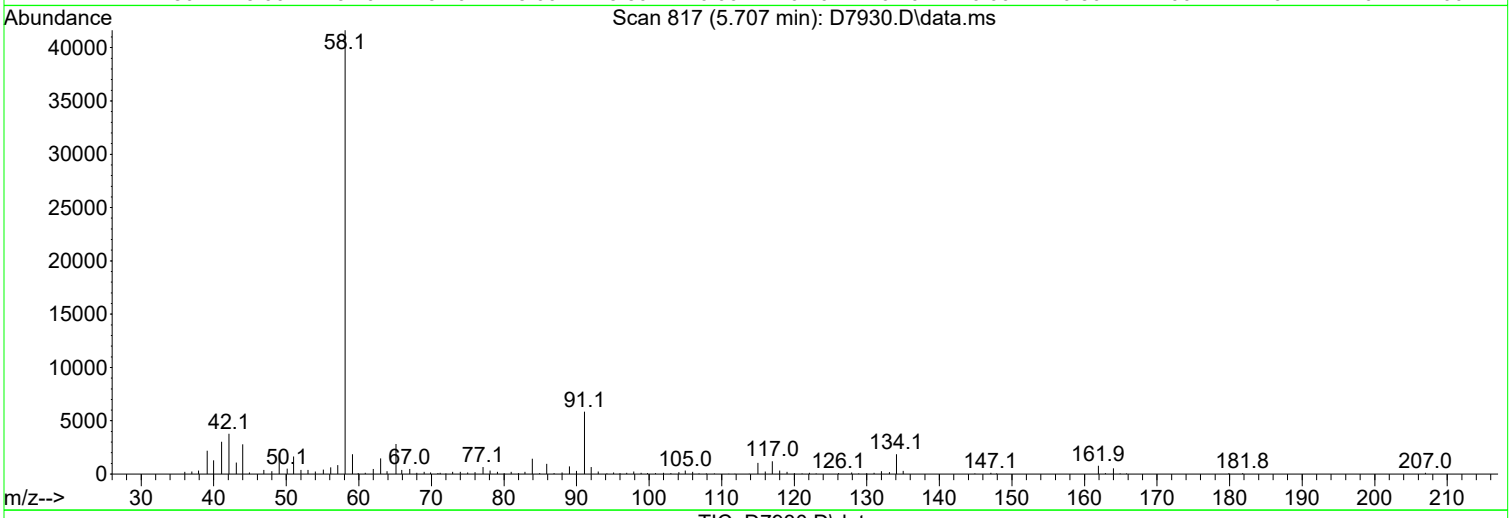
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
Operator : EDeGray
Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7930.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

5.707min (-0.511) 4.54 ppm m

response 116991

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.00	9.06
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

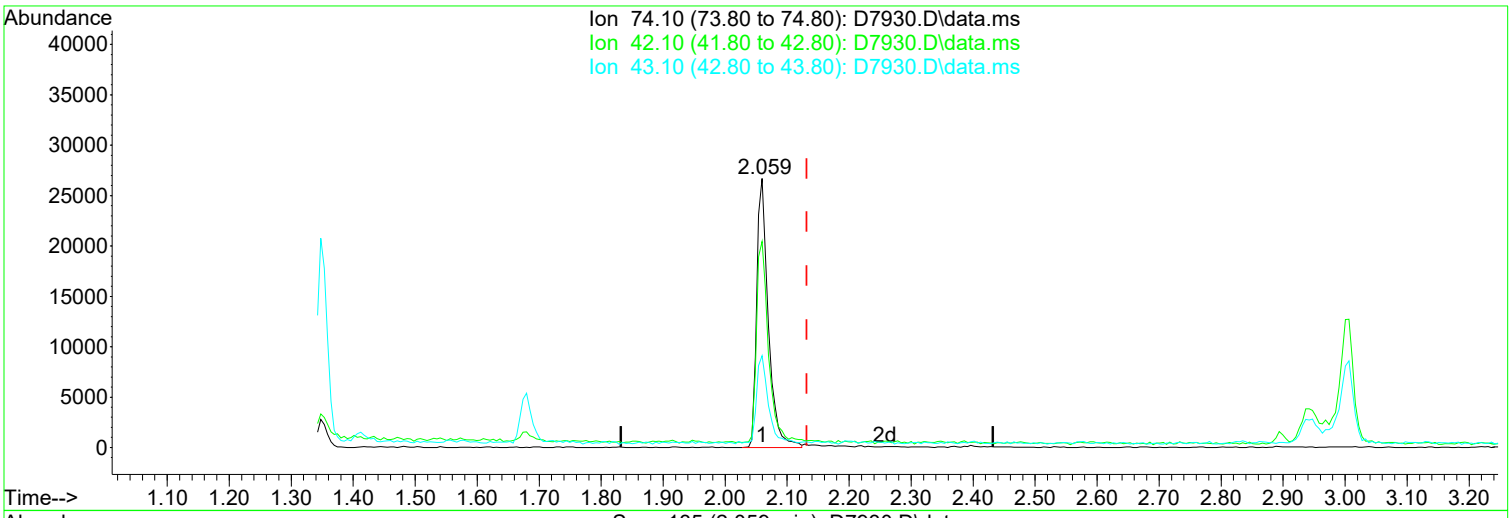
Poor integration.

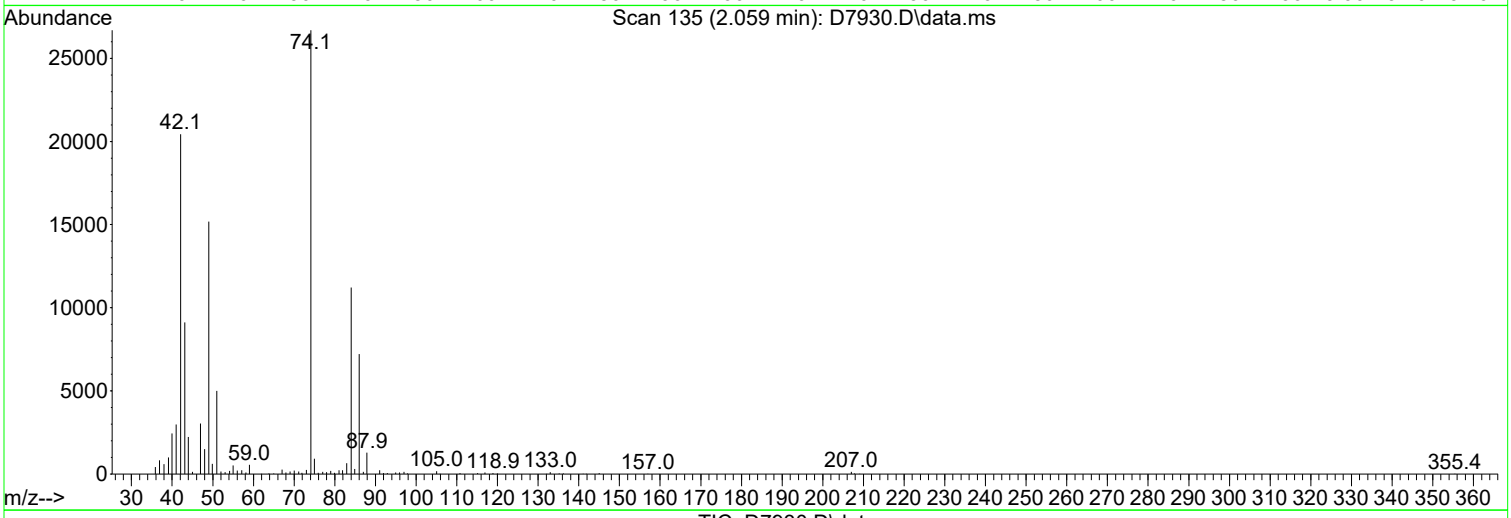
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
Operator : EDeGray
Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7930.D\data.ms

(4) N-Nitrosodimethylamine (TM)

2.059min (-0.073) 4.42 ppm m

response 34667

Ion	Exp%	Act%
74.10	100.00	100.00
42.10	75.10	76.59
43.10	33.40	34.18
0.00	0.00	0.00

Manual Integration:

After

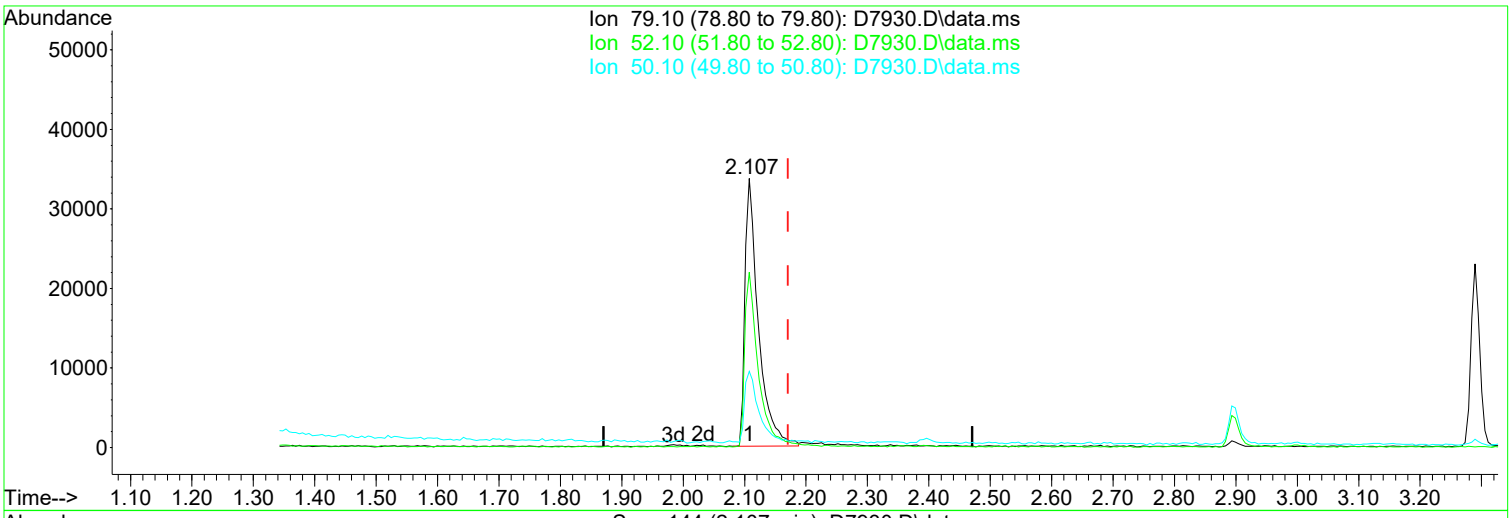
Poor integration.

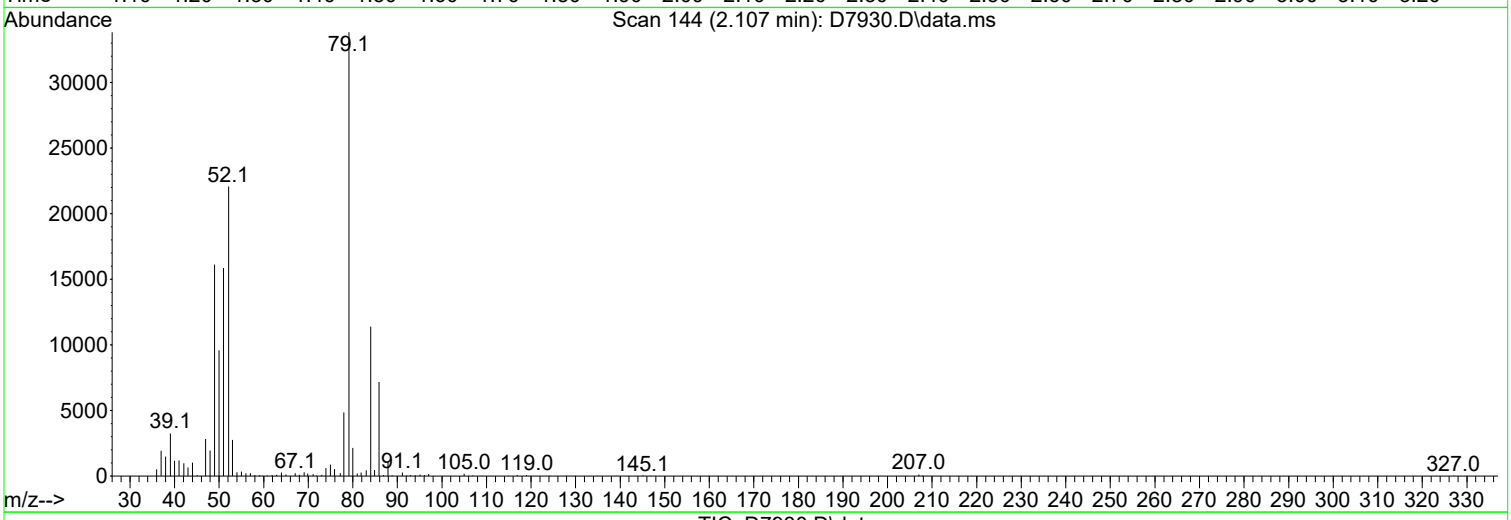
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
Operator : EDeGray
Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7930.D\data.ms

(3) Pyridine (TM)

2.107min (-0.063) 4.46 ppm m

response 50997

Ion	Exp%	Act%
79.10	100.00	100.00
52.10	63.20	65.23
50.10	25.80	28.34
0.00	0.00	0.00

Manual Integration:

After

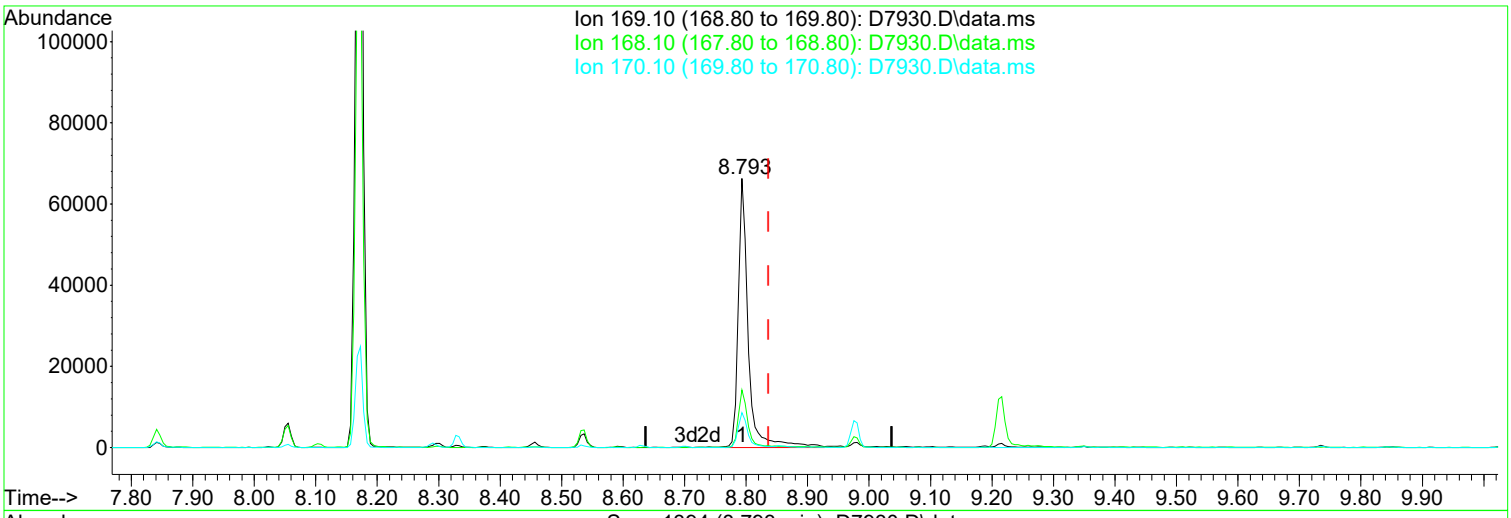
Poor integration.

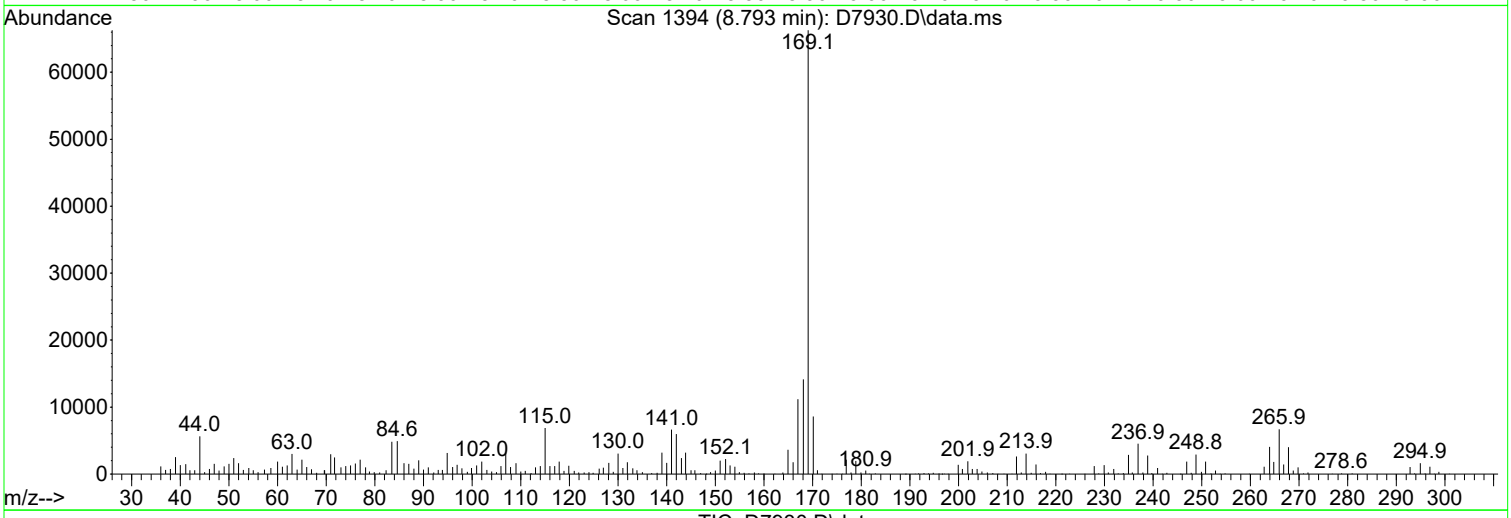
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
Operator : EDeGray
Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7930.D\data.ms

(107) 4-Aminobiphenyl (TM)

8.793min (-0.044) 3.30 ppm m

response 75183

Ion	Exp%	Act%
169.10	100.00	100.00
168.10	22.70	21.36
170.10	13.50	12.97
0.00	0.00	0.00

Manual Integration:

After

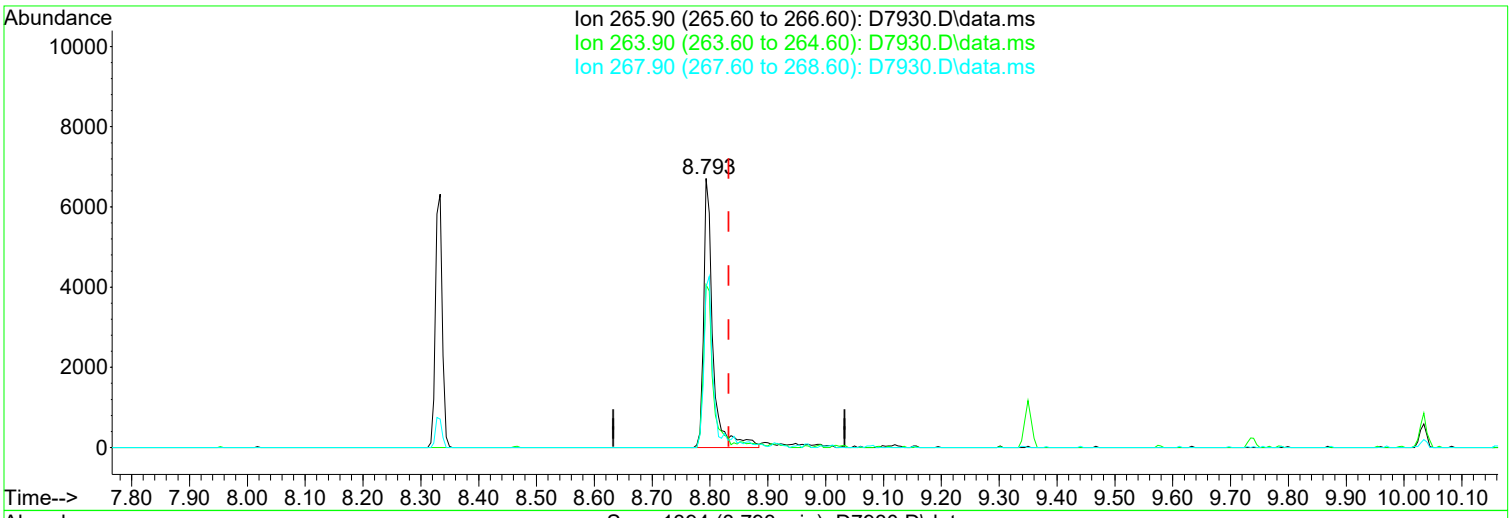
Poor integration.

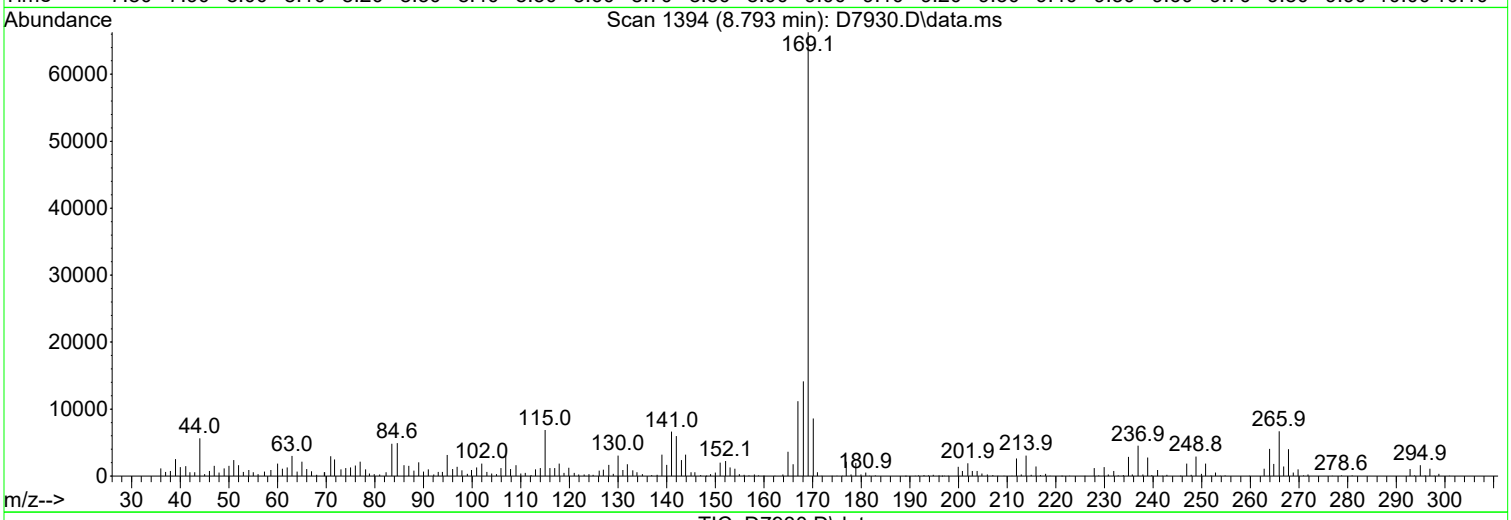
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7930.D
Acq On : 05 Aug 2024 10:29 am
Operator : EDeGray
Sample : 5 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 05 12:28:35 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7930.D\data.ms

(106) Pentachlorophenol (TCM)

8.793min (-0.040) 1.81 ppm m

response 7523

Ion	Exp%	Act%
265.90	100.00	100.00
263.90	64.80	60.55
267.90	66.30	59.68
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7929.D
Acq On : 05 Aug 2024 10:05 am
Operator : EDeGray
Sample : 2 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 05 12:28:26 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.616	152	294157	40.00	ppm	-0.04
34) d8-Naphthalene	5.803	136	1177866	40.00	ppm	-0.04
58) d10-Acenaphthene	7.515	164	640493	40.00	ppm	-0.04
92) d10-Phenanthrene	8.975	188	1092673	40.00	ppm	-0.04
118) d12-Chrysene	12.131	240	800302	40.00	ppm	-0.07
136) d12-Perylene	14.939	264	781934	40.00	ppm	-0.09
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	3.466	112	17261	1.54	ppm	-0.03
Spiked Amount 20.000	Range 10 - 70		Recovery = 7.70%#			
13) SURR2,PHENOL-D6	4.300	99	22746	1.56	ppm	-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery = 7.80%#			
35) SURR4,NITROBENZENE-D5	5.124	82	19630	1.74	ppm	-0.04
Spiked Amount 10.000	Range 31 - 110		Recovery = 17.40%#			
64) SURR5,2-FLUOROBIPHENYL	6.852	172	39993	1.93	ppm	-0.04
Spiked Amount 10.000	Range 31 - 118		Recovery = 19.30%#			
89) SURR3,2,4,6-TRIBROMOPH...	8.290	330	3500	1.28	ppm	-0.04
Spiked Amount 20.000	Range 35 - 141		Recovery = 6.40%#			
125) SURR6,TERPHENYL-D14	10.633	244	34274	1.90	ppm	-0.05
Spiked Amount 10.000	Range 10 - 165		Recovery = 19.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.680	88	8863m	1.936	ppm	
3) Pyridine	2.113	79	20423m	1.758	ppm	
4) N-Nitrosodimethylamine	2.059	74	13511m	1.697	ppm	
5) 2-Picoline	2.899	93	22557	1.753	ppm	96
6) N-Nitrosomethylamine	3.006	42	7445m	2.227	ppm	
7) Methyl Methansulfonate	3.290	80	11332	2.248	ppm	98
9) N-Nitrosodiethylamine	3.648	102	9900	1.635	ppm	87
10) Ethyl Mathanesulfonate	3.921	79	16162	1.868	ppm	95
11) Benzaldehyde	4.226	106	16833	1.750	ppm	98
12) Aniline	4.322	93	29156	1.614	ppm	82
14) Phenol	4.311	94	26408	1.655	ppm	79
15) bis(2-Clethyl)Ether	4.375	93	22666m	1.907	ppm	
16) Pentachloroethane	4.365	117	7331	1.851	ppm	90
17) 2-Chlorophenol	4.434	128	19634	1.621	ppm	94
18) 1,3-Diclbenzene	4.568	146	21563	1.822	ppm	97
19) 1,4-Dichlorobenzene	4.632	146	22680	1.875	ppm	98
20) 1,2-Diclbenzene	4.771	146	21653	1.898	ppm	99
21) Benzyl Alcohol	4.744	79	14554m	1.540	ppm	
22) 1-Methyl-2-pyrrolidinone	4.750	99	12837	1.493	ppm	94
23) 2,2'-oxybis(1-Chloropr...	4.862	45	27267	2.137	ppm	91
24) 2-Methylphenol	4.851	108	17524	1.559	ppm	96
25) 3+4-Methylphenol	4.996	108	19026	1.676	ppm	93
26) Acetophenone	4.980	105	29407	1.862	ppm	96
27) N-Nitroso-Di-n-propyla...	4.980	70	16215	1.845	ppm	95
28) N-Nitrosopyrrolidine	4.958	100	9918	1.481	ppm	84
29) N-Nitrosomorpholine	4.996	56	13822	2.092	ppm	96
30) o-Toluidine	5.017	106	30531	1.709	ppm	74
31) Hexachloroethane	5.081	117	9257	1.901	ppm	90
32) o,o,o-Triethylphosphor...	5.541	198	9378	1.958	ppm	99
33) Alpha-terpinol	5.835	121	8057	2.358	ppm	94
36) Nitrobenzene	5.140	77	20540	1.839	ppm	92
37) N-Nitrosopiperidine	5.279	42	13906	2.368	ppm	93
38) Isophorone	5.365	82	39928	1.843	ppm	98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7929.D
Acq On : 05 Aug 2024 10:05 am
Operator : EDeGray
Sample : 2 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 05 12:28:26 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39)	2-Nitrophenol	5.440	139	6810	1.098	ppm		91
41)	2,4-Dimethylphenol	5.488	107	19941	1.697	ppm		92
42)	bis(-2-Chloroethoxy)Me...	5.568	93	24151	1.840	ppm		99
43)	2,4-Dichlorophenol	5.680	162	13317	1.551	ppm		97
44)	a,a-Dimethylphenethyla...	5.686	58	45995m	1.767	ppm		
45)	1,2,4-Trichlorobenzene	5.750	180	17197	2.078	ppm		98
46)	Naphthalene	5.825	128	60389	1.928	ppm		100
47)	4-Chloroaniline	5.878	127	22689	1.738	ppm		98
48)	2,6-Dichlorophenol	5.889	162	13579	1.668	ppm		95
49)	Hexachlorobutadiene	5.942	225	9784	2.341	ppm		96
50)	Hexachloropropene	5.910	213	8304	1.723	ppm		91
51)	4-Chloro-3-methylphenol	6.365	107	14896	1.421	ppm		97
52)	N-N-di-n-butylamine	6.199	84	17524	1.862	ppm		95
53)	Caprolactam	6.194	113	5903	1.449	ppm	#	19
54)	p-Phenylenediamine	6.221	80	5137m	0.960	ppm		
55)	Safrole	6.408	162	13799	1.869	ppm		92
56)	2-Methylnaphthalene	6.493	142	38437	1.812	ppm		98
57)	1-Methylnaphthalene	6.590	142	37014	1.879	ppm		99
59)	Hexachlorocyclopentadiene	6.648	237	3480	0.970	ppm		95
60)	1,2,4,5-Tetrachloroben...	6.654	216	15675	2.092	ppm		98
61)	1,2,3,4-Tetrachloroben...	6.932	216	15774	2.078	ppm		96
62)	2,4,6-Trichlorophenol	6.777	196	7616m	1.319	ppm		
63)	2,4,5-Trichlorophenol	6.820	196	8134	1.337	ppm		99
65)	Isosafrole	6.916	104	6935	1.861	ppm		98
66)	1,1'-Biphenyl	6.948	154	47795	1.877	ppm		94
67)	2-Chloronaphthalene	6.969	162	34983	1.882	ppm		99
68)	2-Nitroaniline	7.071	65	8308	1.310	ppm		89
69)	1,4-Naphthoquinone	7.141	158	9858	1.726	ppm		90
70)	m-Dinitrobenzene	7.280	168	3459	0.911	ppm		83
71)	Acenaphthylene	7.376	152	50534	1.773	ppm		99
72)	Dimethyl phthalate	7.247	163	39327	1.817	ppm		99
73)	2,6-Dinitrotoluene	7.306	165	6102	1.212	ppm		84
74)	Acenaphthene	7.542	153	36546	1.824	ppm		99
75)	3-Nitroaniline	7.472	138	6611	1.004	ppm		86
76)	2,4-Dinitrophenol	7.579	184	746m	0.251	ppm		
77)	Dibenzofuran	7.713	168	49671	1.891	ppm		98
78)	2,4-Dinitrotoluene	7.702	165	6798	1.031	ppm		78
79)	4-Nitrophenol	7.675	65	4707m	0.945	ppm		
80)	Pentachlorobenzene	7.675	250	15132	2.274	ppm		99
81)	1-Napthylamine	7.793	143	27794m	1.606	ppm		
82)	2-Napthylamine	7.873	143	24263	1.341	ppm		94
83)	2,3,4,6-Tetrachlorophenol	7.841	232	4625m	1.083	ppm		
84)	Fluorene	8.050	166	41008	1.929	ppm		98
85)	4-Chlorophenyl-phenyle...	8.055	204	19147	2.071	ppm		97
86)	Diethylphthalate	7.943	149	39919	1.810	ppm		100
87)	4-Nitroaniline	8.071	138	6820m	0.996	ppm		
88)	5-Nitro-o-toluidine	8.066	152	7339m	1.072	ppm		
90)	Sulfotepp	8.333	322	5891	1.788	ppm		89
91)	Octachlorocyclopentene	8.301	307	2926	1.118	ppm		94
93)	Thionazin	8.023	107	6995	1.493	ppm		96
94)	4,6-Dinitro-2-methylph...	8.103	198	2012	0.462	ppm		81
95)	Diphenylamine	8.167	169	62914	3.444	ppm		96
96)	1,2 Diphenylhydrazine	8.210	77	44965	1.707	ppm		97
97)	N-Nitrosodiphenylamine	8.167	169	62914	3.443	ppm		96
98)	1,3,5-Trinirobenzene	8.440	213	1383	0.574	ppm	#	6
99)	Diallate	8.456	86	15846	1.632	ppm		99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7929.D
Acq On : 05 Aug 2024 10:05 am
Operator : EDeGray
Sample : 2 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 05 12:28:26 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

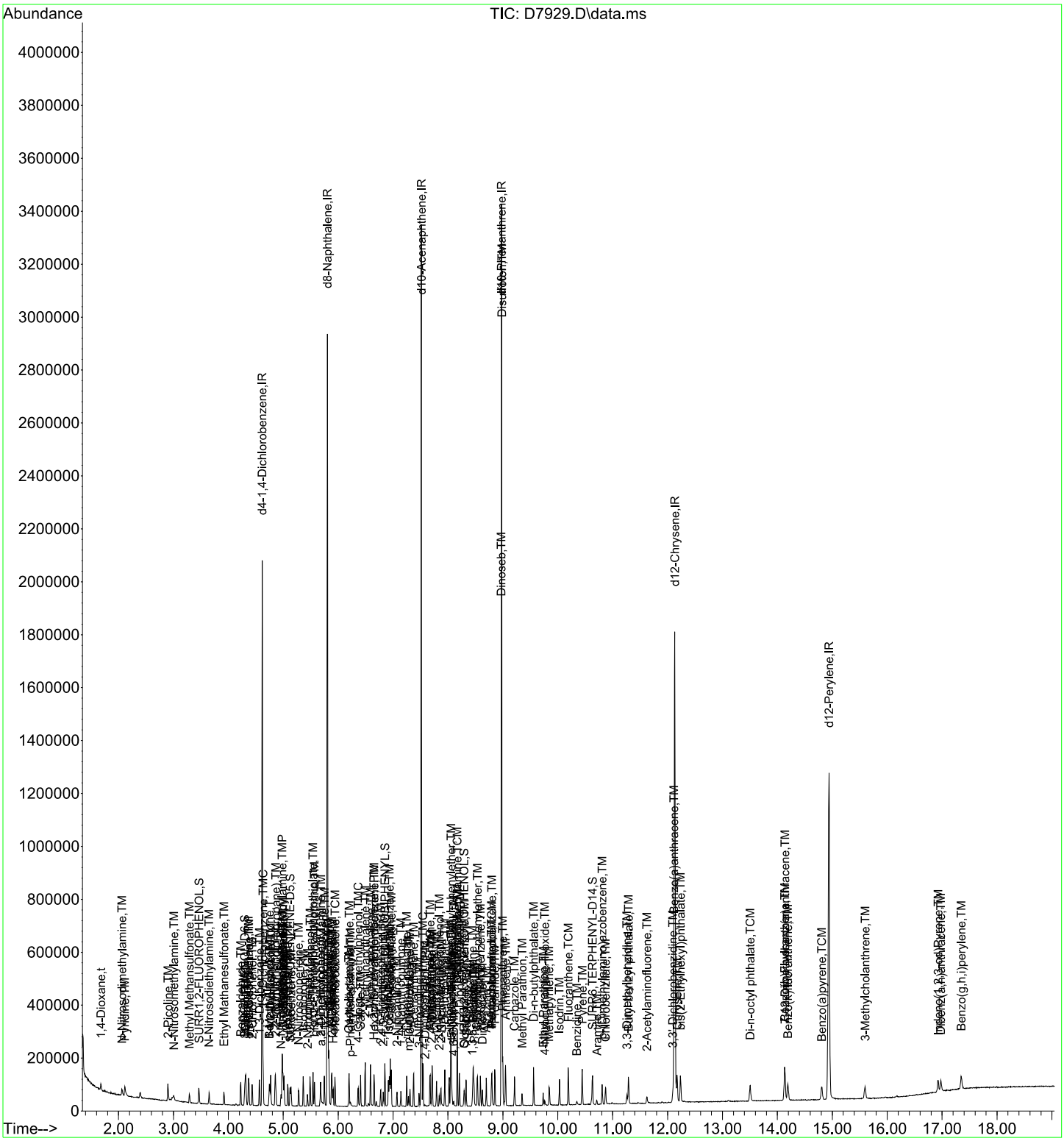
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
100) Phorate	8.462	121	7445	1.356	ppm	#	71
101) Phenacetin	8.478	108	14724m	1.091	ppm		
102) 4-Bromophenyl-phenylether	8.537	248	10637	1.908	ppm		99
103) Hexachlorobenzene	8.590	284	12071	1.949	ppm		87
104) Dimethoate	8.627	87	11409	1.284	ppm		93
105) Atrazine	8.697	215	5380	1.841	ppm	#	86
106) Pentachlorophenol	8.793	266	2511m	0.600	ppm		
107) 4-Aminobiphenyl	8.793	169	27164	1.186	ppm		99
108) Pentachloronitrobenzene	8.799	237	3631	1.630	ppm		84
109) Pronamide	8.852	173	16225	1.575	ppm		97
110) Dinoseb	8.970	211	2405	0.448	ppm	#	69
111) Disulfoton	8.980	88	39420m	1.319	ppm		
112) Phenanthrene	8.997	178	57900	1.776	ppm		98
113) Anthracene	9.050	178	54951	1.690	ppm		99
114) Carbazole	9.210	167	44957	1.368	ppm		99
115) Di-n-butylphthalate	9.558	149	62582	1.542	ppm		98
116) 4-Nitroquinonline-1-oxide	9.761	190	1031m	0.355	ppm		
117) Fluoranthene	10.189	202	54958	1.668	ppm		96
119) Methyl Parathion	9.350	109	5845	1.037	ppm		94
120) Ethyl Parathion	9.735	97	3922	0.839	ppm		98
121) Methapyrilene	9.842	58	21856	1.843	ppm		91
122) Isodrin	10.029	193	6073	2.116	ppm		87
123) Benzidine	10.344	184	6547m	0.366	ppm		
124) Pyrene	10.446	202	55615	1.912	ppm		98
126) Aramite	10.713	185	2535m	1.069	ppm		
127) p-(Dimethylamino)azobe...	10.810	120	14176	1.352	ppm		96
128) Chlorobenzilate	10.869	139	15195	1.394	ppm		94
129) Butyl benzyl phthalate	11.286	149	25345	1.555	ppm		93
130) 3,3-Dimethylbenzidine	11.259	212	15140	0.874	ppm		97
131) 2-Acetylaminofluorene	11.623	181	9415m	0.733	ppm		
132) 3,3'-Dichlorobenzidine	12.093	252	10311m	1.037	ppm		
133) Benzo(a)anthracene	12.115	228	48638	1.840	ppm		98
134) Chrysene	12.174	228	43799	1.772	ppm		98
135) bis(2-Ethylhexyl)phtha...	12.232	149	35986	1.595	ppm		99
137) Di-n-octyl phthalate	13.505	149	50441	1.431	ppm		98
138) 7,12-Dimethylbenz(a)an...	14.137	256	20776	1.872	ppm		99
139) Benzo(b)Fluoranthene	14.131	252	42236	1.823	ppm		99
140) Benzo(k)fluoranthene	14.190	252	38425	1.723	ppm		97
141) Benzo(a)pyrene	14.805	252	33097	1.621	ppm		98
142) 3-Methylcholanthrene	15.597	268	19144	1.511	ppm		98
143) Indeno(1,2,3-cd)Pyrene	16.929	276	26972	1.378	ppm		95
144) Dibenz(a,h)anthracene	16.977	278	25653	1.262	ppm		97
145) Benzo(g,h,i)perylene	17.346	276	31102	1.557	ppm		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7929.D
Acq On : 05 Aug 2024 10:05 am
Operator : EDeGray
Sample : 2 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 05 12:28:26 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7929.D
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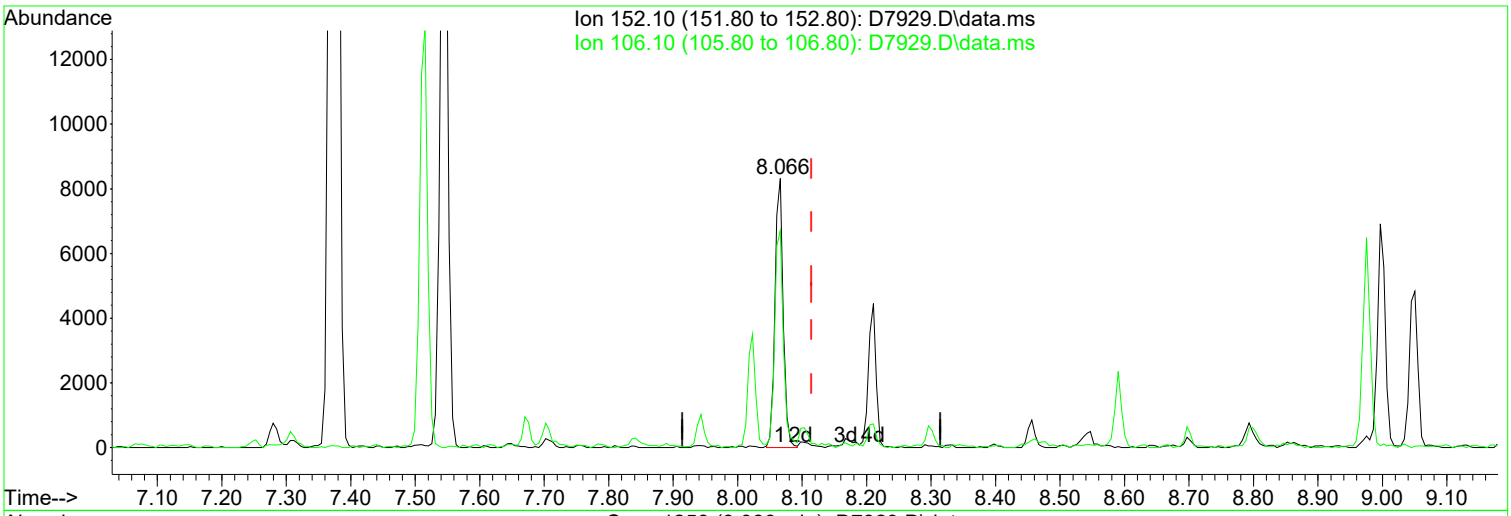

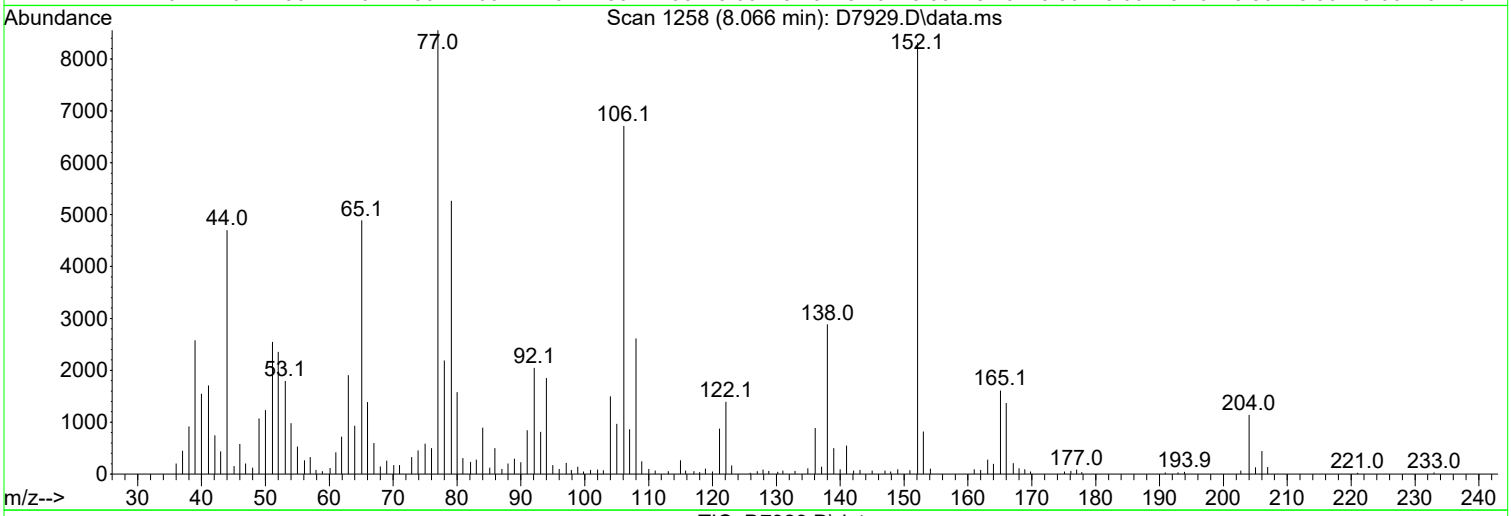

TIC: D7929.D\data.ms

(88) 5-Nitro-o-toluidine (TM)

8.066min (-0.048) 1.07 ppm m

response 7339

Ion	Exp%	Act%
152.10	100.00	100.00
106.10	72.00	80.68
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7929.D
Acq On : 05 Aug 2024 10:05 am
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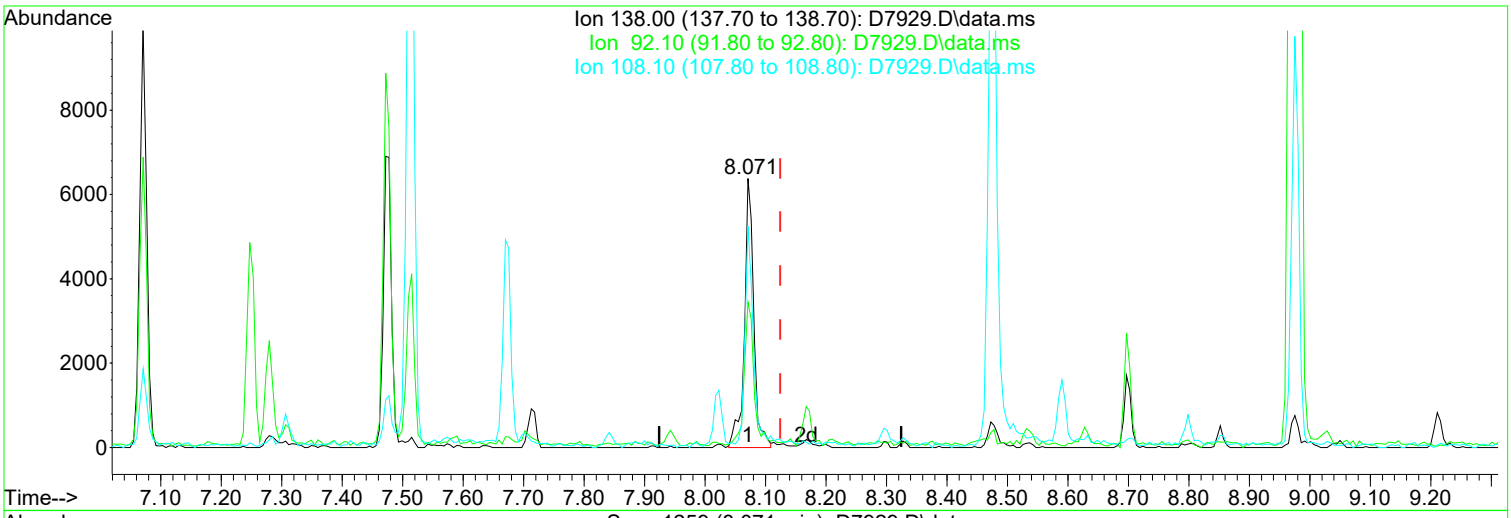

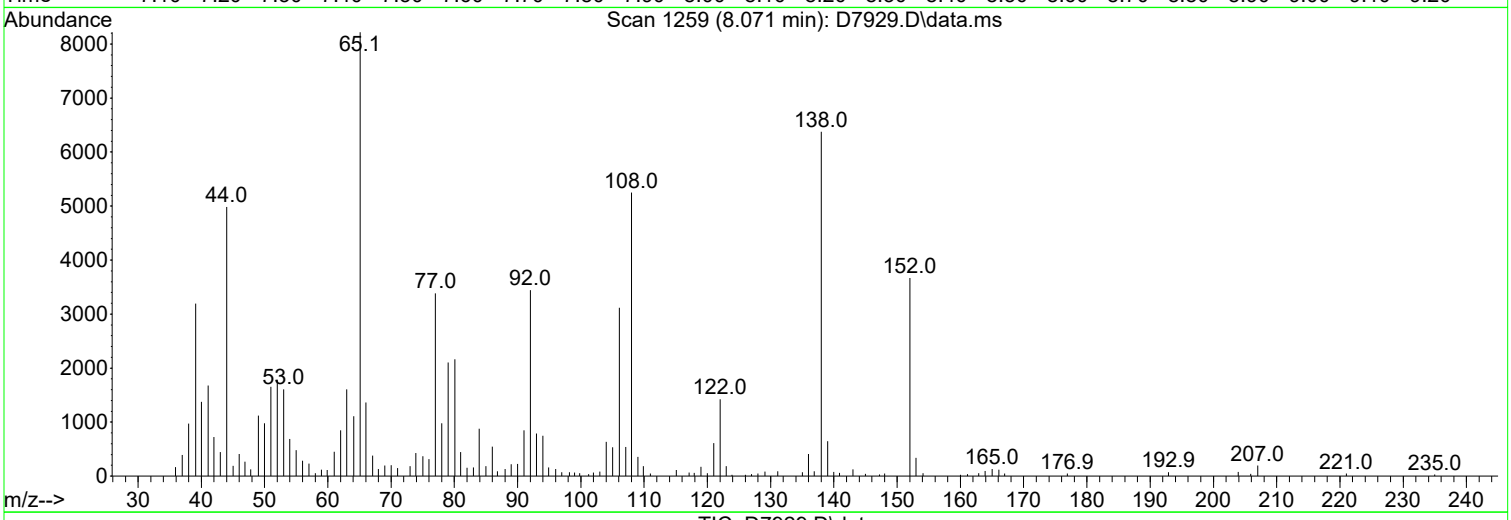

TIC: D7929.D\data.ms

(87) 4-Nitroaniline (TM)

8.071min (-0.054) 1.00 ppm m

response 6820

Ion	Exp%	Act%
138.00	100.00	100.00
92.10	49.90	53.98
108.10	69.70	82.28
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7929.D
Acq On : 05 Aug 2024 10:05 am
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Sample : 2 STD
Misc :
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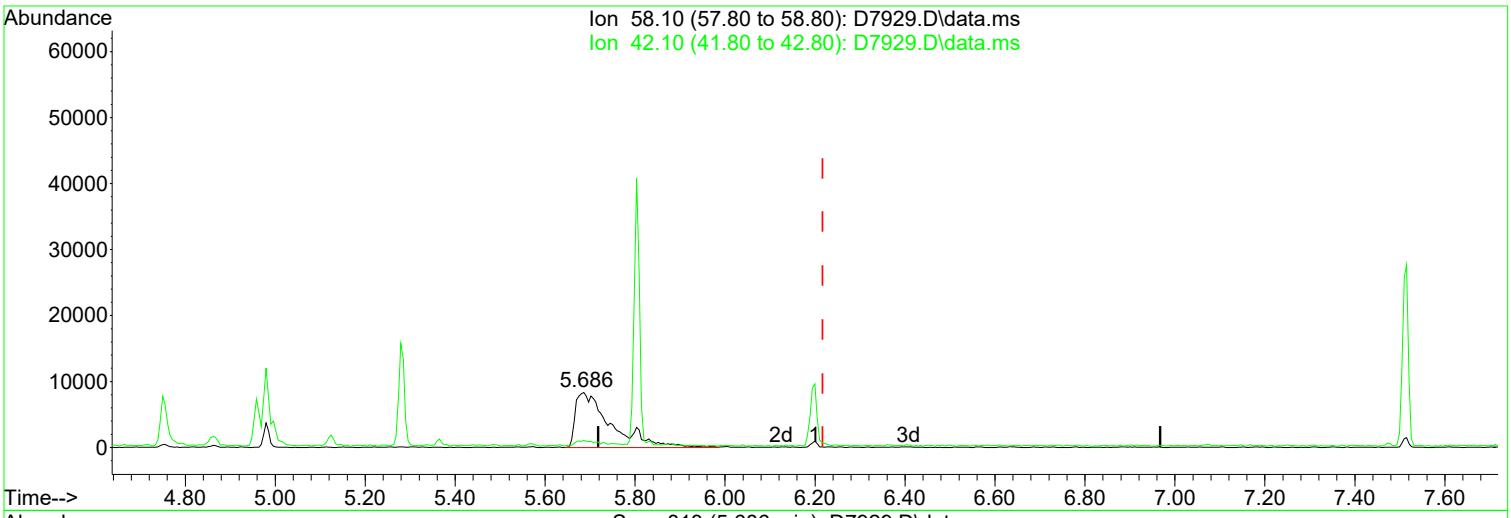

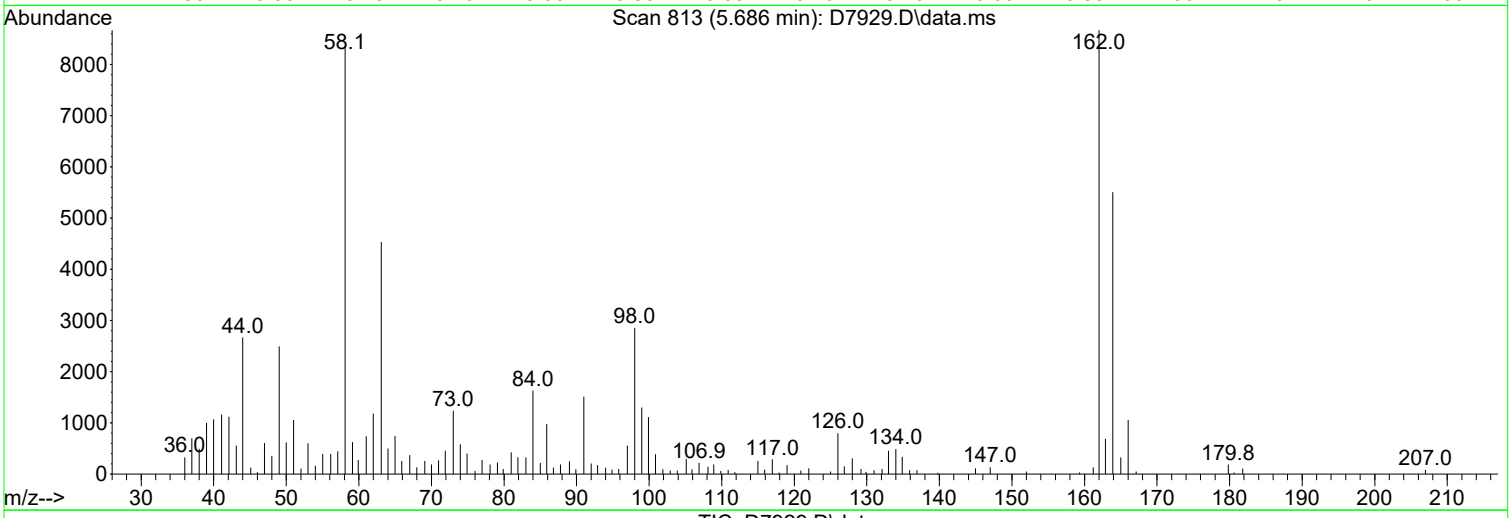

TIC: D7929.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

5.686min (-0.532) 1.77 ppm m

response 45995

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.00	13.41
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
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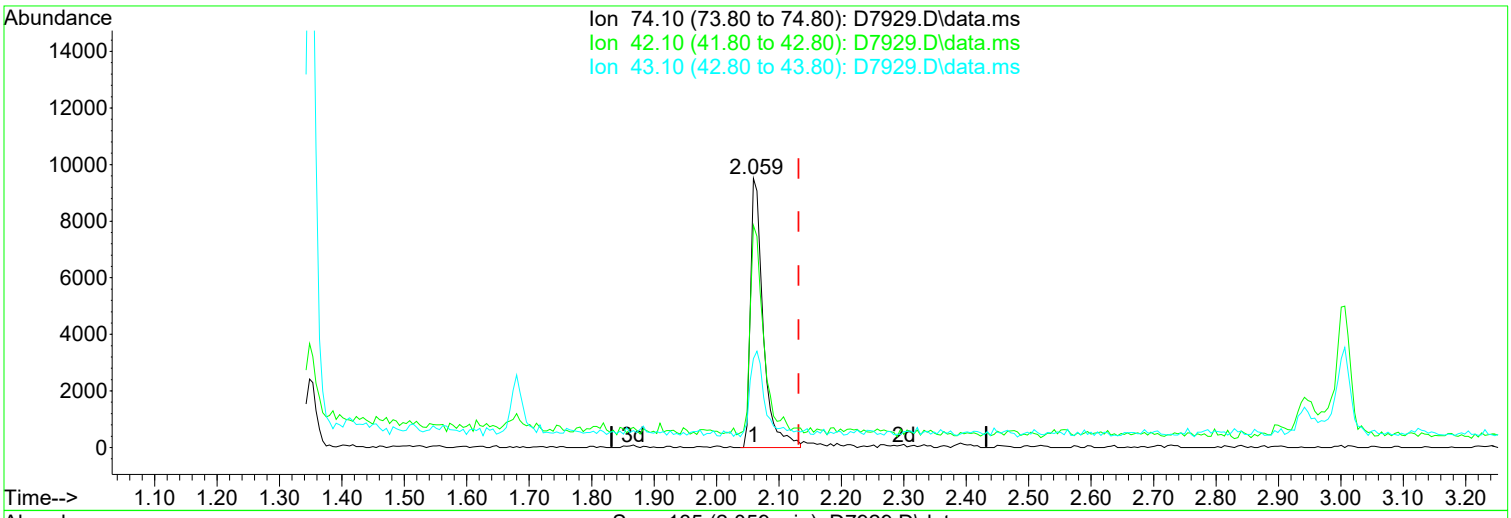

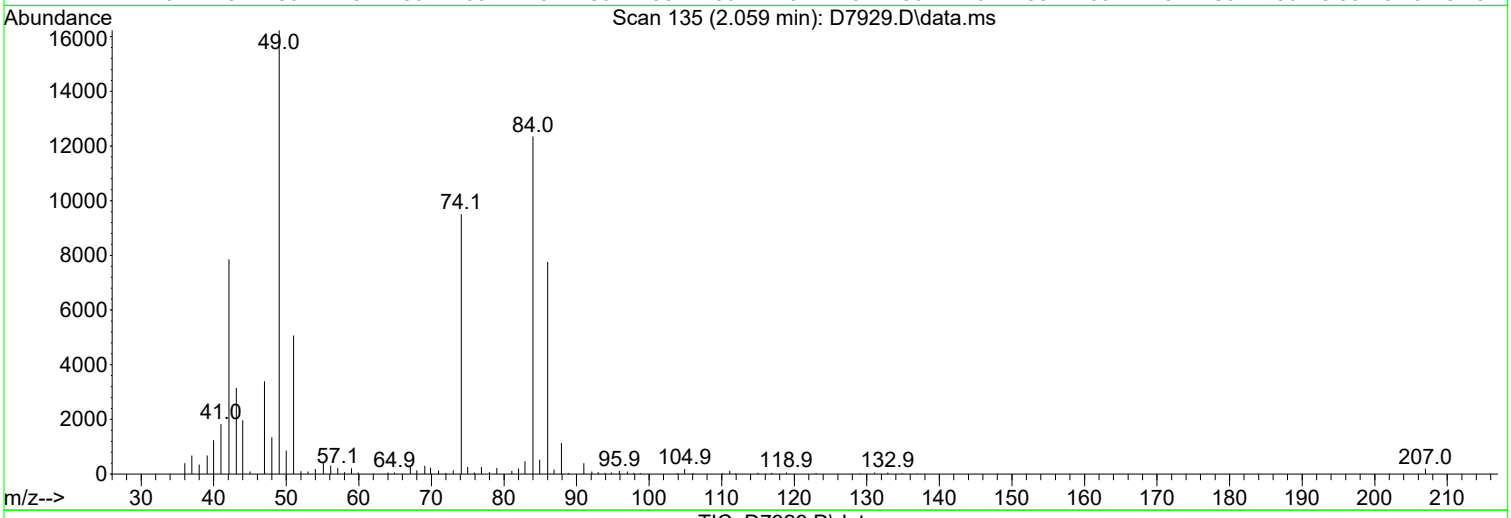

TIC: D7929.D\data.ms

(4) N-Nitrosodimethylamine (TM)

2.059min (-0.073) 1.70 ppm m

response 13511

Ion	Exp%	Act%
74.10	100.00	100.00
42.10	75.10	82.58
43.10	33.40	33.07
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

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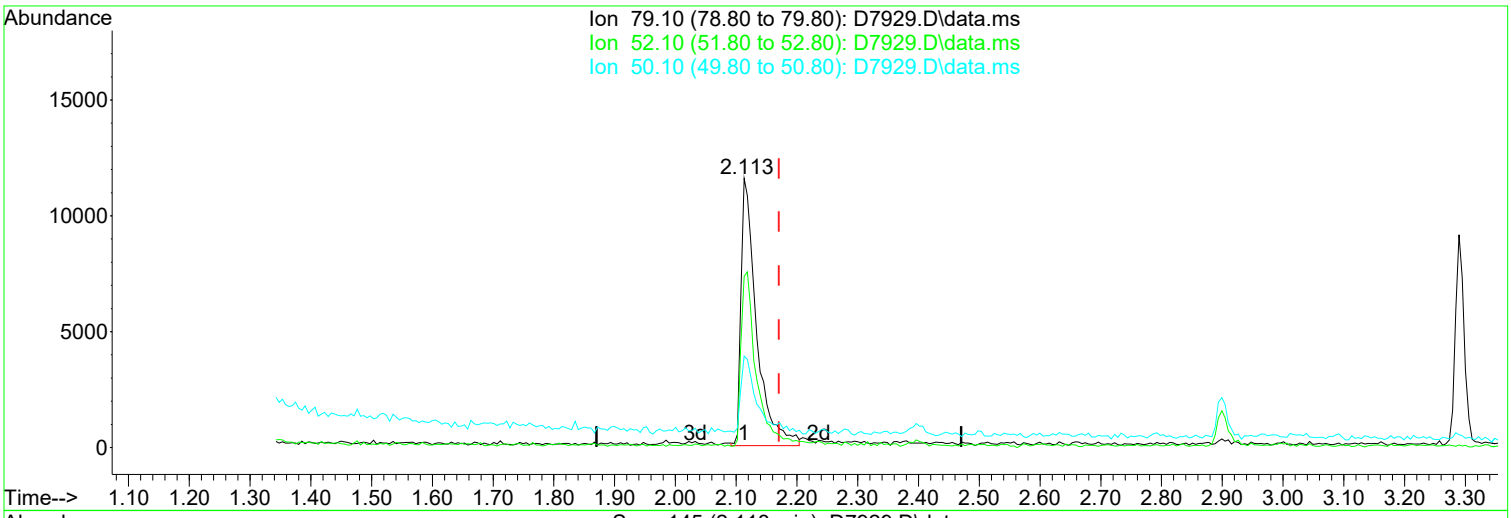

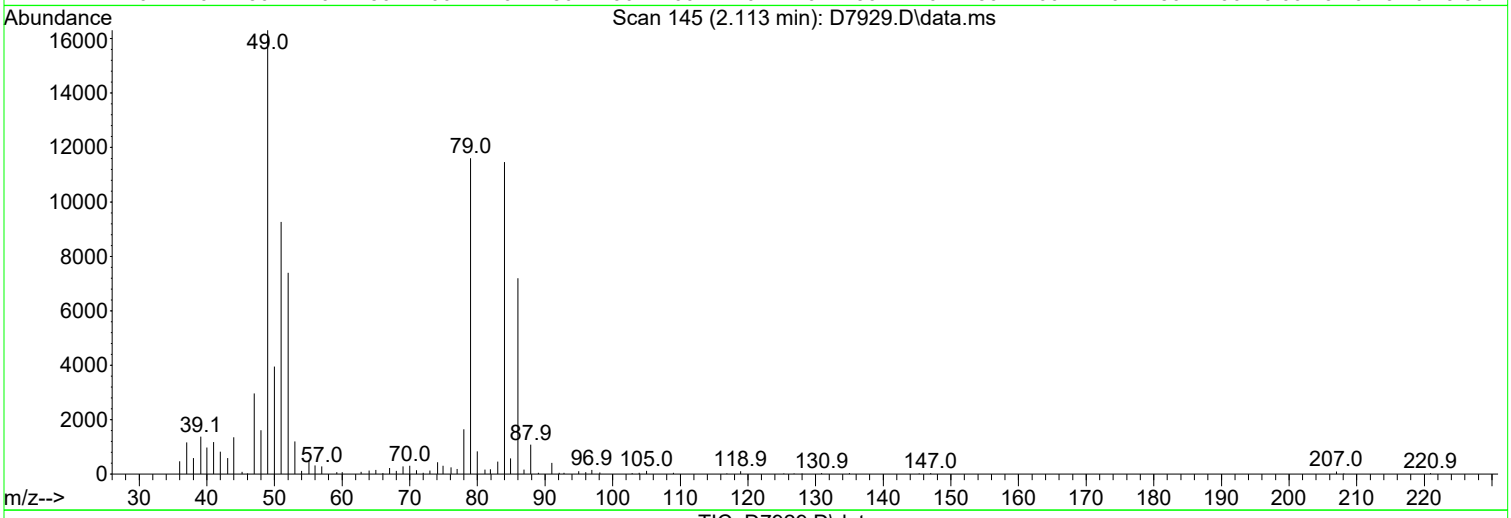

TIC: D7929.D\data.ms

(3) Pyridine (TM)

2.113min (-0.058) 1.76 ppm m

response 20423

Ion	Exp%	Act%
79.10	100.00	100.00
52.10	63.20	63.66
50.10	25.80	34.06
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
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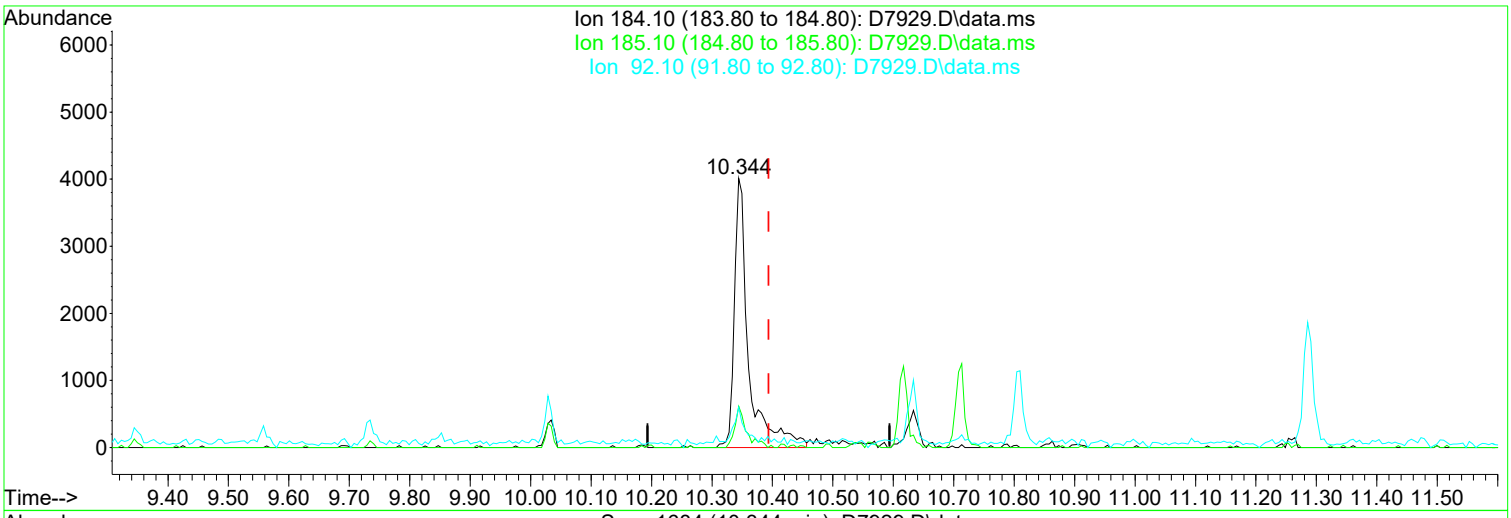
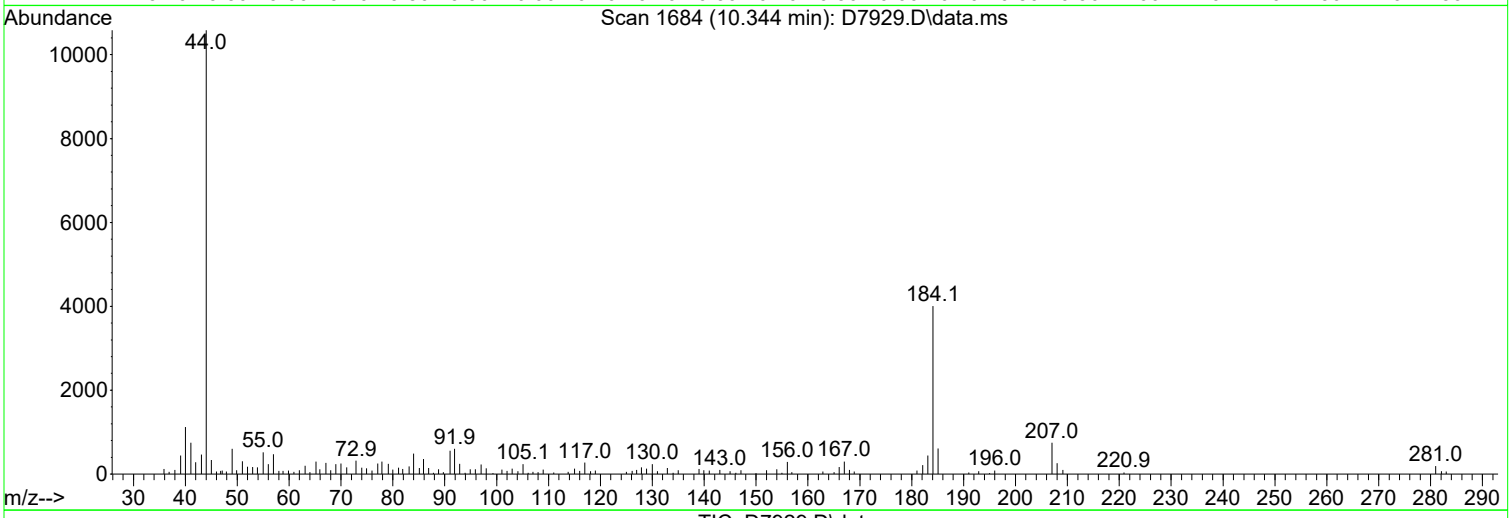
Operator : EDeGray
Sample : 2 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 05 12:28:26 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7929.D\data.ms

(123) Benzidine (TM)

10.344min (-0.050) 0.37 ppm m

response 6547

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	14.00	15.29
92.10	9.00	14.97
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7929.D
Acq On : 05 Aug 2024 10:05 am
Operator : EDeGray
Sample : 2 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 05 12:28:26 2024
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Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
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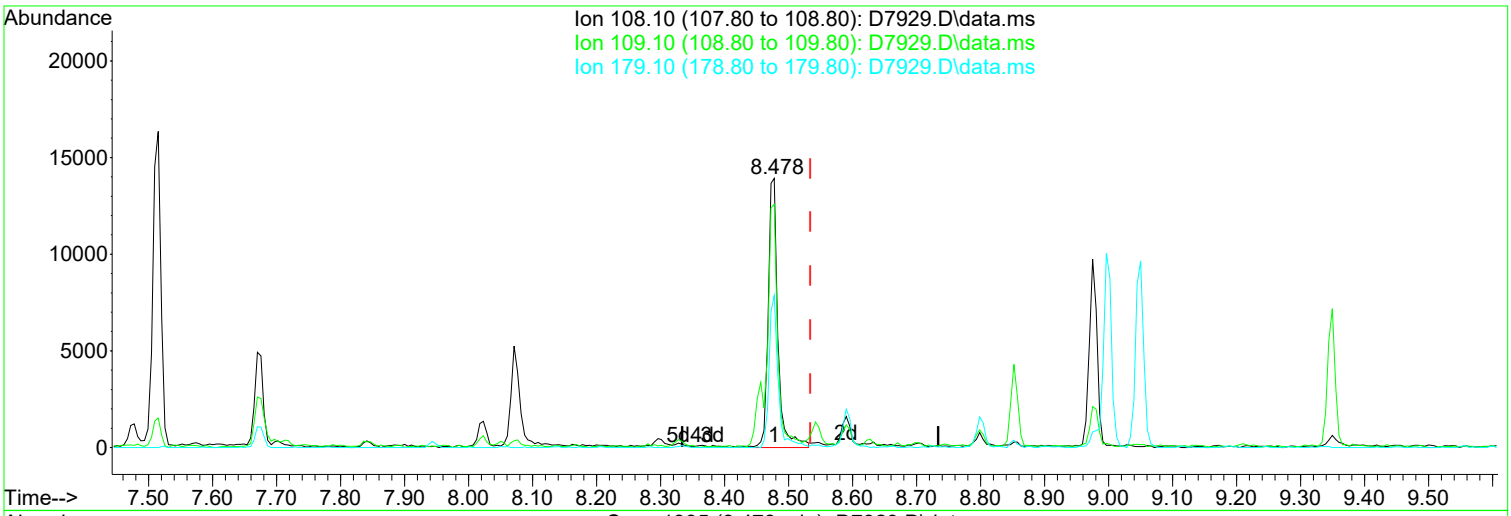

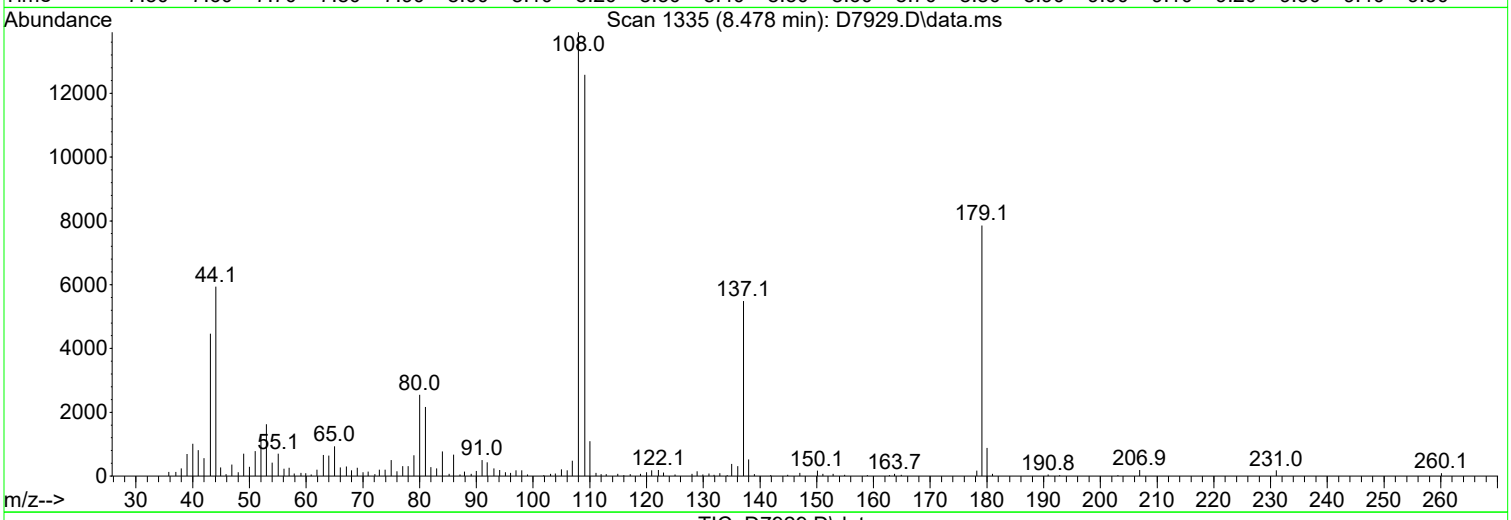

TIC: D7929.D\data.ms

(101) Phenacetin (TM)

8.478min (-0.057) 1.09 ppm m

response 14724

Ion	Exp%	Act%
108.10	100.00	100.00
109.10	88.30	90.43
179.10	55.00	56.49
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.616	152	299230	40.00	ppm	-0.04
34) d8-Naphthalene	5.803	136	1185720	40.00	ppm	-0.04
58) d10-Acenaphthene	7.515	164	642848	40.00	ppm	-0.04
92) d10-Phenanthrene	8.975	188	1069987	40.00	ppm	-0.04
118) d12-Chrysene	12.131	240	747128	40.00	ppm	-0.07
136) d12-Perylene	14.939	264	691688	40.00	ppm	-0.09
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	3.466	112	9547	0.84	ppm	-0.03
Spiked Amount 20.000	Range 10 - 70		Recovery =	4.20%#		
13) SURR2,PHENOL-D6	4.300	99	11957	0.80	ppm	-0.02
Spiked Amount 20.000	Range 10 - 107		Recovery =	4.00%#		
35) SURR4,NITROBENZENE-D5	5.124	82	10180	0.90	ppm	-0.04
Spiked Amount 10.000	Range 31 - 110		Recovery =	9.00%#		
64) SURR5,2-FLUOROBIPHENYL	6.852	172	21282	1.02	ppm	-0.04
Spiked Amount 10.000	Range 31 - 118		Recovery =	10.20%#		
89) SURR3,2,4,6-TRIBROMOPH...	8.290	330	1501	0.55	ppm	-0.04
Spiked Amount 20.000	Range 35 - 141		Recovery =	2.75%#		
125) SURR6,TERPHENYL-D14	10.633	244	16876	1.00	ppm	-0.05
Spiked Amount 10.000	Range 10 - 165		Recovery =	10.00%		
Target Compounds						Qvalue
2) 1,4-Dioxane	1.685	88	4561m	0.979	ppm	
3) Pyridine	2.123	79	11071	0.937	ppm	97
4) N-Nitrosodimethylamine	2.065	74	7354	0.908	ppm	90
5) 2-Picoline	2.904	93	11366	0.868	ppm	95
6) N-Nitrosomethylamine	3.006	42	4110m	1.208	ppm	
7) Methyl Methansulfonate	3.289	80	6145	1.198	ppm	98
9) N-Nitrosodiethylamine	3.653	102	5107	0.829	ppm	93
10) Ethyl Mathanesulfonate	3.921	79	8377	0.952	ppm	92
11) Benzaldehyde	4.225	106	8414	0.827	ppm	99
12) Aniline	4.322	93	15242	0.829	ppm	82
14) Phenol	4.311	94	14260	0.879	ppm	79
15) bis(2-Clethyl)Ether	4.375	93	11948	0.988	ppm	95
16) Pentachloroethane	4.364	117	3957	0.982	ppm	95
17) 2-Chlorophenol	4.434	128	10032	0.814	ppm	95
18) 1,3-Diclbenzene	4.568	146	11652	0.968	ppm	97
19) 1,4-Dichlorobenzene	4.632	146	12034	0.978	ppm	98
20) 1,2-Diclbenzene	4.771	146	11233	0.968	ppm	96
21) Benzyl Alcohol	4.744	79	7710m	0.802	ppm	
22) 1-Methyl-2-pyrrolidinone	4.755	99	6487	0.741	ppm	94
23) 2,2'-oxybis(1-Chloropr...	4.862	45	14515	1.119	ppm	90
24) 2-Methylphenol	4.851	108	9729	0.851	ppm	95
25) 3+4-Methylphenol	4.996	108	10009	0.867	ppm	98
26) Acetophenone	4.980	105	15904	0.990	ppm	99
27) N-Nitroso-Di-n-propyla...	4.980	70	8782	0.982	ppm	95
28) N-Nitrosopyrrolidine	4.958	100	5547	0.815	ppm	89
29) N-Nitrosomorpholine	4.996	56	7376	1.097	ppm	95
30) o-Toluidine	5.017	106	15812	0.870	ppm	75
31) Hexachloroethane	5.081	117	4634	0.935	ppm	93
32) o,o,o-Triethylphosphor...	5.541	198	5132	1.053	ppm	99
33) Alpha-terpinol	5.835	121	4099	1.179	ppm	93
36) Nitrobenzene	5.140	77	10434	0.928	ppm	88
37) N-Nitrosopiperidine	5.279	42	7323m	1.239	ppm	
38) Isophorone	5.365	82	21267	0.975	ppm	96

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
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Acq On : 05 Aug 2024 09:41 am
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Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39)	2-Nitrophenol	5.440	139	3518m	0.563	ppm		
41)	2,4-Dimethylphenol	5.488	107	9991m	0.845	ppm		
42)	bis(-2-Chloroethoxy)Me...	5.568	93	13131	0.994	ppm		98
43)	2,4-Dichlorophenol	5.680	162	6836	0.791	ppm		98
44)	a,a-Dimethylphenethyla...	5.670	58	22188m	0.847	ppm		
45)	1,2,4-Trichlorobenzene	5.750	180	9000	1.080	ppm		97
46)	Naphthalene	5.825	128	32666	1.036	ppm		99
47)	4-Chloroaniline	5.878	127	10845	0.825	ppm		95
48)	2,6-Dichlorophenol	5.889	162	6616	0.807	ppm		82
49)	Hexachlorobutadiene	5.942	225	5235	1.245	ppm		91
50)	Hexachloropropene	5.910	213	4143	0.854	ppm		92
51)	4-Chloro-3-methylphenol	6.365	107	7368	0.698	ppm		94
52)	N-N-di-n-butylamine	6.199	84	8971	0.947	ppm		98
53)	Caprolactam	6.194	113	3153	0.769	ppm	#	39
54)	p-Phenylenediamine	6.226	80	2130m	0.395	ppm		
55)	Safrole	6.408	162	7143	0.961	ppm		89
56)	2-Methylnaphthalene	6.493	142	20629	0.966	ppm		98
57)	1-Methylnaphthalene	6.589	142	19064	0.961	ppm		97
59)	Hexachlorocyclopentadiene	6.648	237	1336	0.371	ppm		94
60)	1,2,4,5-Tetrachloroben...	6.654	216	8990	1.195	ppm		92
61)	1,2,3,4-Tetrachloroben...	6.932	216	8441	1.108	ppm		97
62)	2,4,6-Trichlorophenol	6.777	196	3900m	0.673	ppm		
63)	2,4,5-Trichlorophenol	6.825	196	4105	0.672	ppm		96
65)	Isosafrole	6.916	104	3715	0.993	ppm		87
66)	1,1'-Biphenyl	6.948	154	24506	0.959	ppm		96
67)	2-Chloronaphthalene	6.969	162	18040	0.967	ppm		97
68)	2-Nitroaniline	7.071	65	4256	0.669	ppm		89
69)	1,4-Naphthoquinone	7.146	158	4603	0.803	ppm		98
70)	m-Dinitrobenzene	7.279	168	1672	0.439	ppm		91
71)	Acenaphthylene	7.376	152	26712	0.934	ppm		97
72)	Dimethyl phthalate	7.247	163	20649	0.950	ppm		98
73)	2,6-Dinitrotoluene	7.306	165	3058	0.605	ppm		84
74)	Acenaphthene	7.547	153	19373	0.964	ppm		100
75)	3-Nitroaniline	7.477	138	3071	0.465	ppm		86
77)	Dibenzofuran	7.713	168	25684	0.974	ppm		97
78)	2,4-Dinitrotoluene	7.702	165	3220	0.487	ppm	#	62
79)	4-Nitrophenol	7.675	65	2623m	0.524	ppm		
80)	Pentachlorobenzene	7.675	250	8285	1.240	ppm		94
81)	1-Napthylamine	7.793	143	14232m	0.820	ppm		
82)	2-Napthylamine	7.873	143	12429	0.684	ppm		96
83)	2,3,4,6-Tetrachlorophenol	7.841	232	2147m	0.501	ppm		
84)	Fluorene	8.050	166	21126	0.990	ppm		96
85)	4-Chlorophenyl-phenyle...	8.055	204	9779	1.054	ppm		98
86)	Diethylphthalate	7.943	149	20544	0.928	ppm		99
87)	4-Nitroaniline	8.076	138	3071	0.447	ppm		83
88)	5-Nitro-o-toluidine	8.066	152	3212	0.468	ppm		83
90)	Sulfotepp	8.333	322	2912	0.881	ppm		98
91)	Octachlorocyclopentene	8.301	307	1183	0.450	ppm		88
93)	Thionazin	8.023	107	3557	0.775	ppm		97
95)	Diphenylamine	8.173	169	31621	1.768	ppm		96
96)	1,2 Diphenylhydrazine	8.210	77	23358	0.905	ppm		99
97)	N-Nitrosodiphenylamine	8.173	169	31621	1.767	ppm		96
98)	1,3,5-Trinirobenzene	8.440	213	681	0.288	ppm	#	1
99)	Diallate	8.456	86	8256	0.869	ppm		97
100)	Phorate	8.461	121	3813	0.709	ppm	#	77
101)	Phenacetin	8.478	108	7502	0.567	ppm		93

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

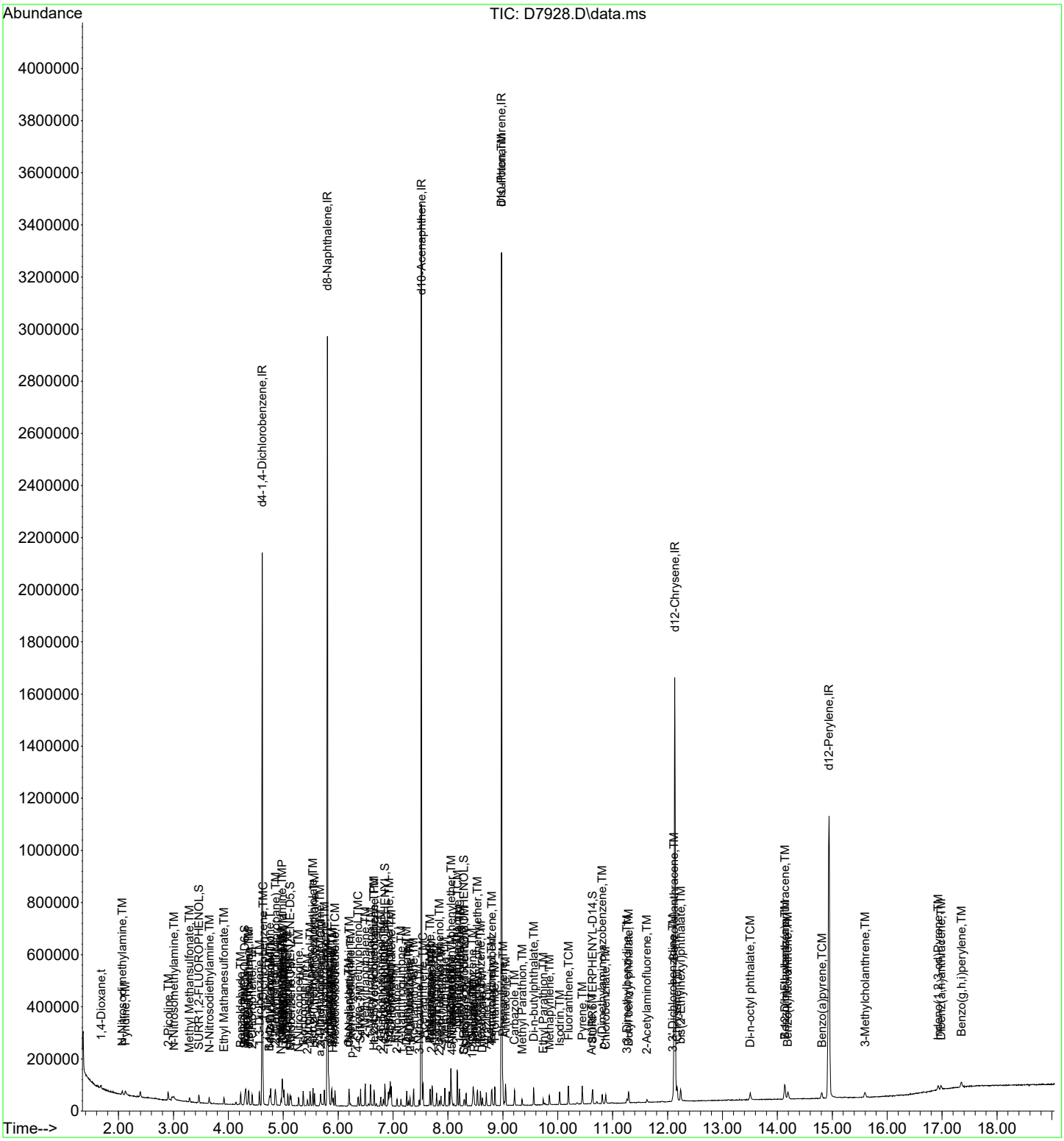
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
102) 4-Bromophenyl-phenylether	8.536	248	5221	0.956	ppm	93
103) Hexachlorobenzene	8.595	284	6859	1.131	ppm	86
104) Dimethoate	8.627	87	5771	0.663	ppm	96
105) Atrazine	8.702	215	2724	0.952	ppm	92
107) 4-Aminobiphenyl	8.793	169	13619	0.607	ppm	99
108) Pentachloronitrobenzene	8.798	237	1710	0.784	ppm	79
109) Pronamide	8.852	173	7843	0.777	ppm	97
111) Disulfoton	8.975	88	24321	0.330	ppm	64
112) Phenanthrene	9.002	178	30092	0.943	ppm	96
113) Anthracene	9.050	178	27586m	0.866	ppm	
114) Carbazole	9.210	167	23138	0.719	ppm	99
115) Di-n-butylphthalate	9.558	149	31724	0.798	ppm	98
117) Fluoranthene	10.194	202	27364	0.848	ppm	99
119) Methyl Parathion	9.349	109	2917	0.555	ppm	86
120) Ethyl Parathion	9.734	97	2285	0.524	ppm	87
121) Methapyrilene	9.847	58	10636	0.961	ppm	98
122) Isodrin	10.034	193	3309	1.235	ppm	93
124) Pyrene	10.446	202	27506	1.013	ppm	98
126) Aramite	10.617	185	1106m	0.499	ppm	
127) p-(Dimethylamino)azobe...	10.810	120	6355	0.649	ppm	90
128) Chlorobenzilate	10.874	139	7228	0.710	ppm	92
129) Butyl benzyl phthalate	11.291	149	11791	0.775	ppm	96
130) 3,3-Dimethylbenzidine	11.259	212	6998	0.433	ppm	96
131) 2-Acetylaminofluorene	11.623	181	3445m	0.287	ppm	
132) 3,3'-Dichlorobenzidine	12.093	252	4479m	0.483	ppm	
133) Benzo(a)anthracene	12.115	228	23959	0.971	ppm	99
134) Chrysene	12.173	228	21784	0.944	ppm	95
135) bis(2-Ethylhexyl)phtha...	12.238	149	15786	0.749	ppm	98
137) Di-n-octyl phthalate	13.505	149	21924	0.703	ppm	93
138) 7,12-Dimethylbenz(a)an...	14.136	256	9501	0.968	ppm	100
139) Benzo(b)Fluoranthene	14.136	252	18915	0.923	ppm	98
140) Benzo(k)fluoranthene	14.190	252	17194	0.871	ppm	96
141) Benzo(a)pyrene	14.810	252	14659	0.812	ppm	95
142) 3-Methylcholanthrene	15.597	268	8120	0.724	ppm	97
143) Indeno(1,2,3-cd)Pyrene	16.928	276	10051	0.580	ppm	96
144) Dibenz(a,h)anthracene	16.982	278	8960	0.498	ppm	96
145) Benzo(g,h,i)perylene	17.351	276	13132	0.743	ppm	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

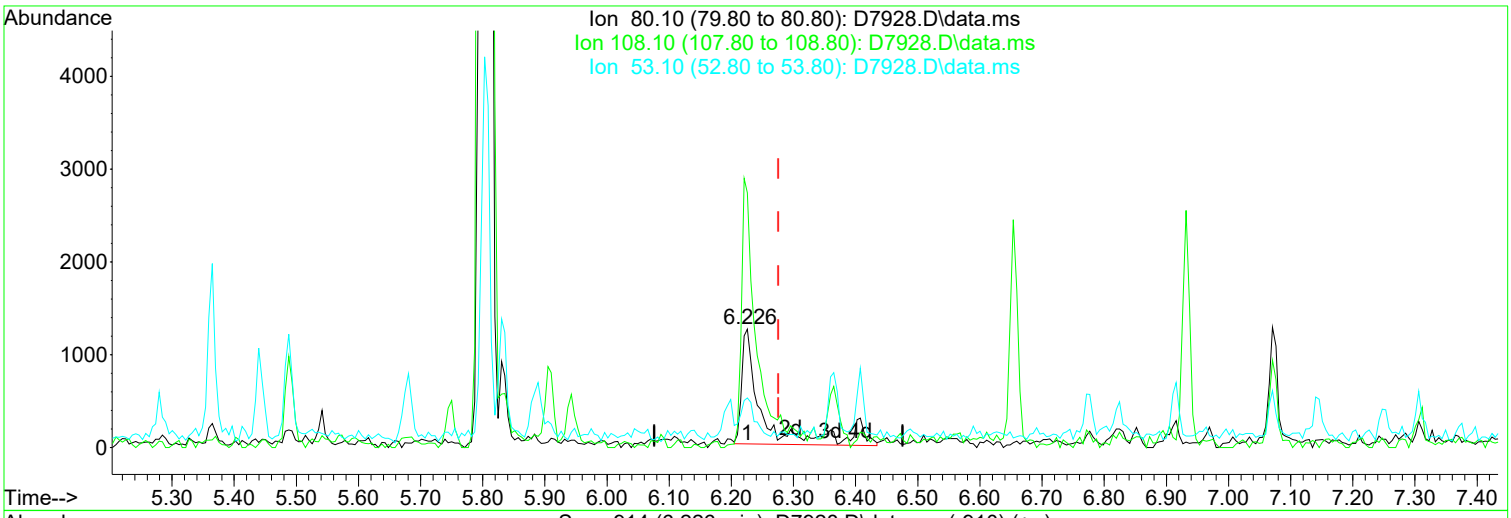
Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration

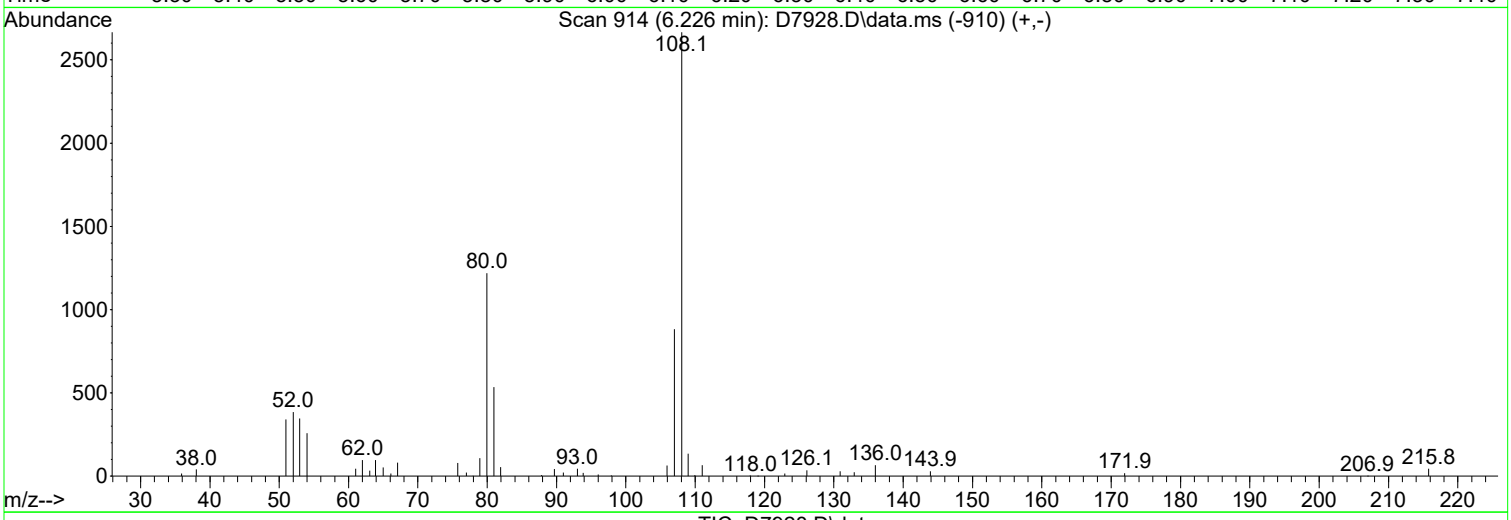


Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7928.D\data.ms

(54) p-Phenylenediamine (TM)

6.226min (-0.050) 0.53 ppm m

response 2870

Ion	Exp%	Act%
80.10	100.00	100.00
108.10	237.80	215.38
53.10	40.00	41.84
0.00	0.00	0.00

Manual Integration:

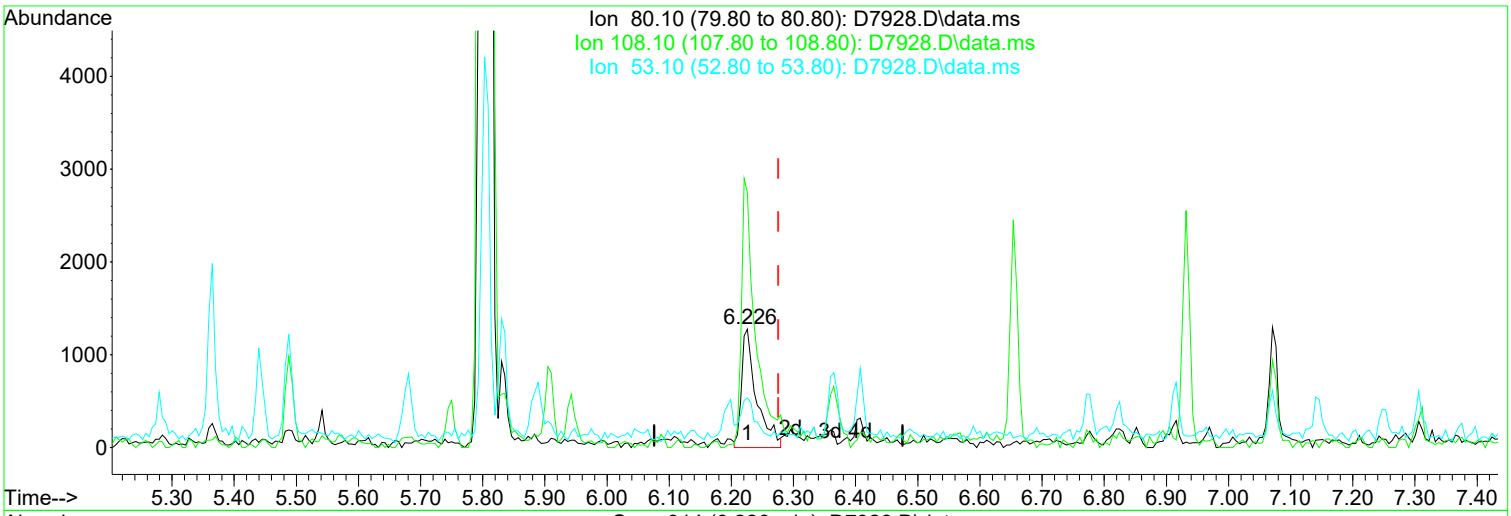
Before

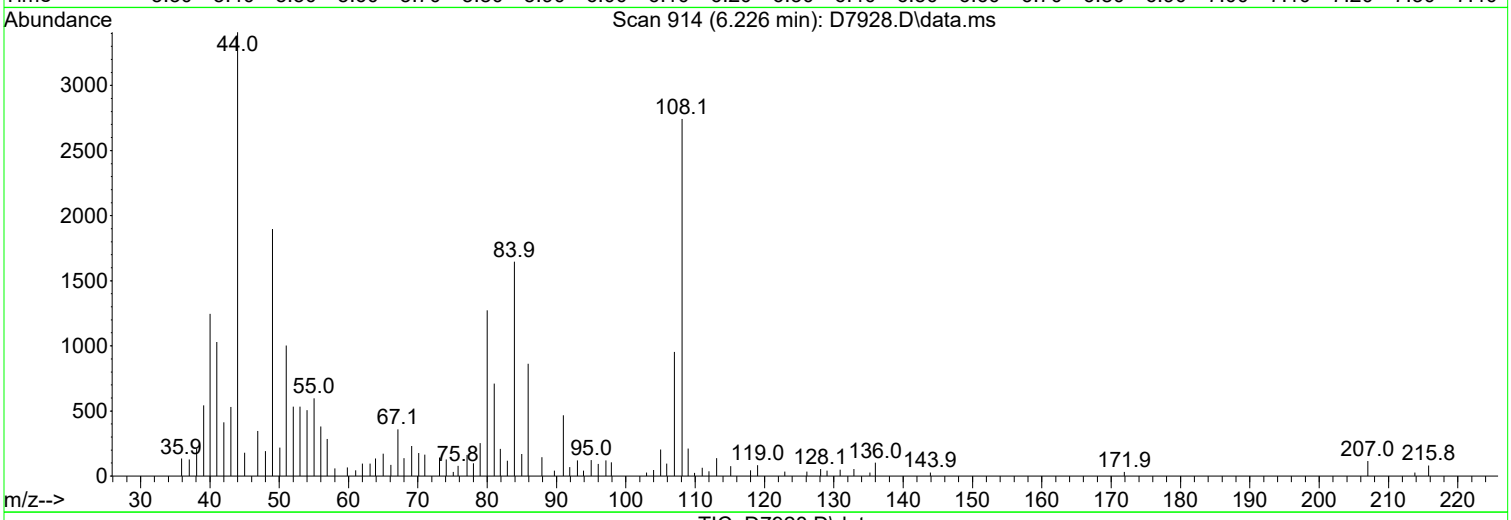
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7928.D\data.ms

(54) p-Phenylenediamine (TM)

6.226min (-0.050) 0.40 ppm m

response 2130

Ion	Exp%	Act%
80.10	100.00	100.00
108.10	237.80	215.38
53.10	40.00	41.84
0.00	0.00	0.00

Manual Integration:

After

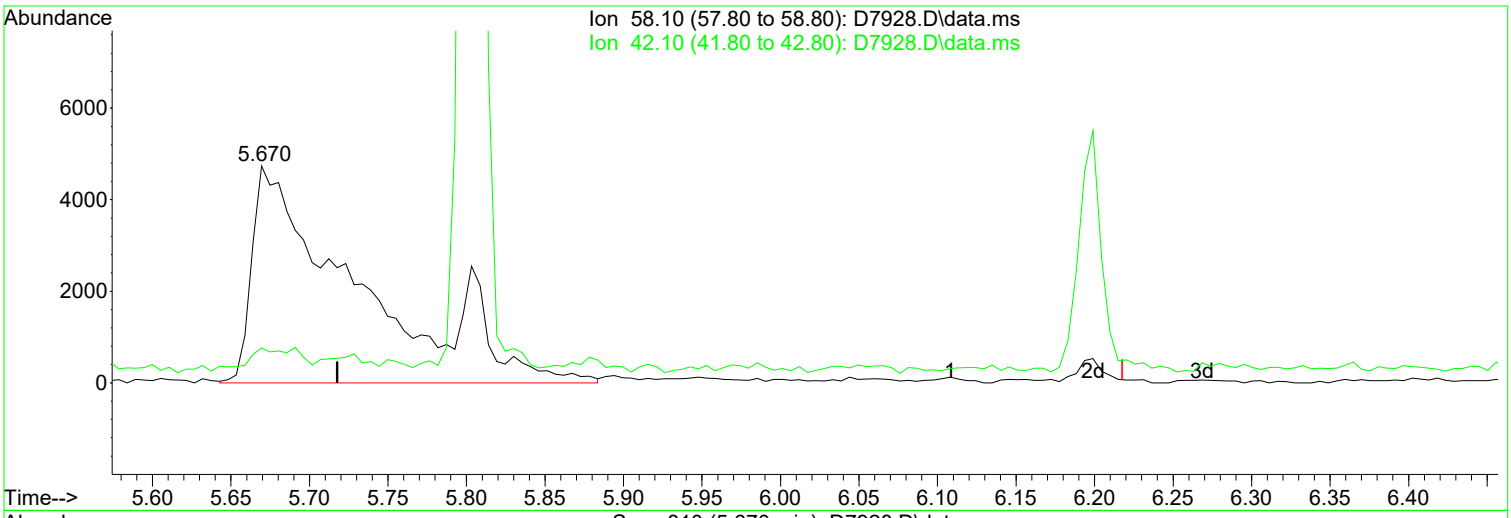
Poor integration.

08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration



TIC: D7928.D\data.ms

(44) a,a-Dimethylphenethylamine (TM)

5.670min (-0.548) 0.85 ppm m

response 22188

Ion	Exp%	Act%
58.10	100.00	100.00
42.10	8.00	16.09
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

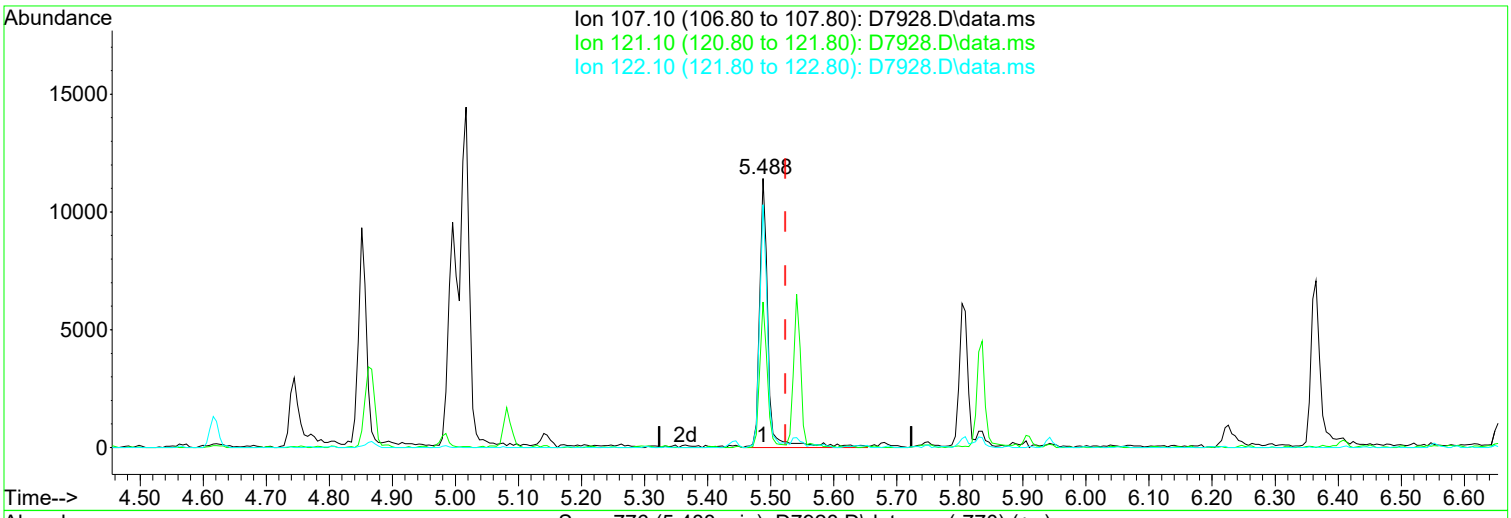
Poor integration.

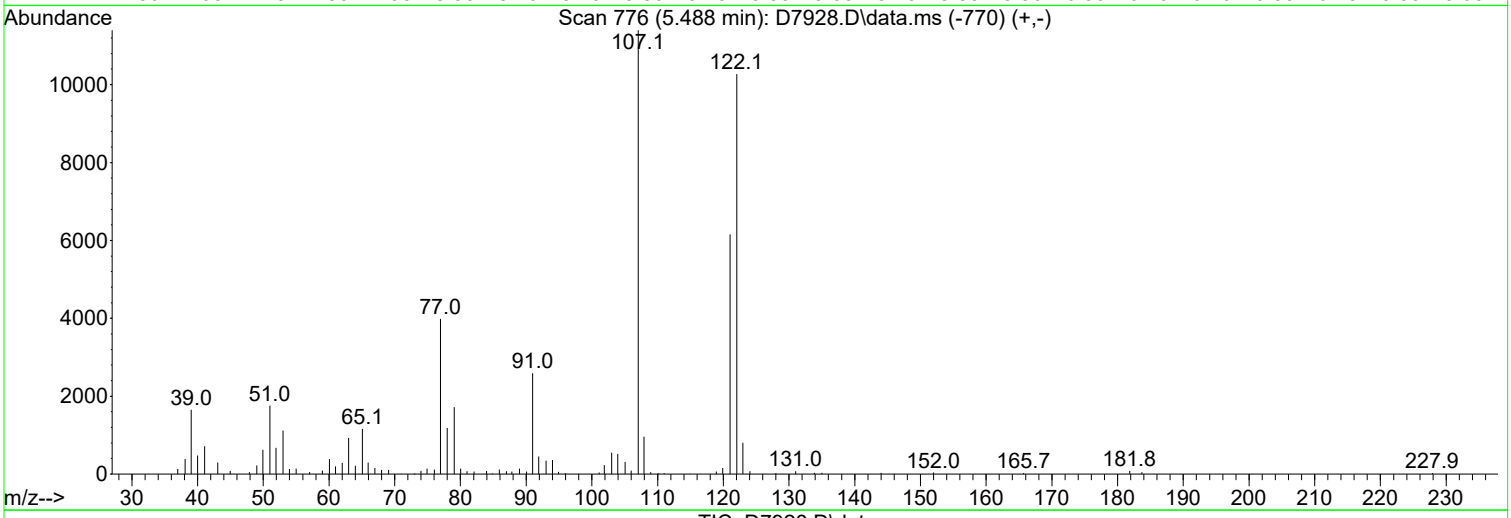
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7928.D\data.ms

(41) 2,4-Dimethylphenol (TM)

5.488min (-0.036) 0.92 ppm

response 10853

Ion	Exp%	Act%
107.10	100.00	100.00
121.10	51.40	54.10
122.10	84.40	90.26
0.00	0.00	0.00

Manual Integration:

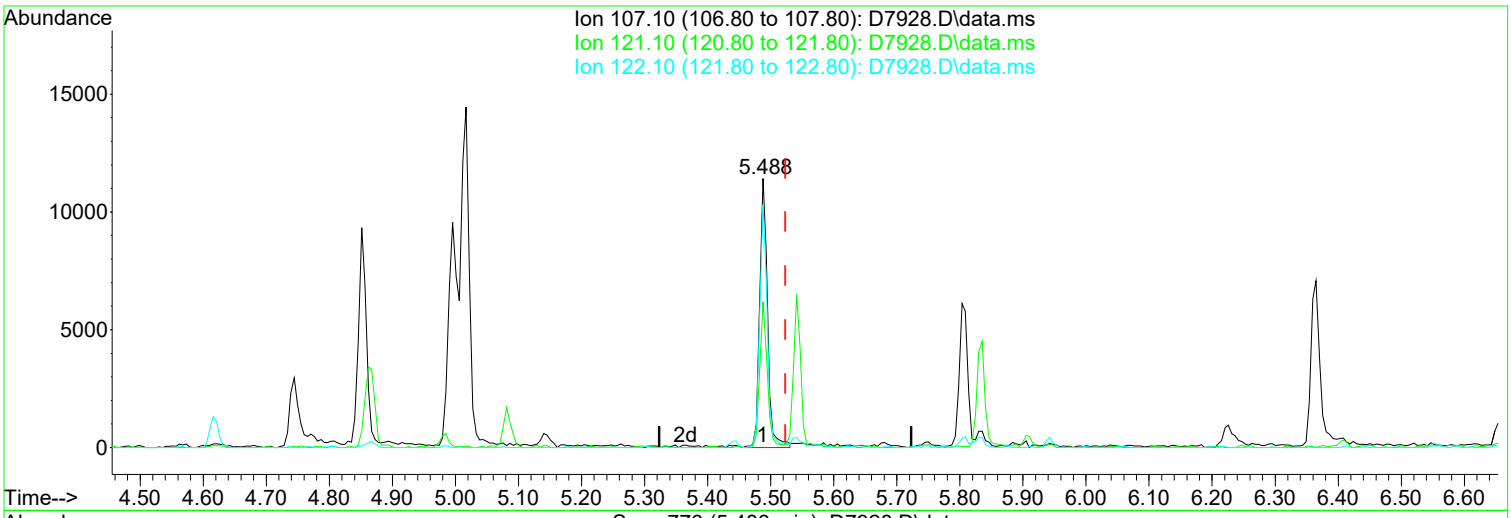
Before

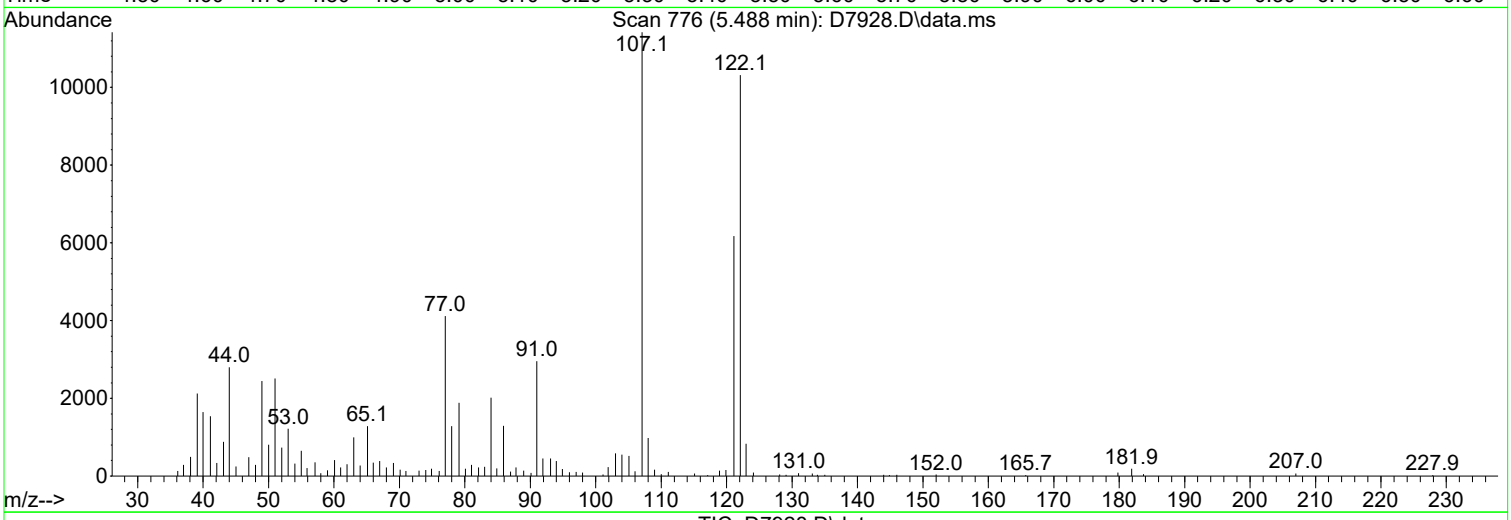
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7928.D\data.ms

(41) 2,4-Dimethylphenol (TM)

5.488min (-0.036) 0.84 ppm m

response 9991

Ion	Exp%	Act%
107.10	100.00	100.00
121.10	51.40	54.09
122.10	84.40	90.34
0.00	0.00	0.00

Manual Integration:

After

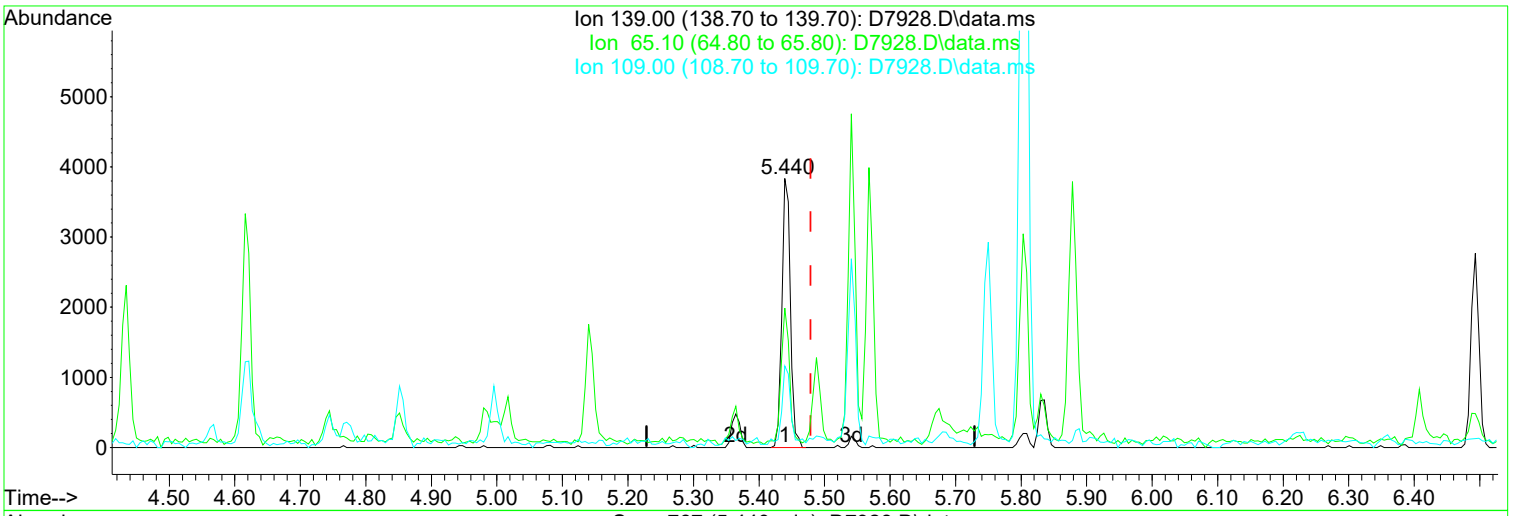
Poor integration.

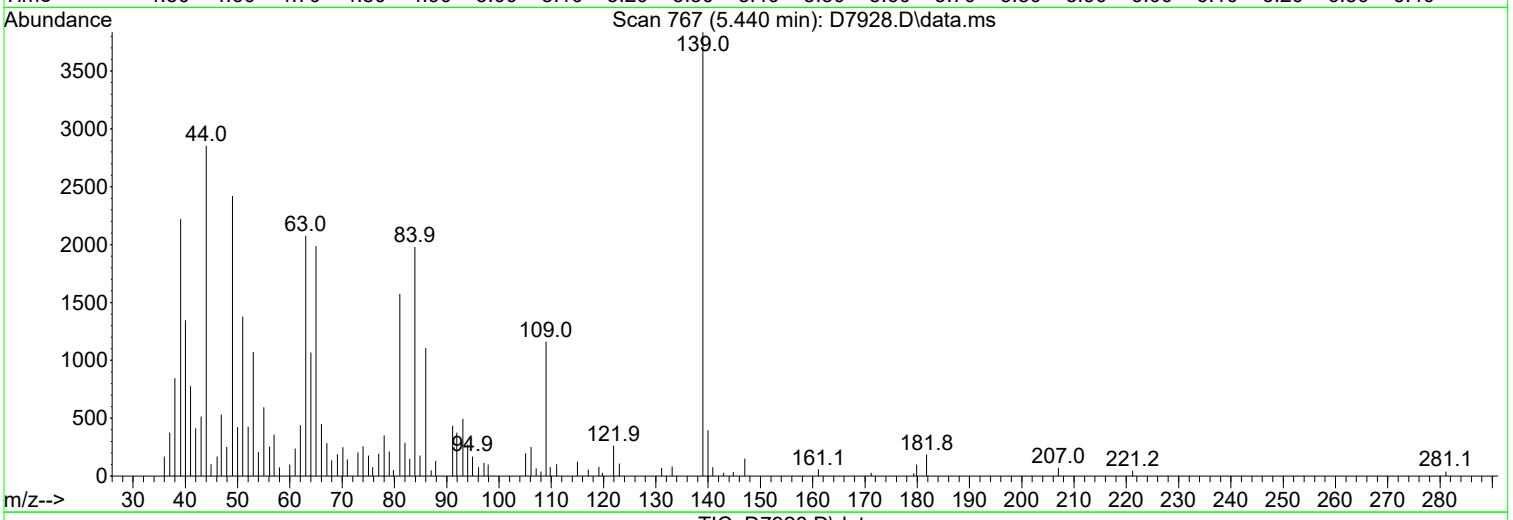
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7928.D\data.ms

(39) 2-Nitrophenol (TCM)

5.440min (-0.040) 0.56 ppm m

response 3518

Ion	Exp%	Act%
139.00	100.00	100.00
65.10	47.60	51.86
109.00	26.50	30.27
0.00	0.00	0.00

Manual Integration:

After

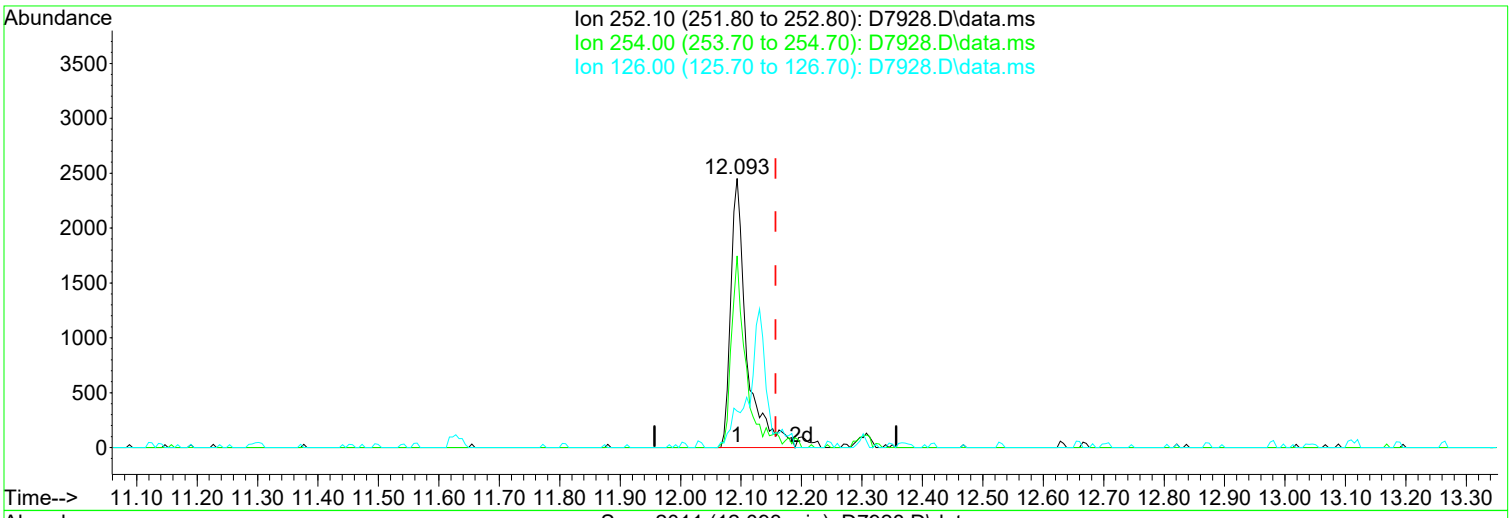
Poor integration.

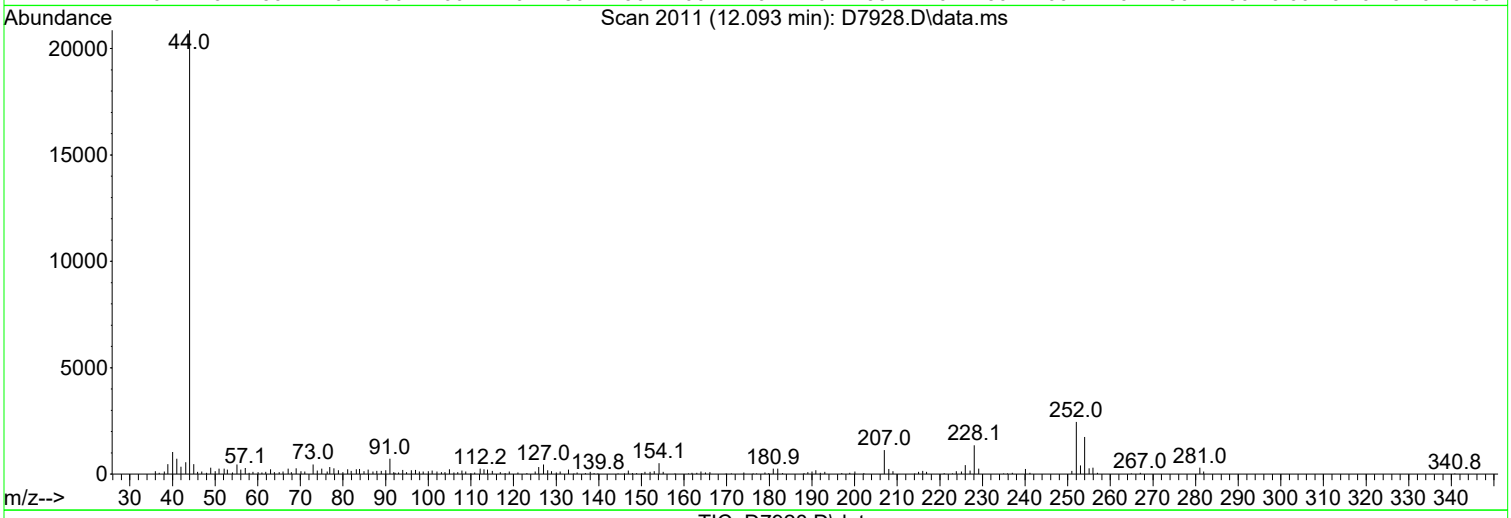
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7928.D\data.ms

(132) 3,3'-Dichlorobenzidine (TM)

12.093min (-0.064) 0.48 ppm m

response 4479

Ion	Exp%	Act%
252.10	100.00	100.00
254.00	65.10	71.28
126.00	15.60	13.55
0.00	0.00	0.00

Manual Integration:

After

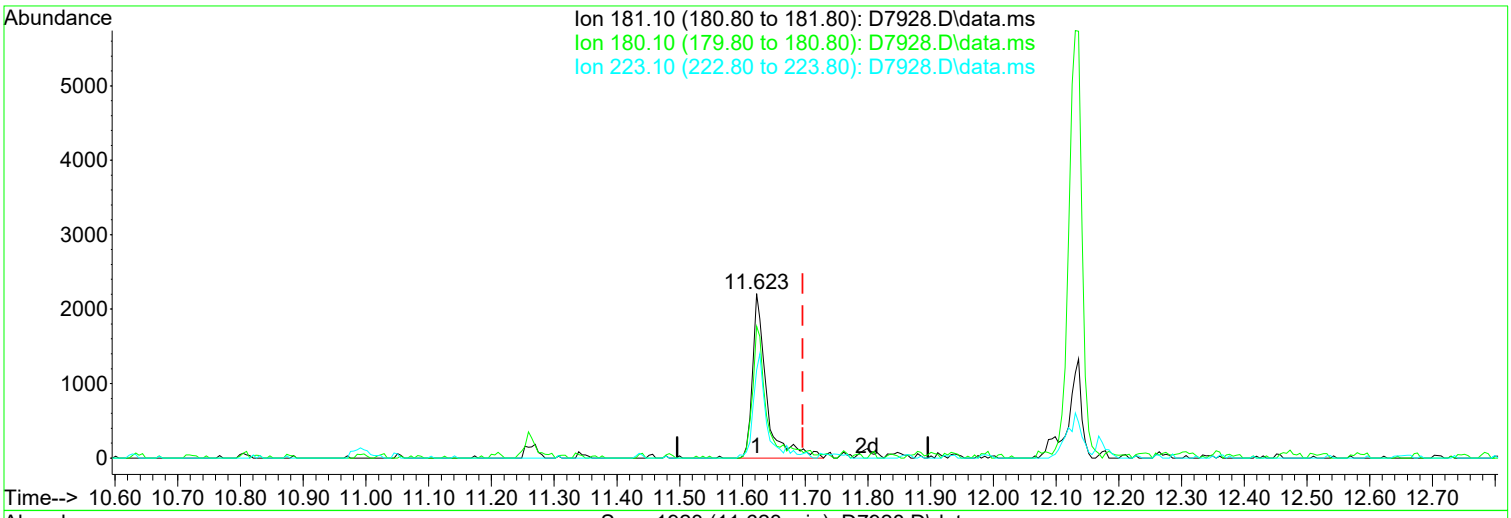
Poor integration.

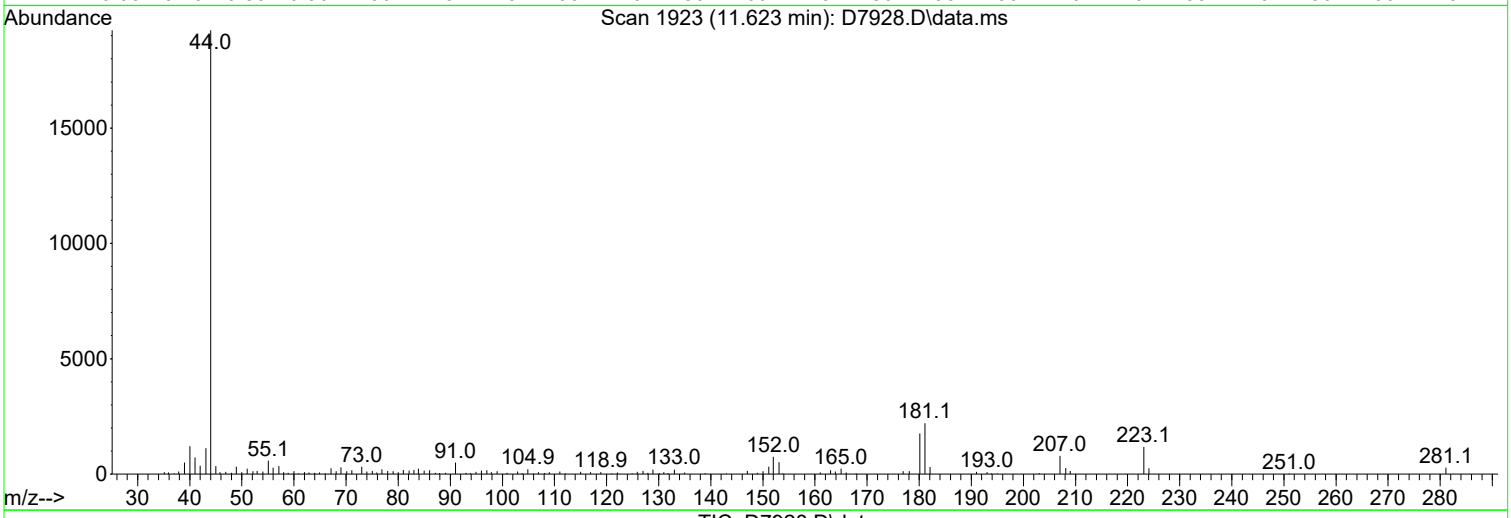
08/06/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7928.D
Acq On : 05 Aug 2024 09:41 am
Operator : EDeGray
Sample : 1 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 05 12:28:17 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Jul 02 09:22:19 2024
Response via : Initial Calibration





TIC: D7928.D\data.ms

(131) 2-Acetylaminofluorene (TM)

11.623min (-0.074) 0.29 ppm m

response 3445

Ion	Exp%	Act%
181.10	100.00	100.00
180.10	79.20	80.11
223.10	52.90	53.42
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/06/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7927.D
Acq On : 05 Aug 2024 09:17 am
Operator : EDeGray
Sample : IB
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 06 09:55:13 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 09:48:15 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.616	152	303546	40.00	ppm	0.00
34) d8-Naphthalene	5.803	136	1201785	40.00	ppm	0.00
58) d10-Acenaphthene	7.515	164	652092	40.00	ppm	0.00
92) d10-Phenanthrene	8.980	188	1088912	40.00	ppm	0.00
118) d12-Chrysene	12.136	240	761560	40.00	ppm	0.00
136) d12-Perylene	14.949	264	681259	40.00	ppm	0.00
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	0.000	112	0	0.00	ppm	
Spiked Amount 20.000	Range 10 - 70		Recovery =	0.00%#		
13) SURR2,PHENOL-D6	0.000	99	0	0.00	ppm	
Spiked Amount 20.000	Range 10 - 107		Recovery =	0.00%#		
35) SURR4,NITROBENZENE-D5	5.124	82	358	0.03	ppm	0.00
Spiked Amount 10.000	Range 31 - 110		Recovery =	0.30%#		
64) SURR5,2-FLUOROBIPHENYL	6.900	172	314	0.02	ppm	0.05
Spiked Amount 10.000	Range 31 - 118		Recovery =	0.20%#		
89) SURR3,2,4,6-TRIBROMOPH...	0.000	330	0	0.00	ppm	
Spiked Amount 20.000	Range 35 - 141		Recovery =	0.00%#		
125) SURR6,TERPHENYL-D14	10.638	244	144	0.01	ppm	0.00
Spiked Amount 10.000	Range 10 - 165		Recovery =	0.10%#		

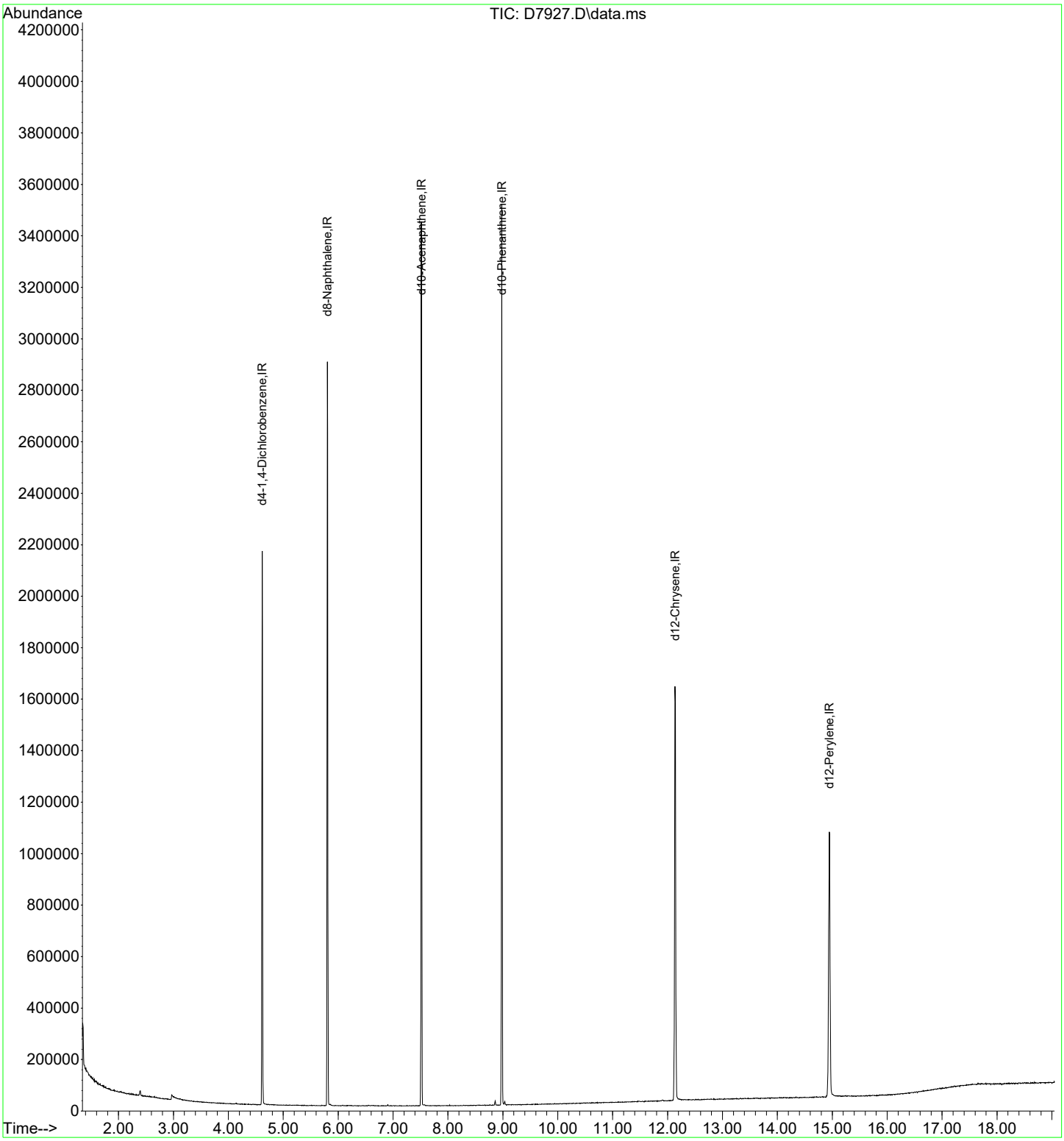
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7927.D
Acq On : 05 Aug 2024 09:17 am
Operator : EDeGray
Sample : IB
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 06 09:55:13 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\8270-080524(64).M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 06 09:48:15 2024
Response via : Initial Calibration

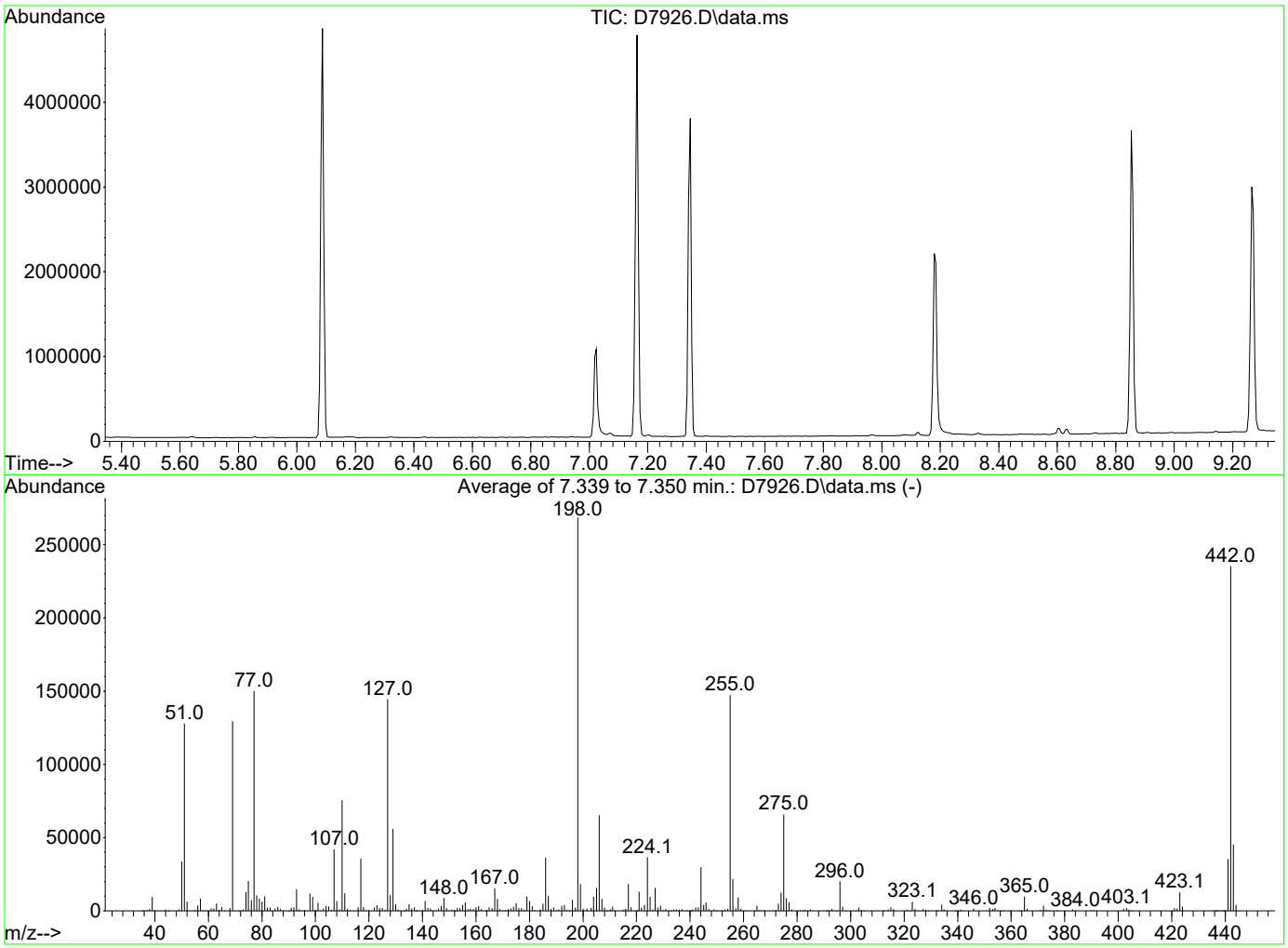


1st BA 08/07/24
2nd MP 08/07/24

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7926.D
Acq On : 05 Aug 2024 08:05 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Title : TUNE CHECK
Last Update : Mon Jun 17 10:53:32 2024



AutoFind: Scans 795, 796, 797; Background Corrected with Scan 790

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	1.6	2079	PASS
69	198	0.00	100	48.2	129526	PASS
70	69	0.00	2	0.4	519	PASS
197	198	0.00	2	0.8	2237	PASS
198	198	100	100	100.0	268480	PASS
199	198	5	9	6.8	18336	PASS
365	198	1	200	3.6	9743	PASS
441	443	0.01	150	78.3	35347	PASS
442	442	100	100	100.0	235360	PASS
443	442	15	24	19.2	45125	PASS

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7926.D
Acq On : 05 Aug 2024 08:05 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 05 08:47:04 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Mon Jun 17 10:53:32 2024
Response via : Initial Calibration

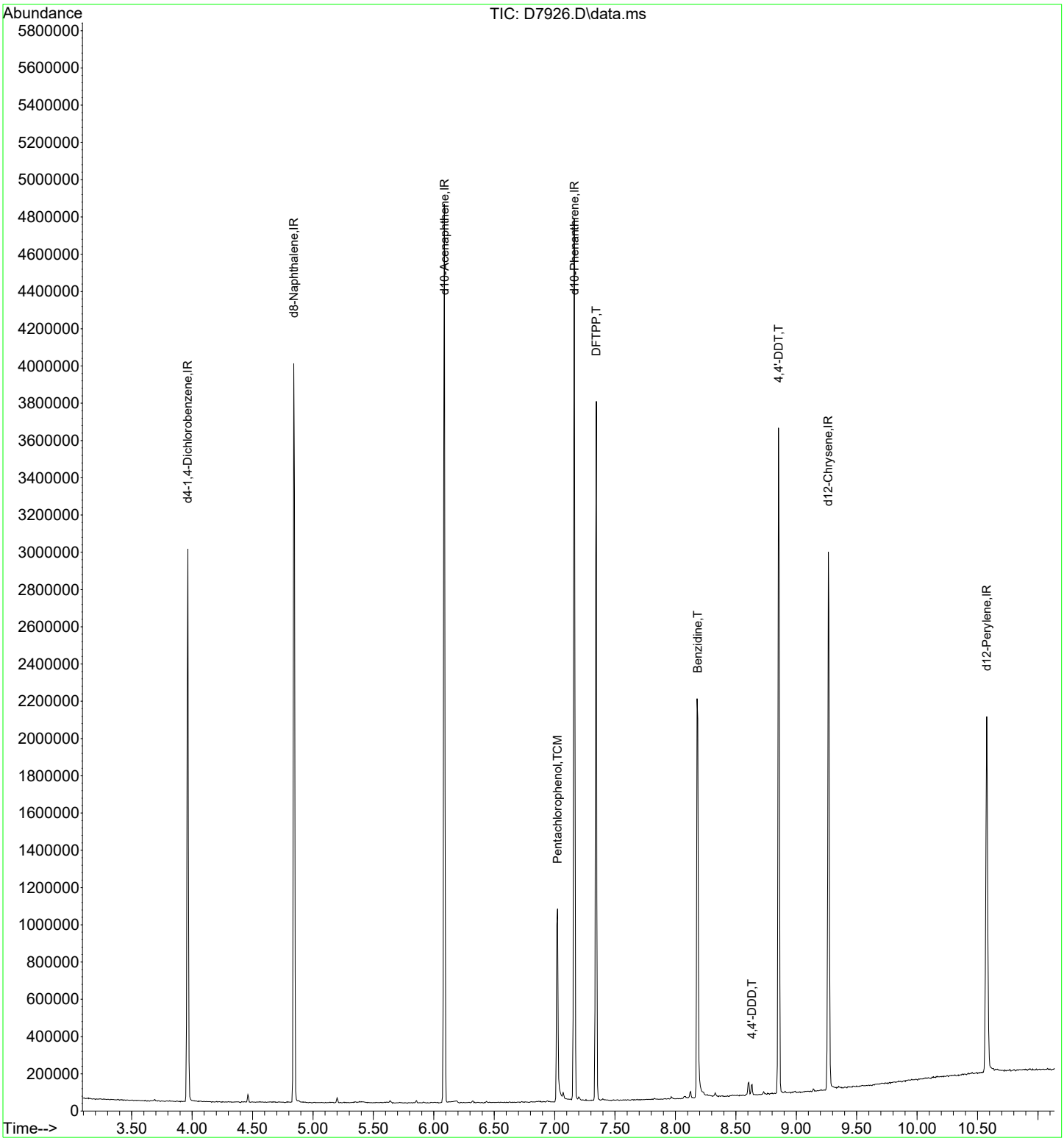
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	3.964	152	364513	40.00	ppm	-0.04
2) d8-Naphthalene	4.841	136	1438798	40.00	ppm	-0.04
3) d10-Acenaphthene	6.088	164	766718	40.00	ppm	-0.03
4) d10-Phenanthrene	7.163	188	1256861	40.00	ppm	-0.03
7) d12-Chrysene	9.265	240	866199	40.00	ppm	-0.02
12) d12-Perylene	10.575	264	758360	40.00	ppm	-0.02
Target Compounds						Qvalue
5) Pentachlorophenol	7.024	266	115492	37.707	ppm	99
6) DFTPP	7.345	198	275341	48.373	ppm	74
8) Benzidine	8.184	184	774629	41.976	ppm	98
9) 4,4'-DDE	7.965	246	554	N.D.		
10) 4,4'-DDD	8.634	235	7469	1.198	ppm	90
11) 4,4'-DDT	8.853	235	481974	77.310	ppm	91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7926.D
Acq On : 05 Aug 2024 08:05 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 05 08:47:04 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Mon Jun 17 10:53:32 2024
Response via : Initial Calibration

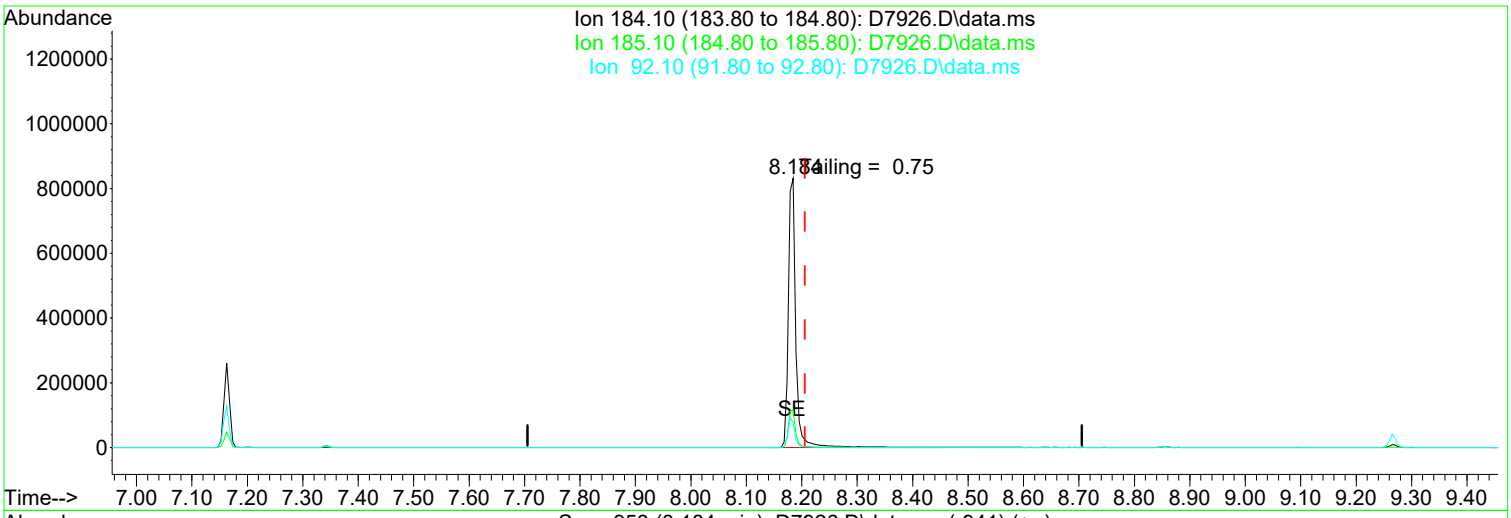


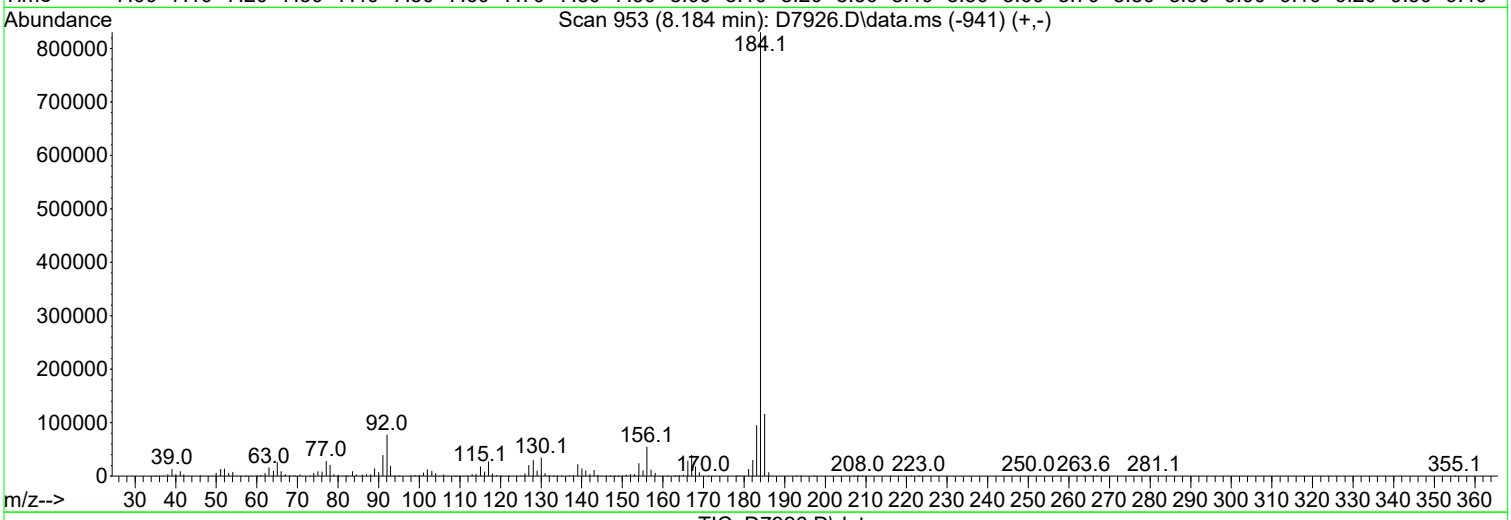
1st BA 08/07/24
2nd MP 08/07/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7926.D
Acq On : 05 Aug 2024 08:05 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 05 08:47:04 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Mon Jun 17 10:53:32 2024
Response via : Initial Calibration





TIC: D7926.D\data.ms

(8) Benzidine (T)

8.184min (-0.022) 41.98 ppm

response 774629

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	14.80	14.01
92.10	10.10	9.31
0.00	0.00	0.00

Manual Integration:

After

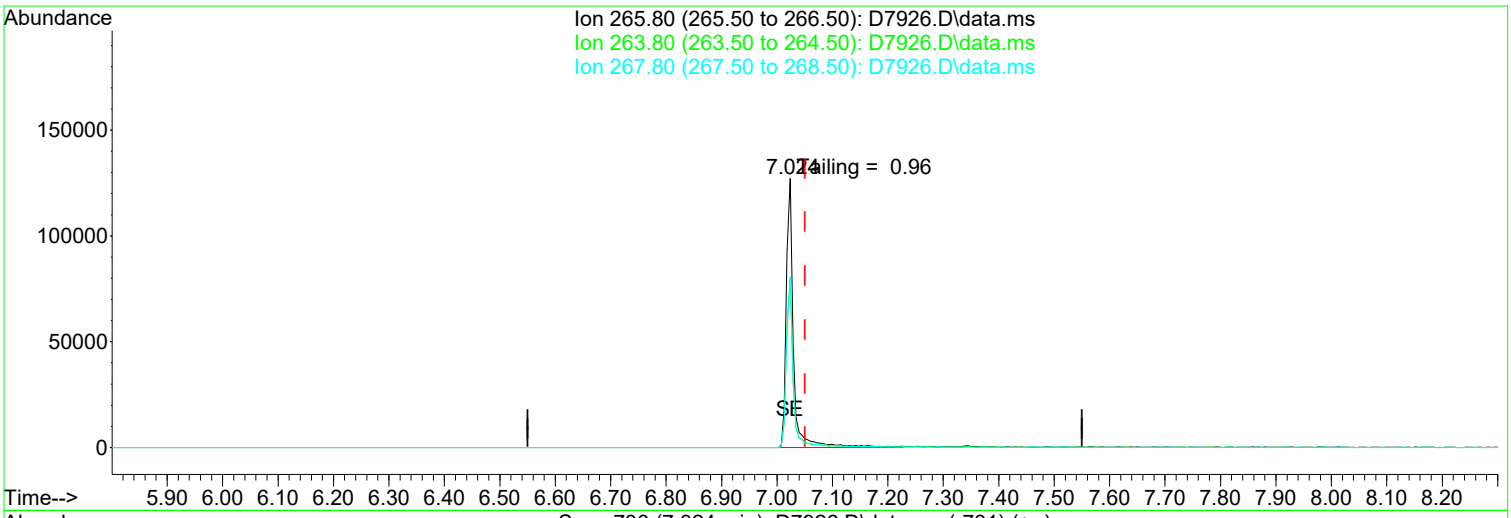
Other - Tailing

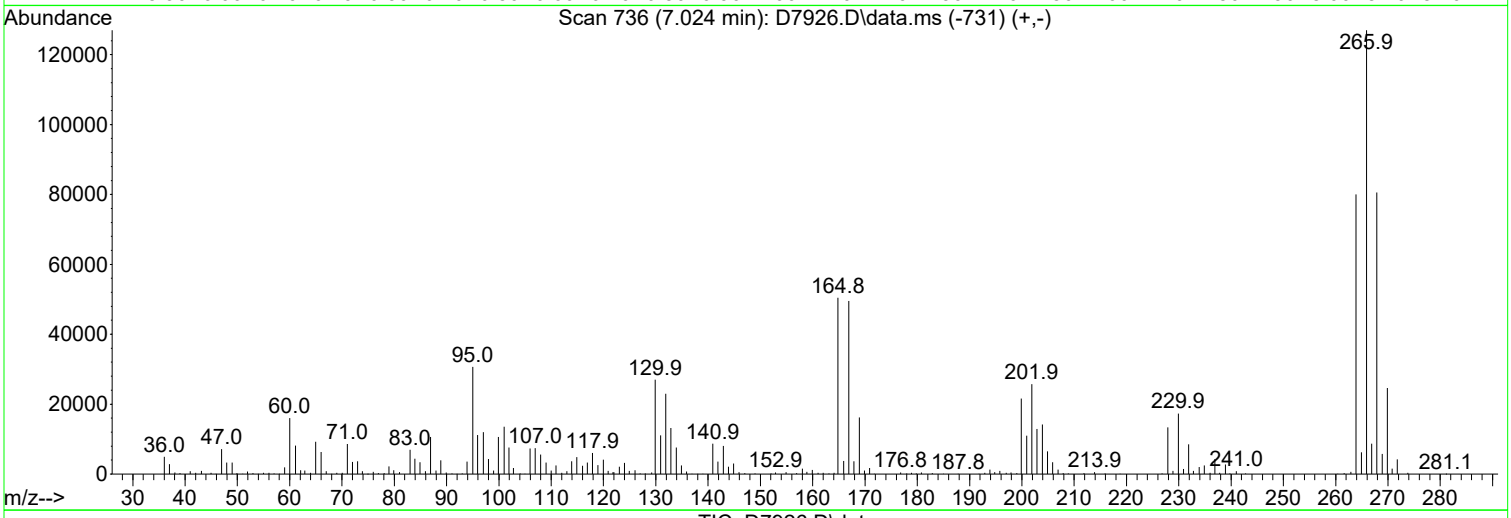
08/05/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5977-MS64\Data\080524\
Data File : D7926.D
Acq On : 05 Aug 2024 08:05 am
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 05 08:47:04 2024
Quant Method : I:\ACQUDATA\5977-MS64\Methods\TUNE-E.M
Quant Title : TUNE CHECK
QLast Update : Mon Jun 17 10:53:32 2024
Response via : Initial Calibration





TIC: D7926.D\data.ms

(5) Pentachlorophenol (TCM)

7.024min (-0.027) 37.71 ppm

response 115492

Ion	Exp%	Act%
265.80	100.00	100.00
263.80	63.50	63.00
267.80	64.20	63.44
0.00	0.00	0.00

Manual Integration:

After

Other - Tailing

08/05/24

Analysis: 8270/6725	**Analyst:** BA	**Run Method:** TUNE/8270	
Date: 8/5/24	**Instr.** R-MS-64	**Quant Method:** 8270-080524(64)	
Syringes:	**ICAL:** RC	**LIMS Run#:**	

Pos.	Sample	Diln.	Stds. ID	File#	OK?	Comments
	BLK			D7925	—	
	TUNE		234273	26	Y	
	INST BLK			27	Y	
	1 STD			28	Y	
	2			29	Y	
	5			30	Y	
	10			31	Y	
	20			32	Y	
	40			33	Y	
	60			34	Y	
	80			35	Y	
	100			36	N	BAD SHOOT
	ICV			37	Y	

8270 Calibration

Conc.(ppm)	ul Stds. 1-4	uL ISTD	uL DCM	uL STD (total)	Final Vol.	
1	2	10	992	8	1mL	
2	4	10	984	16	1mL	
5	10	10	960	40	1mL	
10	10	5	460	40	0.5mL	
20	20	5	420	80	0.5mL	
40	20	2.5	170	80	0.25mL	
60	30	2.5	130	120	0.25mL	
80	40	2.5	90	160	0.25mL	
100	50	2.5	50	200	0.25mL	
ICV (40)	40ul #1/3 20ul #2/4	2.5	130	120	0.25mL	Secondary

Primary Standards:	ID	Conc.	Exp:	Secondary Standards:	ID	Conc.	Exp:
#1	236508	500ppm	1/25/2025	#1	235465	250ppm	8/30/2024
#2	235454	500ppm	11/28/2024	#2	235466	500ppm	8/30/2024
#3	235455	500ppm	11/28/2024	#3	235604	250ppm	12/5/2024
#4	235457	500ppm	11/28/2024	#4	235467	500ppm	11/28/2024

Syringes: 10uL(233536) 25uL(225837) 50uL(57042) 250uL(220842) 1000uL(220840)

All samples = _____mL + _____uL Combined IS/Surr.;

Primary :_____ exp: Secondary :_____ exp:

Primary:_____ exp: Secondary :_____ exp:

Reagents:

ALS Group USA, Corp.

DBA ALS Environmetal

QC/QC Report

Date Analyzed: 8/5/24 8:05

ICAL Tune Summary
Semi Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5977-MS64\DATA\080524\D7926.D Analytical Method: 8270D

Instrument ID: R-MS-64

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Results Pass/Fail
68	69	0	2	1.6	2079	PASS
69	69	100	100	100.0	129526	PASS
70	69	0	2	0.4	519	PASS
197	198	0	2	0.8	2237	PASS
198	198	100	100	100.0	268480	PASS
199	198	5	9	6.8	18336	PASS
365	198	1	200	3.6	9743	PASS
441	443	0.01	150	78.3	35347	PASS
442	442	100	100	100.0	235360	PASS
443	442	15	24	19.2	45125	PASS

Sample Name	Lab Code	File ID:	Date Analyzes:	Q
IB	IB	I:\ACQUDATA\5977-MS64\Data\080524\D7927.D	8/5/24 9:17	
1 STD	1 STD	I:\ACQUDATA\5977-MS64\DATA\080524\D7928.D	8/5/24 9:41	
2 STD	2 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7929.D	8/5/24 10:05	
5 STD	5 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7930.D	8/5/24 10:29	
10 STD	10 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7931.D	8/5/24 10:54	
20 STD	20 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7932.D	8/5/24 11:18	
40 STD	40 STD	I:\ACQUDATA\5977-MS64\DATA\080524\D7933.D	8/5/24 11:42	
60 STD	60 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7934.D	8/5/24 14:31	
80 STD	80 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7935.D	8/5/24 14:55	
ICV	ICV	I:\ACQUDATA\5977-MS64\Data\080524\D7937.D	8/5/24 13:19	

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

#	Lab Code	Sample Name	File Location	Acquisition Date
17	RC2400152-17	1 STD KF	I:\ACQUDATA\5977-MS64\Data\061824\D7360.D	06/18/2024 21:23
11	RC2400152-11	2 STD KF	I:\ACQUDATA\5977-MS64\Data\061824\D7361.D	06/18/2024 21:48
12	RC2400152-12	10 STD KF	I:\ACQUDATA\5977-MS64\Data\061824\D7362.D	06/18/2024 22:13
13	RC2400152-13	50 STD KF	I:\ACQUDATA\5977-MS64\Data\061824\D7363.D	06/18/2024 22:38
14	RC2400152-14	80 STD KF	I:\ACQUDATA\5977-MS64\Data\061824\D7364.D	06/18/2024 23:03
15	RC2400152-15	100 STD KF	I:\ACQUDATA\5977-MS64\Data\061824\D7365.D	06/18/2024 23:27
01	RC2400152-01	1 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7928.D	08/05/2024 09:41
02	RC2400152-02	2 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7929.D	08/05/2024 10:05
03	RC2400152-03	5 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7930.D	08/05/2024 10:29
04	RC2400152-04	10 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7931.D	08/05/2024 10:54
05	RC2400152-05	20 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7932.D	08/05/2024 11:18
06	RC2400152-06	40 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7933.D	08/05/2024 11:42
07	RC2400152-07	60 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7934.D	08/05/2024 14:31
08	RC2400152-08	80 STD	I:\ACQUDATA\5977-MS64\Data\080524\D7935.D	08/05/2024 14:55

Analyte

1,2,4,5-Tetrachlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.5594	02	2.000	0.4895	03	5.000	0.5098	04	10.000	0.4857
05	20.000	0.5094	06	40.000	0.4703	07	60.000	0.484	08	80.000	0.5165

1,2,4-Trichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.3036	02	2.000	0.292	03	5.000	0.2925	04	10.000	0.2796
05	20.000	0.2927	06	40.000	0.2689	07	60.000	0.2795	08	80.000	0.2967

1,2-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.502	02	2.000	1.472	03	5.000	1.473	04	10.000	1.411
05	20.000	1.46	06	40.000	1.354	07	60.000	1.37	08	80.000	1.434

1,2-Diphenylhydrazine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.8732	02	2.000	0.823	03	5.000	0.8717	04	10.000	0.8672
05	20.000	0.9213	06	40.000	0.8359	07	60.000	0.8317	08	80.000	0.8515

1,3,5-Trinitrobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.02531	03	5.000	0.02908	04	10.000	0.03647	05	20.000	0.05103
06	40.000	0.06371	07	60.000	0.07797	08	80.000	0.08574			

1,3-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.558	02	2.000	1.466	03	5.000	1.502	04	10.000	1.448

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

Analyte

1,3-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	20.000	1.503	06	40.000	1.39	07	60.000	1.422	08	80.000	1.491

1,3-Dinitrobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.108	03	5.000	0.1287	04	10.000	0.142	05	20.000	0.171
06	40.000	0.1804	07	60.000	0.2044	08	80.000	0.2215			

1,4-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.609	02	2.000	1.542	03	5.000	1.595	04	10.000	1.499
05	20.000	1.546	06	40.000	1.428	07	60.000	1.463	08	80.000	1.526

1,4-Naphthoquinone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2864	02	2.000	0.3078	03	5.000	0.3652	04	10.000	0.3924
05	20.000	0.4302	06	40.000	0.3869	07	60.000	0.3852	08	80.000	0.3885

1-Methylnaphthalene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.6431	02	2.000	0.6285	03	5.000	0.6415	04	10.000	0.6183
05	20.000	0.6434	06	40.000	0.5997	07	60.000	0.6028	08	80.000	0.6361

1-Naphthylamine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.8856	02	2.000	0.8679	03	5.000	0.7015	04	10.000	0.9068
05	20.000	0.944	06	40.000	0.8344	07	60.000	0.8049	08	80.000	0.8595

2,2'-Oxybis(1-chloropropane)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.94	02	2.000	1.854	03	5.000	1.881	04	10.000	1.789
05	20.000	1.828	06	40.000	1.667	07	60.000	1.642	08	80.000	1.713

2,3,4,6-Tetrachlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.1444	03	5.000	0.1639	04	10.000	0.1866	05	20.000	0.2163
06	40.000	0.2227	07	60.000	0.2457	08	80.000	0.2764			

2,4,5-Trichlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2554	02	2.000	0.254	03	5.000	0.2783	04	10.000	0.2953
05	20.000	0.3418	06	40.000	0.3346	07	60.000	0.3593	08	80.000	0.3871

2,4,6-Tribromophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.1093	03	5.000	0.1246	04	10.000	0.1383	05	20.000	0.1588
06	40.000	0.1558	07	60.000	0.1701	08	80.000	0.1858			

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

Analyte

2,4,6-Trichlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2427	02	2.000	0.2378	03	5.000	0.2721	04	10.000	0.2825
05	20.000	0.3173	06	40.000	0.3171	07	60.000	0.3413	08	80.000	0.3662

2,4-Dichlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2306	02	2.000	0.2261	03	5.000	0.2474	04	10.000	0.255
05	20.000	0.2757	06	40.000	0.2644	07	60.000	0.2776	08	80.000	0.296

2,4-Dimethylphenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.337	02	2.000	0.3386	03	5.000	0.3554	04	10.000	0.3516
05	20.000	0.3671	06	40.000	0.3513	07	60.000	0.362	08	80.000	0.3853

2,4-Dinitrophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	5.0000	0.0321	04	10.000	0.04112	05	20.000	0.05787	06	40.000	0.07968
07	60.000	0.1086	08	80.000	0.1339						

2,4-Dinitrotoluene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2004	02	2.000	0.2123	03	5.000	0.2546	04	10.000	0.3028
05	20.000	0.3438	06	40.000	0.3493	07	60.000	0.3782	08	80.000	0.4076

2,6-Dichlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2232	02	2.000	0.2306	03	5.000	0.2469	04	10.000	0.2511
05	20.000	0.268	06	40.000	0.2553	07	60.000	0.2628	08	80.000	0.2807

2,6-Dinitrotoluene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.1903	02	2.000	0.1905	03	5.000	0.232	04	10.000	0.2462
05	20.000	0.2773	06	40.000	0.2715	07	60.000	0.2899	08	80.000	0.3046

2-Acetylaminofluorene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.2353	03	5.000	0.2937	04	10.000	0.3905	05	20.000	0.4626
06	40.000	0.4707	07	60.000	0.5118	08	80.000	0.5555			

2-Chloronaphthalene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.123	02	2.000	1.092	03	5.000	1.125	04	10.000	1.069
05	20.000	1.12	06	40.000	1.03	07	60.000	1.051	08	80.000	1.103

2-Chlorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.341	02	2.000	1.335	03	5.000	1.372	04	10.000	1.36
05	20.000	1.44	06	40.000	1.347	07	60.000	1.407	08	80.000	1.467

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

Analyte

2-Fluorobiphenyl

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.324	02	2.000	1.249	03	5.000	1.293	04	10.000	1.246
05	20.000	1.308	06	40.000	1.188	07	60.000	1.219	08	80.000	1.28

2-Fluorophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.276	02	2.000	1.174	03	5.000	1.268	04	10.000	1.256
05	20.000	1.31	06	40.000	1.222	07	60.000	1.292	08	80.000	1.372

2-Methylnaphthalene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.6959	02	2.000	0.6527	03	5.000	0.6812	04	10.000	0.6622
05	20.000	0.6912	06	40.000	0.6417	07	60.000	0.6506	08	80.000	0.6841

2-Methylphenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.301	02	2.000	1.191	03	5.000	1.26	04	10.000	1.247
05	20.000	1.321	06	40.000	1.229	07	60.000	1.25	08	80.000	1.319

2-Naphthylamine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.7734	02	2.000	0.7576	03	5.000	0.6852	04	10.000	0.7563
05	20.000	0.7786	06	40.000	0.7247	07	60.000	0.7001	08	80.000	0.7563

2-Nitroaniline

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.2594	03	5.000	0.2852	04	10.000	0.3119	05	20.000	0.3536
06	40.000	0.3458	07	60.000	0.3629	08	80.000	0.3906			

2-Nitrophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.1187	02	2.000	0.1156	03	5.000	0.1328	04	10.000	0.131
05	20.000	0.174	06	40.000	0.1598	07	60.000	0.1819	08	80.000	0.1958

2-Picoline

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.519	02	2.000	1.534	03	5.000	1.588	04	10.000	1.574
05	20.000	1.634	06	40.000	1.507	07	60.000	1.564	08	80.000	1.648

3,3'-Dichlorobenzidine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2398	02	2.000	0.2577	03	5.000	0.2474	04	10.000	0.3303
05	20.000	0.4048	06	40.000	0.4047	07	60.000	0.4255	08	80.000	0.4517

3,3'-Dimethylbenzidine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	5.000	0.4613	04	10.000	0.5865	05	20.000	0.6515	06	40.000	0.6272
07	60.000	0.628	08	80.000	0.6412						

Client: NASA/WSTF/Navarro **Service Request:** R2407792
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Analyte

3- and 4-Methylphenol Coelution

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.338	02	2.000	1.294	03	5.000	1.359	04	10.000	1.391
05	20.000	1.486	06	40.000	1.403	07	60.000	1.417	08	80.000	1.487

3-Methylcholanthrene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.4696	02	2.000	0.4897	03	5.000	0.5232	04	10.000	0.5597
05	20.000	0.6043	06	40.000	0.561	07	60.000	0.5729	08	80.000	0.6151

3-Nitroaniline

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.2064	03	5.000	0.2514	04	10.000	0.2932	05	20.000	0.3305
06	40.000	0.3134	07	60.000	0.3322	08	80.000	0.3608			

4,6-Dinitro-2-methylphenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	5.000	0.04484	04	10.000	0.05085	05	20.000	0.07269	06	40.000	0.08741
07	60.000	0.1083	08	80.000	0.1214						

4-Aminobiphenyl

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.5091	02	2.000	0.4972	03	5.000	0.5528	04	10.000	0.5874
05	20.000	0.7115	06	40.000	0.6848	07	60.000	0.6763	08	80.000	0.6872

4-Bromophenyl Phenyl Ether

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.1952	02	2.000	0.1947	03	5.000	0.1995	04	10.000	0.1928
05	20.000	0.2047	06	40.000	0.1896	07	60.000	0.194	08	80.000	0.2044

4-Chloro-3-methylphenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2486	02	2.000	0.2529	03	5.000	0.2919	04	10.000	0.2854
05	20.000	0.3061	06	40.000	0.3013	07	60.000	0.3123	08	80.000	0.3329

4-Chloroaniline

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.3659	02	2.000	0.3853	03	5.000	0.4006	04	10.000	0.3926
05	20.000	0.4168	06	40.000	0.4057	07	60.000	0.3973	08	80.000	0.4131

4-Chlorophenyl Phenyl Ether

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.6085	02	2.000	0.5979	03	5.000	0.6085	04	10.000	0.5849
05	20.000	0.6181	06	40.000	0.5773	07	60.000	0.5887	08	80.000	0.6173

4-Nitroaniline

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.213	03	5.000	0.2712	04	10.000	0.33	05	20.000	0.3684
06	40.000	0.3359	07	60.000	0.3436	08	80.000	0.3605			

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Analyte

4-Nitrophenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	10.000	0.2054	05	20.000	0.2028	06	40.000	0.2655	07	60.000	0.2854
08	80.000	0.3121									

4-Nitroquinoline N-Oxide

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	5.000	0.02622	04	10.000	0.04086	05	20.000	0.05674	06	40.000	0.0694
07	60.000	0.07653	08	80.000	0.08198						

5-Nitro-o-toluidine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.2292	03	5.000	0.2864	04	10.000	0.3263	05	20.000	0.3645
06	40.000	0.3622	07	60.000	0.3796	08	80.000	0.4051			

7,12-Dimethylbenz(a)anthracene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.5314	03	5.000	0.5538	04	10.000	0.5312	05	20.000	0.578
06	40.000	0.5488	07	60.000	0.5743	08	80.000	0.6223			

Acenaphthene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.205	02	2.000	1.141	03	5.000	1.178	04	10.000	1.118
05	20.000	1.162	06	40.000	1.08	07	60.000	1.089	08	80.000	1.147

Acenaphthylene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.662	02	2.000	1.578	03	5.000	1.642	04	10.000	1.592
05	20.000	1.654	06	40.000	1.555	07	60.000	1.584	08	80.000	1.645

Acetophenone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	2.126	02	2.000	1.999	03	5.000	2.066	04	10.000	2.023
05	20.000	2.098	06	40.000	1.93	07	60.000	1.95	08	80.000	2.044

Aniline

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	2.037	02	2.000	1.982	03	5.000	2.085	04	10.000	2.108
05	20.000	2.189	06	40.000	2.032	07	60.000	2.08	08	80.000	2.171

Anthracene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.031	02	2.000	1.006	03	5.000	1.028	04	10.000	1.013
05	20.000	1.042	06	40.000	0.9721	07	60.000	0.9924	08	80.000	1.026

Aramite, Total

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.06335	03	5.000	0.06901	04	10.000	0.07074	05	20.000	0.07755
06	40.000	0.07398	07	60.000	0.07873	08	80.000	0.08564			

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Analyte

Benzidine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	5.000	0.2085	04	10.000	0.4453	05	20.000	0.5396	06	40.000	0.51
07	60.000	0.4866	08	80.000	0.4854						

Benzo(g,h,i)perylene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.7594	02	2.000	0.7955	03	5.000	0.8324	04	10.000	0.9078
05	20.000	0.9458	06	40.000	0.8582	07	60.000	0.8622	08	80.000	0.8949

Benzyl Alcohol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.031	02	2.000	0.9895	03	5.000	0.9801	04	10.000	1.004
05	20.000	1.081	06	40.000	1.028	07	60.000	1.059	08	80.000	1.109

Bis(2-chloroethoxy)methane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.443	02	2.000	0.4101	03	5.000	0.424	04	10.000	0.4019
05	20.000	0.4232	06	40.000	0.3926	07	60.000	0.4009	08	80.000	0.415

Bis(2-chloroethyl) Ether

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.597	02	2.000	1.541	03	5.000	1.513	04	10.000	1.413
05	20.000	1.489	06	40.000	1.363	07	60.000	1.391	08	80.000	1.456

Bis(2-ethylhexyl) Phthalate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.8993	03	5.000	0.9758	04	10.000	0.8792	05	20.000	0.9247
06	40.000	0.867	07	60.000	0.8957	08	80.000	0.9752			

Butyl Benzyl Phthalate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.6313	02	2.000	0.6334	03	5.000	0.6813	04	10.000	0.6398
05	20.000	0.6787	06	40.000	0.6396	07	60.000	0.6662	08	80.000	0.7144

Chlorobenzilate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.3797	03	5.000	0.4364	04	10.000	0.4347	05	20.000	0.4724
06	40.000	0.4493	07	60.000	0.4817	08	80.000	0.5176			

Di-n-butyl Phthalate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.186	02	2.000	1.145	03	5.000	1.194	04	10.000	1.176
05	20.000	1.306	06	40.000	1.239	07	60.000	1.274	08	80.000	1.328

Di-n-octyl Phthalate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.268	02	2.000	1.29	03	5.000	1.435	04	10.000	1.329
05	20.000	1.472	06	40.000	1.425	07	60.000	1.485	08	80.000	1.656

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Analyte

Diallate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.3086	02	2.000	0.29	03	5.000	0.309	04	10.000	0.3015
05	20.000	0.3191	06	40.000	0.2908	07	60.000	0.2906	08	80.000	0.3093

Dibenzofuran

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.598	02	2.000	1.551	03	5.000	1.591	04	10.000	1.523
05	20.000	1.586	06	40.000	1.475	07	60.000	1.496	08	80.000	1.562

Diethyl Phthalate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.278	02	2.000	1.247	03	5.000	1.31	04	10.000	1.258
05	20.000	1.291	06	40.000	1.2	07	60.000	1.228	08	80.000	1.312

Dimethoate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2157	02	2.000	0.2088	03	5.000	0.2442	04	10.000	0.2654
05	20.000	0.2876	06	40.000	0.2512	07	60.000	0.2387	08	80.000	0.2391

Dimethyl Phthalate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.285	02	2.000	1.228	03	5.000	1.284	04	10.000	1.23
05	20.000	1.297	06	40.000	1.196	07	60.000	1.212	08	80.000	1.284

Disulfoton

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.7215	03	5.000	0.5976	04	10.000	0.541	05	20.000	0.4809
06	40.000	0.5009	07	60.000	0.424	08	80.000	0.4599			

Ethyl Methanesulfonate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.12	02	2.000	1.099	03	5.000	1.127	04	10.000	1.068
05	20.000	1.116	06	40.000	1.019	07	60.000	1.055	08	80.000	1.114

Ethyl Parathion

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.09801	03	5.000	0.1393	04	10.000	0.1508	05	20.000	0.1762
06	40.000	0.1799	07	60.000	0.1964	08	80.000	0.2156			

Fluoranthene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.023	02	2.000	1.006	03	5.000	1.007	04	10.000	1.019
05	20.000	1.109	06	40.000	1.048	07	60.000	1.067	08	80.000	1.112

Fluorene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.315	02	2.000	1.281	03	5.000	1.303	04	10.000	1.269
05	20.000	1.336	06	40.000	1.253	07	60.000	1.258	08	80.000	1.304

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Analyte

Hexachlorobutadiene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.1766	02	2.000	0.1661	03	5.000	0.1664	04	10.000	0.1599
05	20.000	0.1655	06	40.000	0.1532	07	60.000	0.1569	08	80.000	0.1676

Hexachlorocyclopentadiene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.08313	02	2.000	0.1087	03	5.000	0.1516	04	10.000	0.1887
05	20.000	0.2215	06	40.000	0.2256	07	60.000	0.2228	08	80.000	0.2325

Hexachloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.6195	02	2.000	0.6294	03	5.000	0.6269	04	10.000	0.6127
05	20.000	0.6344	06	40.000	0.5851	07	60.000	0.5955	08	80.000	0.6248

Hexachloropropene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.1398	02	2.000	0.141	03	5.000	0.1547	04	10.000	0.1704
05	20.000	0.1821	06	40.000	0.1698	07	60.000	0.1771	08	80.000	0.1866

Isodrin

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.1772	02	2.000	0.1518	03	5.000	0.1487	04	10.000	0.1235
05	20.000	0.1236	06	40.000	0.1178	07	60.000	0.1228	08	80.000	0.134

Isophorone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.7174	02	2.000	0.678	03	5.000	0.7095	04	10.000	0.6957
05	20.000	0.7193	06	40.000	0.6677	07	60.000	0.679	08	80.000	0.7124

Isosafrole

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2312	02	2.000	0.2166	03	5.000	0.2265	04	10.000	0.2186
05	20.000	0.2337	06	40.000	0.214	07	60.000	0.2178	08	80.000	0.2359

Methapyrilene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.5462	03	5.000	0.5711	04	10.000	0.5309	05	20.000	0.5529
06	40.000	0.4844	07	60.000	0.4715	08	80.000	0.5072			

Methyl Methanesulfonate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.8214	02	2.000	0.7705	03	5.000	0.7826	04	10.000	0.7775
05	20.000	0.7939	06	40.000	0.7245	07	60.000	0.7453	08	80.000	0.7839

Methyl Parathion

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.1461	03	5.000	0.1789	04	10.000	0.1987	05	20.000	0.2292
06	40.000	0.2159	07	60.000	0.2224	08	80.000	0.2336			

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Analyte

N-Nitrosodi-n-propylamine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.174	02	2.000	1.102	03	5.000	1.156	04	10.000	1.149
05	20.000	1.2	06	40.000	1.102	07	60.000	1.1	08	80.000	1.154

N-Nitrosodiethylamine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.6827	02	2.000	0.6731	03	5.000	0.6917	04	10.000	0.6611
05	20.000	0.6978	06	40.000	0.6565	07	60.000	0.6853	08	80.000	0.7139

N-Nitrosodimethylamine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.9831	02	2.000	0.9186	03	5.000	0.9583	04	10.000	0.9598
05	20.000	0.9896	06	40.000	0.9021	07	60.000	0.9465	08	80.000	0.9914

N-Nitrosodiphenylamine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.000	0.5911	02	4.000	0.5758	03	10.000	0.601	04	20.000	0.5953
05	40.000	0.6358	06	80.000	0.5655	07	120.000	0.5661	08	160.000	0.5839

N-Nitrosomethylethylamine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.5494	02	2.000	0.5062	03	5.000	0.5331	04	10.000	0.5455
05	20.000	0.5179	06	40.000	0.4981	07	60.000	0.525	08	80.000	0.5563

N-Nitrosomorpholine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.986	02	2.000	0.9398	03	5.000	0.9337	04	10.000	0.9308
05	20.000	0.9774	06	40.000	0.8818	07	60.000	0.878	08	80.000	0.9215

N-Nitrosopiperidine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.247	02	2.000	0.2361	03	5.000	0.2427	04	10.000	0.2411
05	20.000	0.2489	06	40.000	0.2264	07	60.000	0.2264	08	80.000	0.2395

N-Nitrosopyrrolidine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.7415	02	2.000	0.6743	03	5.000	0.7402	04	10.000	0.7479
05	20.000	0.7942	06	40.000	0.7324	07	60.000	0.7529	08	80.000	0.7966

Naphthalene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.102	02	2.000	1.025	03	5.000	1.033	04	10.000	0.9943
05	20.000	1.027	06	40.000	0.9481	07	60.000	0.9562	08	80.000	0.9905

Nitrobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.352	02	2.000	0.3488	03	5.000	0.3593	04	10.000	0.3543
05	20.000	0.377	06	40.000	0.3525	07	60.000	0.3628	08	80.000	0.3818

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

Analyte

Nitrobenzene-d5

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.3434	02	2.000	0.3333	03	5.000	0.3457	04	10.000	0.3499
05	20.000	0.3717	06	40.000	0.3483	07	60.000	0.3635	08	80.000	0.3848

O,O,O-Triethyl Phosphorothioate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.686	02	2.000	0.6376	03	5.000	0.6619	04	10.000	0.6717
05	20.000	0.6869	06	40.000	0.6279	07	60.000	0.6455	08	80.000	0.6892

Pentachlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.5155	02	2.000	0.4725	03	5.000	0.4661	04	10.000	0.4313
05	20.000	0.4522	06	40.000	0.4191	07	60.000	0.435	08	80.000	0.4597

Pentachloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.529	02	2.000	0.4984	03	5.000	0.5057	04	10.000	0.481
05	20.000	0.4927	06	40.000	0.4657	07	60.000	0.4784	08	80.000	0.5046

Pentachloronitrobenzene (PCNB)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.06646	03	5.000	0.07319	04	10.000	0.0763	05	20.000	0.08207
06	40.000	0.08293	07	60.000	0.08889	08	80.000	0.09388			

Phenacetin

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2805	02	2.000	0.2695	03	5.000	0.3357	04	10.000	0.3725
05	20.000	0.4175	06	40.000	0.3999	07	60.000	0.4138	08	80.000	0.4365

Phenanthrene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.125	02	2.000	1.06	03	5.000	1.071	04	10.000	1.025
05	20.000	1.055	06	40.000	0.9737	07	60.000	0.9957	08	80.000	1.018

Phenol

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.906	02	2.000	1.796	03	5.000	2.051	04	10.000	1.863
05	20.000	1.986	06	40.000	1.869	07	60.000	1.926	08	80.000	2.02

Phenol-d6

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.598	02	2.000	1.547	03	5.000	1.662	04	10.000	1.631
05	20.000	1.734	06	40.000	1.619	07	60.000	1.67	08	80.000	1.779

Phorate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.1425	02	2.000	0.1363	03	5.000	0.153	04	10.000	0.1573
05	20.000	0.1704	06	40.000	0.1549	07	60.000	0.1584	08	80.000	0.1675

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

Analyte

Pronamide

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.297	03	5.000	0.3109	04	10.000	0.329	05	20.000	0.3682
06	40.000	0.3434	07	60.000	0.3533	08	80.000	0.3752			

Pyrene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.473	02	2.000	1.39	03	5.000	1.394	04	10.000	1.278
05	20.000	1.319	06	40.000	1.219	07	60.000	1.261	08	80.000	1.323

Pyridine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.48	02	2.000	1.389	03	5.000	1.41	04	10.000	1.478
05	20.000	1.53	06	40.000	1.397	07	60.000	1.447	08	80.000	1.52

Safrole

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.241	02	2.000	0.2343	03	5.000	0.2389	04	10.000	0.2363
05	20.000	0.2466	06	40.000	0.2329	07	60.000	0.2351	08	80.000	0.2525

Sulfotep

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.1812	02	2.000	0.184	03	5.000	0.2082	04	10.000	0.204
05	20.000	0.2115	06	40.000	0.2026	07	60.000	0.2101	08	80.000	0.2278

Thionazin

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.133	02	2.000	0.128	03	5.000	0.1287	04	10.000	0.1311
05	20.000	0.138	06	40.000	0.127	07	60.000	0.1335	08	80.000	0.1431

o-Toluidine

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	2.114	02	2.000	2.076	03	5.000	2.194	04	10.000	2.407
05	20.000	2.306	06	40.000	2.266	07	60.000	2.264	08	80.000	2.195

p-Dimethylaminoazobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.3402	02	2.000	0.3543	03	5.000	0.3902	04	10.000	0.3932
05	20.000	0.4222	06	40.000	0.3981	07	60.000	0.4145	08	80.000	0.4416

p-Terphenyl-d14

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.9035	02	2.000	0.8565	03	5.000	0.8876	04	10.000	0.8487
05	20.000	0.8742	06	40.000	0.802	07	60.000	0.8411	08	80.000	0.8901

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

		Calibration Evaluation				Calibration Evaluation	
Analyte Name	Compound Type	Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
1,2,4,5-Tetrachlorobenzene	TRG	Average RF	% RSD	5.5	≤20	0.5031	0.010
1,2,4-Trichlorobenzene	TRG	Average RF	% RSD	3.9	≤20	0.2882	
1,2-Dichlorobenzene	TRG	Average RF	% RSD	3.7	≤20	1.434	
1,2-Diphenylhydrazine	TRG	Average RF	% RSD	3.7	≤20	0.8594	
1,3,5-Trinitrobenzene	TRG	Quadratic	COD	0.9973	≥0.99	0.05276	
1,3-Dichlorobenzene	TRG	Average RF	% RSD	3.6	≤20	1.472	
1,3-Dinitrobenzene	TRG	Quadratic	COD	0.9998	≥0.99	0.1651	
1,4-Dichlorobenzene	TRG	Average RF	% RSD	4.0	≤20	1.526	
1,4-Naphthoquinone	TRG	Average RF	% RSD	12.9	≤20	0.3678	
1-Methylnaphthalene	TRG	Average RF	% RSD	2.9	≤20	0.6267	
1-Naphthylamine	TRG	Average RF	% RSD	8.7	≤20	0.8506	
2,2'-Oxybis(1-chloropropane)	TRG	Average RF	% RSD	6.0	≤20	1.789	0.010
2,3,4,6-Tetrachlorophenol	TRG	Quadratic	COD	0.9993	≥0.99	0.208	0.010
2,4,5-Trichlorophenol	TRG	Average RF	% RSD	15.8	≤20	0.3132	0.200
2,4,6-Tribromophenol	SURR	Average RF	% RSD	17.8	≤20	0.1489	
2,4,6-Trichlorophenol	TRG	Average RF	% RSD	15.5	≤20	0.2971	0.200
2,4-Dichlorophenol	TRG	Average RF	% RSD	9.3	≤20	0.2591	0.200
2,4-Dimethylphenol	TRG	Average RF	% RSD	4.4	≤20	0.3561	0.200
2,4-Dinitrophenol	TRG	Quadratic	COD	0.9998	≥0.99	0.07555	0.010
2,4-Dinitrotoluene	TRG	Quadratic	COD	0.9998	≥0.99	0.3061	0.200
2,6-Dichlorophenol	TRG	Average RF	% RSD	7.5	≤20	0.2523	
2,6-Dinitrotoluene	TRG	Average RF	% RSD	17.4	≤20	0.2503	0.200
2-Acetylaminofluorene	TRG	Quadratic	COD	0.9995	≥0.99	0.4171	
2-Chloronaphthalene	TRG	Average RF	% RSD	3.3	≤20	1.089	0.800
2-Chlorophenol	TRG	Average RF	% RSD	3.5	≤20	1.384	0.800
2-Fluorobiphenyl	SURR	Average RF	% RSD	3.7	≤20	1.263	
2-Fluorophenol	SURR	Average RF	% RSD	4.6	≤20	1.271	
2-Methylnaphthalene	TRG	Average RF	% RSD	3.1	≤20	0.67	0.400
2-Methylphenol	TRG	Average RF	% RSD	3.6	≤20	1.265	0.700
2-Naphthylamine	TRG	Average RF	% RSD	4.6	≤20	0.7415	
2-Nitroaniline	TRG	Average RF	% RSD	14.0	≤20	0.3299	0.010
2-Nitrophenol	TRG	Quadratic	COD	0.9986	≥0.99	0.1512	0.100
2-Picoline	TRG	Average RF	% RSD	3.3	≤20	1.571	
3,3'-Dichlorobenzidine	TRG	Quadratic	COD	0.9995	≥0.99	0.3452	0.010

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

		Calibration Evaluation				Calibration Evaluation	
Analyte Name	Compound Type	Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
3,3'-Dimethylbenzidine	TRG	Average RF	% RSD	11.9	≤20	0.5993	
3- and 4-Methylphenol Coelution	TRG	Average RF	% RSD	4.8	≤20	1.397	0.600
3-Methylcholanthrene	TRG	Average RF	% RSD	9.4	≤20	0.5494	
3-Nitroaniline	TRG	Average RF	% RSD	17.8	≤20	0.2983	0.010
4,6-Dinitro-2-methylphenol	TRG	Quadratic	COD	0.9993	≥0.99	0.08092	0.010
4-Aminobiphenyl	TRG	Average RF	% RSD	14.2	≤20	0.6133	
4-Bromophenyl Phenyl Ether	TRG	Average RF	% RSD	2.8	≤20	0.1969	0.100
4-Chloro-3-methylphenol	TRG	Average RF	% RSD	9.9	≤20	0.2914	0.200
4-Chloroaniline	TRG	Average RF	% RSD	4.1	≤20	0.3972	0.010
4-Chlorophenyl Phenyl Ether	TRG	Average RF	% RSD	2.6	≤20	0.6001	0.400
4-Nitroaniline	TRG	Average RF	% RSD	17.6	≤20	0.3175	0.010
4-Nitrophenol	TRG	Average RF	% RSD	19.1	≤20	0.2542	0.010
4-Nitroquinoline N-Oxide	TRG	Quadratic	COD	0.9993	≥0.99	0.05862	
5-Nitro-o-toluidine	TRG	Average RF	% RSD	18.1	≤20	0.3362	
7,12-Dimethylbenz(a)anthracene	TRG	Average RF	% RSD	5.7	≤20	0.5628	
Acenaphthene	TRG	Average RF	% RSD	3.8	≤20	1.14	0.900
Acenaphthylene	TRG	Average RF	% RSD	2.5	≤20	1.614	0.900
Acetophenone	TRG	Average RF	% RSD	3.4	≤20	2.03	0.010
Aniline	TRG	Average RF	% RSD	3.4	≤20	2.086	
Anthracene	TRG	Average RF	% RSD	2.3	≤20	1.014	0.700
Aramite, Total	TRG	Average RF	% RSD	9.8	≤20	0.07415	
Benzidine	TRG	Quadratic	COD	0.9958	≥0.99	0.4459	
Benzo(g,h,i)perylene	TRG	Average RF	% RSD	7.1	≤20	0.857	0.500
Benzyl Alcohol	TRG	Average RF	% RSD	4.4	≤20	1.035	
Bis(2-chloroethoxy)methane	TRG	Average RF	% RSD	3.9	≤20	0.4138	0.300
Bis(2-chloroethyl) Ether	TRG	Average RF	% RSD	5.4	≤20	1.47	0.700
Bis(2-ethylhexyl) Phthalate	TRG	Average RF	% RSD	4.8	≤20	0.9167	0.010
Butyl Benzyl Phthalate	TRG	Average RF	% RSD	4.5	≤20	0.6606	0.010
Chlorobenzilate	TRG	Average RF	% RSD	9.6	≤20	0.4531	
Di-n-butyl Phthalate	TRG	Average RF	% RSD	5.4	≤20	1.231	0.010
Di-n-octyl Phthalate	TRG	Average RF	% RSD	8.9	≤20	1.42	0.010
Diallate	TRG	Average RF	% RSD	3.6	≤20	0.3024	
Dibenzofuran	TRG	Average RF	% RSD	2.9	≤20	1.548	0.800
Diethyl Phthalate	TRG	Average RF	% RSD	3.2	≤20	1.266	0.010
Dimethoate	TRG	Average RF	% RSD	10.4	≤20	0.2439	

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
Dimethyl Phthalate	TRG	Average RF	% RSD	3.2	≤20	1.252	0.010
Disulfoton	TRG	Average RF	% RSD	18.9	≤20	0.5323	
Ethyl Methanesulfonate	TRG	Average RF	% RSD	3.5	≤20	1.09	
Ethyl Parathion	TRG	Quadratic	COD	0.9994	≥0.99	0.1652	
Fluoranthene	TRG	Average RF	% RSD	4.1	≤20	1.049	0.600
Fluorene	TRG	Average RF	% RSD	2.3	≤20	1.29	0.900
Hexachlorobutadiene	TRG	Average RF	% RSD	4.4	≤20	0.164	0.010
Hexachlorocyclopentadiene	TRG	Quadratic	COD	0.9995	≥0.99	0.1793	0.050
Hexachloroethane	TRG	Average RF	% RSD	2.8	≤20	0.616	0.300
Hexachloropropene	TRG	Average RF	% RSD	10.9	≤20	0.1652	
Isodrin	TRG	Average RF	% RSD	14.8	≤20	0.1374	
Isophorone	TRG	Average RF	% RSD	2.9	≤20	0.6974	0.400
Isosafrole	TRG	Average RF	% RSD	3.8	≤20	0.2243	
Methapyrilene	TRG	Average RF	% RSD	7.1	≤20	0.5235	
Methyl Methanesulfonate	TRG	Average RF	% RSD	3.8	≤20	0.775	
Methyl Parathion	TRG	Average RF	% RSD	15.5	≤20	0.2035	
N-Nitrosodi-n-propylamine	TRG	Average RF	% RSD	3.3	≤20	1.142	0.500
N-Nitrosodiethylamine	TRG	Average RF	% RSD	2.8	≤20	0.6828	
N-Nitrosodimethylamine	TRG	Average RF	% RSD	3.4	≤20	0.9562	
N-Nitrosodiphenylamine	TRG	Average RF	% RSD	3.9	≤20	0.5893	0.010
N-Nitrosomethylethylamine	TRG	Average RF	% RSD	4.0	≤20	0.5289	
N-Nitrosomorpholine	TRG	Average RF	% RSD	4.2	≤20	0.9311	
N-Nitrosopiperidine	TRG	Average RF	% RSD	3.6	≤20	0.2385	
N-Nitrosopyrrolidine	TRG	Average RF	% RSD	5.1	≤20	0.7475	
Naphthalene	TRG	Average RF	% RSD	4.9	≤20	1.01	0.700
Nitrobenzene	TRG	Average RF	% RSD	3.4	≤20	0.3611	0.200
Nitrobenzene-d5	SURR	Average RF	% RSD	4.8	≤20	0.3551	
O,O,O-Triethyl Phosphorothioate	TRG	Average RF	% RSD	3.6	≤20	0.6633	
Pentachlorobenzene	TRG	Average RF	% RSD	6.6	≤20	0.4564	
Pentachloroethane	TRG	Average RF	% RSD	4.0	≤20	0.4944	
Pentachloronitrobenzene (PCNB)	TRG	Average RF	% RSD	11.6	≤20	0.08053	
Phenacetin	TRG	Average RF	% RSD	17.5	≤20	0.3657	
Phenanthrene	TRG	Average RF	% RSD	4.6	≤20	1.04	0.700
Phenol	TRG	Average RF	% RSD	4.5	≤20	1.927	0.800
Phenol-d6	SURR	Average RF	% RSD	4.5	≤20	1.655	

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

		Calibration Evaluation				Calibration Evaluation	
Analyte Name	Compound Type	Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
Phorate	TRG	Average RF	% RSD	7.4	≤20	0.155	
Pronamide	TRG	Average RF	% RSD	8.5	≤20	0.3396	
Pyrene	TRG	Average RF	% RSD	6.2	≤20	1.332	0.600
Pyridine	TRG	Average RF	% RSD	3.8	≤20	1.456	
Safrole	TRG	Average RF	% RSD	2.8	≤20	0.2397	
Sulfotep	TRG	Average RF	% RSD	7.4	≤20	0.2037	
Thionazin	TRG	Average RF	% RSD	4.1	≤20	0.1328	
o-Toluidine	TRG	Average RF	% RSD	4.8	≤20	2.228	
p-Dimethylaminoazobenzene	TRG	Average RF	% RSD	8.6	≤20	0.3943	
p-Terphenyl-d14	SURR	Average RF	% RSD	3.8	≤20	0.863	

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Verification Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

#	Lab Code	Sample Name	File Location	Acquisition Date
16	RC2400152-16	ICV KF	I:\ACQUDATA\5977-MS64\Data\061824\D7366.D	06/18/2024 23:52
09	RC2400152-09	ICV	I:\ACQUDATA\5977-MS64\Data\080524\D7937.D	08/05/2024 13:19

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
1,2,4,5-Tetrachlorobenzene	40.0	43.6	5.031E-1	5.478E-1	8.89	±30	Average RF
1,2,4-Trichlorobenzene	40.0	41.7	2.882E-1	3.007E-1	4.34	±30	Average RF
1,2-Dichlorobenzene	40.0	42.5	1.434E0	1.526E0	6.36	±30	Average RF
1,2-Diphenylhydrazine	40.0	42.2	8.594E-1	9.067E-1	5.50	±30	Average RF
1,3,5-Trinitrobenzene	40.0	47.1	5.276E-2	7.83E-2	17.78	±30	Quadratic
1,3-Dichlorobenzene	40.0	42.9	1.472E0	1.58E0	7.32	±30	Average RF
1,3-Dinitrobenzene	40.0	44.6	1.651E-1	2.098E-1	11.42	±30	Quadratic
1,4-Dichlorobenzene	40.0	42.1	1.526E0	1.606E0	5.23	±30	Average RF
1,4-Naphthoquinone	40.0	46.4	3.678E-1	4.266E-1	15.99	±30	Average RF
1-Methylnaphthalene	40.0	41.7	6.267E-1	6.532E-1	4.23	±30	Average RF
1-Naphthylamine	40.0	61.1	8.506E-1	1.298E0	52.66*	±30	Average RF
2,3,4,6-Tetrachlorophenol	40.0	46.9	2.08E-1	2.761E-1	17.22	±30	Quadratic
2,4,5-Trichlorophenol	40.0	49.6	3.132E-1	3.887E-1	24.08	±30	Average RF
2,4,6-Trichlorophenol	40.0	47.9	2.971E-1	3.557E-1	19.70	±30	Average RF
2,4-Dichlorophenol	40.0	44.0	2.591E-1	2.852E-1	10.07	±30	Average RF
2,4-Dimethylphenol	40.0	34.5	3.561E-1	3.072E-1	-13.710	±30	Average RF
2,4-Dinitrophenol	40.0	47.9	7.555E-2	1.107E-1	19.78	±30	Quadratic
2,4-Dinitrotoluene	40.0	45.8	3.061E-1	4.143E-1	14.53	±30	Quadratic
2,6-Dichlorophenol	40.0	43.8	2.523E-1	2.764E-1	9.55	±30	Average RF
2,6-Dinitrotoluene	40.0	50.5	2.503E-1	3.158E-1	26.20	±30	Average RF
2-Acetylaminofluorene	40.0	49.4	4.171E-1	6.104E-1	23.50	±30	Quadratic
2-Chloronaphthalene	40.0	48.2	1.089E0	1.311E0	20.41	±30	Average RF
2-Chlorophenol	40.0	43.0	1.384E0	1.487E0	7.49	±30	Average RF
5-Nitro-o-toluidine	40.0	54.2	3.362E-1	4.554E-1	35.47*	±30	Average RF
2-Methylnaphthalene	40.0	42.7	6.7E-1	7.154E-1	6.79	±30	Average RF
2-Methylphenol	40.0	42.7	1.265E0	1.35E0	6.78	±30	Average RF
2-Naphthylamine	40.0	56.5	7.415E-1	1.047E0	41.13*	±30	Average RF
2-Nitroaniline	40.0	56.8	3.299E-1	4.687E-1	42.06*	±30	Average RF
2-Nitrophenol	40.0	44.0	1.512E-1	1.862E-1	10.06	±30	Quadratic
2-Picoline	40.0	46.2	1.571E0	1.813E0	15.39	±30	Average RF
3,3'-Dichlorobenzidine	40.0	49.9	3.452E-1	5.181E-1	24.84	±30	Quadratic
3,3'-Dimethylbenzidine	40.0	47.1	5.993E-1	7.061E-1	17.82	±30	Average RF

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Verification Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
3- and 4-Methylphenol Coelution	40.0	45.8	1.397E0	1.599E0	14.47	±30	Average RF
3-Methylcholanthrene	40.0	43.4	5.494E-1	5.963E-1	8.52	±30	Average RF
3-Nitroaniline	40.0	45.5	2.983E-1	3.395E-1	13.83	±30	Average RF
4,6-Dinitro-2-methylphenol	40.0	46.4	8.092E-2	1.091E-1	16.10	±30	Quadratic
4-Aminobiphenyl	40.0	54.1	6.133E-1	8.292E-1	35.20*	±30	Average RF
4-Bromophenyl Phenyl Ether	40.0	42.8	1.969E-1	2.104E-1	6.89	±30	Average RF
4-Chloro-3-methylphenol	40.0	43.3	2.914E-1	3.156E-1	8.28	±30	Average RF
4-Chloroaniline	40.0	42.5	3.972E-1	4.223E-1	6.33	±30	Average RF
4-Chlorophenyl Phenyl Ether	40.0	42.4	6.001E-1	6.358E-1	5.94	±30	Average RF
4-Nitroaniline	40.0	44.1	3.175E-1	3.497E-1	10.13	±30	Average RF
4-Nitrophenol	40.0	46.2	2.542E-1	2.938E-1	15.56	±30	Average RF
4-Nitroquinoline N-Oxide	40.0	41.6	5.862E-2	7.074E-2	3.88	±30	Quadratic
7,12-Dimethylbenz(a)anthracene	40.0	42.7	5.628E-1	6.013E-1	6.84	±30	Average RF
Acenaphthene	40.0	42.4	1.14E0	1.208E0	5.98	±30	Average RF
Acenaphthylene	40.0	47.1	1.614E0	1.9E0	17.72	±30	Average RF
Acetophenone	40.0	40.4	2.03E0	2.048E0	0.934	±30	Average RF
Aniline	40.0	38.1	2.086E0	1.985E0	-4.805	±30	Average RF
Anthracene	40.0	43.1	1.014E0	1.093E0	7.78	±30	Average RF
Aramite, Total	80.0	87.3	7.415E-2	8.088E-2	9.08	±30	Average RF
Benzidine	40.0	39.0	4.459E-1	5.213E-1	-2.384	±30	Quadratic
Benzo(g,h,i)perylene	40.0	41.0	8.57E-1	8.782E-1	2.47	±30	Average RF
Benzyl Alcohol	40.0	45.0	1.035E0	1.164E0	12.50	±30	Average RF
2,2'-Oxybis(1-chloropropane)	40.0	42.6	1.789E0	1.905E0	6.48	±30	Average RF
Bis(2-chloroethoxy)methane	40.0	43.3	4.138E-1	4.482E-1	8.30	±30	Average RF
Bis(2-chloroethyl) Ether	40.0	42.0	1.47E0	1.545E0	5.04	±30	Average RF
Bis(2-ethylhexyl) Phthalate	40.0	42.0	9.167E-1	9.622E-1	4.96	±30	Average RF
Butyl Benzyl Phthalate	40.0	43.5	6.606E-1	7.178E-1	8.67	±30	Average RF
Chlorobenzilate	40.0	43.4	4.531E-1	4.917E-1	8.52	±30	Average RF
Di-n-butyl Phthalate	40.0	44.4	1.231E0	1.366E0	10.97	±30	Average RF
Di-n-octyl Phthalate	40.0	45.0	1.42E0	1.599E0	12.60	±30	Average RF
Diallate	40.0	36.0	3.024E-1	2.721E-1	-9.994	±30	Average RF
Dibenzofuran	40.0	43.1	1.548E0	1.666E0	7.66	±30	Average RF
Diethyl Phthalate	40.0	42.3	1.266E0	1.337E0	5.65	±30	Average RF
Dimethoate	40.0	50.4	2.439E-1	3.075E-1	26.10	±30	Average RF
Dimethyl Phthalate	40.0	42.7	1.252E0	1.336E0	6.69	±30	Average RF
Disulfoton	40.0	41.3	5.323E-1	5.492E-1	3.19	±30	Average RF

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Verification Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Ethyl Methanesulfonate	40.0	41.8	1.09E0	1.14E0	4.61	±30	Average RF
Fluoranthene	40.0	43.1	1.049E0	1.131E0	7.81	±30	Average RF
Fluorene	40.0	42.4	1.29E0	1.367E0	6.02	±30	Average RF
Hexachlorobutadiene	40.0	39.4	1.64E-1	1.616E-1	-1.461	±30	Average RF
Hexachlorocyclopentadiene	40.0	39.7	1.793E-1	2.181E-1	-0.848	±30	Quadratic
Hexachloroethane	40.0	41.8	6.16E-1	6.441E-1	4.56	±30	Average RF
Hexachloropropene	40.0	45.0	1.652E-1	1.86E-1	12.61	±30	Average RF
Isodrin	40.0	41.1	1.374E-1	1.413E-1	2.81	±30	Average RF
Isophorone	40.0	42.5	6.974E-1	7.407E-1	6.22	±30	Average RF
Isosafrole	40.0	43.3	2.243E-1	2.429E-1	8.28	±30	Average RF
Methapyrilene	40.0	52.7	5.235E-1	6.897E-1	31.76*	±30	Average RF
Methyl Methanesulfonate	40.0	44.1	7.75E-1	8.548E-1	10.31	±30	Average RF
Methyl Parathion	40.0	55.7	2.035E-1	2.832E-1	39.16*	±30	Average RF
N-Nitrosodi-n-propylamine	40.0	41.2	1.142E0	1.177E0	3.05	±30	Average RF
N-Nitrosodiethylamine	40.0	49.6	6.828E-1	8.468E-1	24.03	±30	Average RF
N-Nitrosodimethylamine	40.0	41.1	9.562E-1	9.816E-1	2.66	±30	Average RF
N-Nitrosodiphenylamine	40.0	45.5	5.893E-1	6.71E-1	13.87	±30	Average RF
N-Nitrosomethylethylamine	40.0	47.5	5.289E-1	6.283E-1	18.78	±30	Average RF
N-Nitrosomorpholine	40.0	44.5	9.311E-1	1.035E0	11.13	±30	Average RF
N-Nitrosopiperidine	40.0	45.7	2.385E-1	2.723E-1	14.15	±30	Average RF
N-Nitrosopyrrolidine	40.0	48.9	7.475E-1	9.146E-1	22.35	±30	Average RF
Naphthalene	40.0	41.6	1.01E0	1.05E0	4.00	±30	Average RF
Nitrobenzene	40.0	43.7	3.611E-1	3.946E-1	9.27	±30	Average RF
O,O,O-Triethyl Phosphorothioate	40.0	45.6	6.633E-1	7.559E-1	13.96	±30	Average RF
Ethyl Parathion	40.0	47.9	1.652E-1	2.281E-1	19.79	±30	Quadratic
Pentachlorobenzene	40.0	40.6	4.564E-1	4.637E-1	1.60	±30	Average RF
Pentachloroethane	40.0	43.5	4.944E-1	5.373E-1	8.67	±30	Average RF
Pentachloronitrobenzene (PCNB)	40.0	46.0	8.053E-2	9.256E-2	14.93	±30	Average RF
Phenacetin	40.0	45.8	3.657E-1	4.19E-1	14.57	±30	Average RF
Phenanthrene	40.0	41.0	1.04E0	1.065E0	2.39	±30	Average RF
Phenol	40.0	41.3	1.927E0	1.989E0	3.20	±30	Average RF
Phorate	40.0	49.2	1.55E-1	1.906E-1	22.96	±30	Average RF
Pronamide	40.0	41.3	3.396E-1	3.505E-1	3.21	±30	Average RF
Pyrene	40.0	41.2	1.332E0	1.373E0	3.10	±30	Average RF
Pyridine	40.0	36.2	1.456E0	1.319E0	-9.438	±30	Average RF
Safrole	40.0	45.0	2.397E-1	2.697E-1	12.51	±30	Average RF

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 6/18/2024

Initial Calibration Verification Summary
Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400152 **Signal ID:** 1
Instrument ID: R-MS-64

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Sulfotep	40.0	49.8	2.037E-1	2.535E-1	24.47	±30	Average RF
Thionazin	40.0	46.9	1.328E-1	1.558E-1	17.36	±30	Average RF
o-Toluidine	40.0	45.8	2.228E0	2.549E0	14.43	±30	Average RF
p-Dimethylaminoazobenzene	40.0	48.8	3.943E-1	4.813E-1	22.06	±30	Average RF

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/21/24 10:43

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method:	8270E	**Calibration Date:**	6/18/2024
File ID:	I:\ACQUDATA\5977-MS64\Data\082124\D8252.D\	**Calibration ID:**	RC2400152
Signal ID:	1	**Analysis Lot:**	851525
		Units:	ppm

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,2,4,5-Tetrachlorobenzene	40.0	38.6	0.5031	0.4852	-3.5	NA	±20	Average RF
1,2,4-Trichlorobenzene	40.0	39.2	0.2882	0.2824	-2.0	NA	±20	Average RF
1,2-Dichlorobenzene	40.0	39.2	1.4345	1.4052	-2.0	NA	±20	Average RF
1,2-Diphenylhydrazine	40.0	36.6	0.8594	0.7867	-8.5	NA	±20	Average RF
1,3,5-Trinitrobenzene	40.0	49.0	0.0528	0.083	NA	22.4*	±20	Quadratic
1,3-Dichlorobenzene	40.0	39.5	1.4725	1.4535	-1.3	NA	±20	Average RF
1,3-Dinitrobenzene	40.0	46.8	0.1651	0.2226	NA	16.9	±20	Quadratic
1,4-Dichlorobenzene	40.0	39.3	1.5259	1.5008	-1.6	NA	±20	Average RF
1,4-Naphthoquinone	40.0	40.6	0.3678	0.3731	1.4	NA	±20	Average RF
1-Methylnaphthalene	40.0	39.2	0.6267	0.6145	-1.9	NA	±20	Average RF
1-Naphthylamine	40.0	43.1	0.8506	0.9161	7.7	NA	±20	Average RF
2,3,4,6-Tetrachlorophenol	40.0	45.6	0.208	0.2672	NA	14.1	±20	Quadratic
2,4,5-Trichlorophenol	40.0	46.9	0.3132	0.3671	17.2	NA	±20	Average RF
2,4,6-Trichlorophenol	40.0	47.1	0.2971	0.3498	17.7	NA	±20	Average RF
2,4-Dichlorophenol	40.0	44.6	0.2591	0.2886	11.4	NA	±20	Average RF
2,4-Dimethylphenol	40.0	40.9	0.3561	0.3645	2.4	NA	±20	Average RF
2,4-Dinitrophenol	40.0	58.7	0.0756	0.1561	NA	46.8*	±20	Quadratic
2,4-Dinitrotoluene	40.0	43.0	0.3061	0.3852	NA	7.6	±20	Quadratic
2,6-Dichlorophenol	40.0	43.6	0.2523	0.2747	8.9	NA	±20	Average RF
2,6-Dinitrotoluene	40.0	46.7	0.2503	0.2924	16.8	NA	±20	Average RF
2-Acetylaminofluorene	40.0	43.2	0.4171	0.5195	NA	8.0	±20	Quadratic
2-Chloronaphthalene	40.0	38.6	1.089	1.0502	-3.6	NA	±20	Average RF
2-Chlorophenol	40.0	42.1	1.3836	1.4557	5.2	NA	±20	Average RF
5-Nitro-o-toluidine	40.0	47.5	0.3362	0.399	18.7	NA	±20	Average RF
2-Methylnaphthalene	40.0	39.2	0.67	0.6565	-2.0	NA	±20	Average RF
2-Methylphenol	40.0	41.3	1.2647	1.3073	3.4	NA	±20	Average RF
2-Naphthylamine	40.0	49.5	0.7415	0.9176	23.7*	NA	±20	Average RF
2-Nitroaniline	40.0	45.4	0.3299	0.3744	13.5	NA	±20	Average RF
2-Nitrophenol	40.0	45.8	0.1512	0.1955	NA	14.6	±20	Quadratic
2-Picoline	40.0	40.5	1.571	1.5903	1.2	NA	±20	Average RF
3,3'-Dichlorobenzidine	40.0	42.1	0.3452	0.4259	NA	5.2	±20	Quadratic
3,3'-Dimethylbenzidine	40.0	43.6	0.5993	0.3933	-34.4*	NA	±20	Average RF
3- and 4-Methylphenol Coelution	40.0	41.9	1.3968	1.4647	4.9	NA	±20	Average RF
3-Methylcholanthrene	40.0	40.6	0.5494	0.5582	1.6	NA	±20	Average RF
3-Nitroaniline	40.0	48.8	0.2983	0.3642	22.1*	NA	±20	Average RF
4,6-Dinitro-2-methylphenol	40.0	53.6	0.0809	0.1343	NA	34.0*	±20	Quadratic
4-Aminobiphenyl	40.0	47.2	0.6133	0.7232	17.9	NA	±20	Average RF
4-Bromophenyl Phenyl Ether	40.0	39.8	0.1969	0.1959	-0.5	NA	±20	Average RF
4-Chloro-3-methylphenol	40.0	43.3	0.2914	0.3153	8.2	NA	±20	Average RF

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Service Request: R2407792
Date Analyzed: 08/21/24 10:43

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
File ID: I:\ACQUDATA\5977-MS64\Data\082124\D8252.D\
Signal ID: 1
Calibration Date: 6/18/2024
Calibration ID: RC2400152
Analysis Lot: 851525
Units: ppm

4-Chloroaniline	40.0	39.1	0.3972	0.3882	-2.3	NA	±20	Average RF
4-Chlorophenyl Phenyl Ether	40.0	38.7	0.6001	0.5803	-3.3	NA	±20	Average RF
4-Nitroaniline	40.0	48.7	0.3175	0.3862	21.6*	NA	±20	Average RF
4-Nitrophenol	40.0	47.9	0.2542	0.3043	19.7	NA	±20	Average RF
4-Nitroquinoline N-Oxide	40.0	44.9	0.0586	0.0782	NA	12.3	±20	Quadratic
7,12-Dimethylbenz(a)anthracene	40.0	39.1	0.5628	0.5505	-2.2	NA	±20	Average RF
Acenaphthene	40.0	38.3	1.14	1.0914	-4.3	NA	±20	Average RF
Acenaphthylene	40.0	38.7	1.6138	1.5614	-3.2	NA	±20	Average RF
Acetophenone	40.0	39.2	2.0295	1.9903	-1.9	NA	±20	Average RF
Aniline	40.0	41.5	2.0856	2.1639	3.8	NA	±20	Average RF
Anthracene	40.0	38.8	1.0137	0.9825	-3.1	NA	±20	Average RF
Aramite, Total	40.0	38.0	0.0741	0.0705	-4.9	NA	±20	Average RF
Benzidine	40.0	47.1	0.4459	0.6177	NA	17.7	±20	Quadratic
Benzo(g,h,i)perylene	40.0	40.7	0.857	0.8723	1.8	NA	±20	Average RF
Benzyl Alcohol	40.0	42.6	1.0351	1.1016	6.4	NA	±20	Average RF
2,2'-Oxybis(1-chloropropane)	40.0	34.9	1.7894	1.5628	-12.7	NA	±20	Average RF
Bis(2-chloroethoxy)methane	40.0	37.3	0.4138	0.386	-6.7	NA	±20	Average RF
Bis(2-chloroethyl) Ether	40.0	37.7	1.4704	1.3862	-5.7	NA	±20	Average RF
Bis(2-ethylhexyl) Phthalate	40.0	31.6	0.9167	0.7236	-21.1*	NA	±20	Average RF
Butyl Benzyl Phthalate	40.0	33.8	0.6606	0.5574	-15.6	NA	±20	Average RF
Chlorobenzilate	40.0	37.7	0.4531	0.4274	-5.7	NA	±20	Average RF
Di-n-butyl Phthalate	40.0	37.1	1.2311	1.1428	-7.2	NA	±20	Average RF
Di-n-octyl Phthalate	40.0	30.9	1.4199	1.0984	-22.6*	NA	±20	Average RF
Diallate	40.0	34.9	0.3024	0.2635	-12.9	NA	±20	Average RF
Dibenzofuran	40.0	38.7	1.5479	1.4975	-3.3	NA	±20	Average RF
Diethyl Phthalate	40.0	36.1	1.2655	1.1421	-9.7	NA	±20	Average RF
Dimethoate	40.0	43.3	0.2439	0.2637	8.1	NA	±20	Average RF
Dimethyl Phthalate	40.0	38.3	1.252	1.2003	-4.1	NA	±20	Average RF
Disulfoton	40.0	29.1	0.5323	0.3871	-27.3*	NA	±20	Average RF
Ethyl Methanesulfonate	40.0	38.7	1.0897	1.055	-3.2	NA	±20	Average RF
Fluoranthene	40.0	41.6	1.0488	1.0903	4.0	NA	±20	Average RF
Fluorene	40.0	39.1	1.2897	1.2595	-2.3	NA	±20	Average RF
Hexachlorobutadiene	40.0	38.4	0.164	0.1576	-3.9	NA	±20	Average RF
Hexachlorocyclopentadiene	40.0	39.8	0.1793	0.2191	NA	-0.4	±20	Quadratic
Hexachloroethane	40.0	39.0	0.616	0.6004	-2.5	NA	±20	Average RF
Hexachloropropene	40.0	45.6	0.1652	0.1882	13.9	NA	±20	Average RF
Isodrin	40.0	32.2	0.1374	0.1108	-19.4	NA	±20	Average RF
Isophorone	40.0	38.3	0.6974	0.6678	-4.2	NA	±20	Average RF
Isosafrole	40.0	37.5	0.2243	0.2103	-6.2	NA	±20	Average RF
Methapyrilene	40.0	31.9	0.5235	0.4175	-20.3	NA	±20	Average RF
Methyl Methanesulfonate	40.0	39.1	0.775	0.7569	-2.3	NA	±20	Average RF
Methyl Parathion	40.0	46.3	0.2035	0.2358	15.8	NA	±20	Average RF
N-Nitrosodi-n-propylamine	40.0	38.0	1.1421	1.0855	-5.0	NA	±20	Average RF

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Service Request: R2407792
Date Analyzed: 08/21/24 10:43

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
File ID: I:\ACQUDATA\5977-MS64\Data\082124\D8252.D\
Signal ID: 1
Calibration Date: 6/18/2024
Calibration ID: RC2400152
Analysis Lot: 851525
Units: ppm

N-Nitrosodiethylamine	40.0	35.5	0.6828	0.6062	-11.2	NA	±20	Average RF
N-Nitrosodimethylamine	40.0	39.5	0.9562	0.9451	-1.2	NA	±20	Average RF
N-Nitrosodiphenylamine	80.0	78.5	0.5893	0.5784	-1.8	NA	±20	Average RF
N-Nitrosomethylethylamine	40.0	39.1	0.5289	0.517	-2.3	NA	±20	Average RF
N-Nitrosomorpholine	40.0	38.4	0.9311	0.8938	-4.0	NA	±20	Average RF
N-Nitrosopiperidine	40.0	38.1	0.2385	0.2269	-4.9	NA	±20	Average RF
N-Nitrosopyrrolidine	40.0	41.5	0.7475	0.7748	3.7	NA	±20	Average RF
Naphthalene	40.0	38.7	1.0096	0.9758	-3.3	NA	±20	Average RF
Nitrobenzene	40.0	40.6	0.3611	0.3662	1.4	NA	±20	Average RF
O,O,O-Triethyl Phosphorothioate	40.0	38.6	0.6633	0.6394	-3.6	NA	±20	Average RF
Ethyl Parathion	40.0	38.7	0.1652	0.1776	NA	-3.3	±20	Quadratic
Pentachlorobenzene	40.0	38.4	0.4564	0.4387	-3.9	NA	±20	Average RF
Pentachloroethane	40.0	38.6	0.4944	0.4769	-3.5	NA	±20	Average RF
Pentachloronitrobenzene (PCNB)	40.0	42.9	0.0805	0.0864	7.3	NA	±20	Average RF
Phenacetin	40.0	44.2	0.3657	0.4046	10.6	NA	±20	Average RF
Phenanthrene	40.0	38.0	1.0404	0.9888	-5.0	NA	±20	Average RF
Phenol	40.0	41.5	1.927	1.9992	3.7	NA	±20	Average RF
Phorate	40.0	39.2	0.155	0.1518	-2.1	NA	±20	Average RF
Pronamide	40.0	39.5	0.3396	0.3353	-1.3	NA	±20	Average RF
Pyrene	40.0	37.3	1.3321	1.2418	-6.8	NA	±20	Average RF
Pyridine	40.0	40.9	1.4562	1.4884	2.2	NA	±20	Average RF
Safrole	40.0	38.7	0.2397	0.2316	-3.4	NA	±20	Average RF
Sulfotep	40.0	39.7	0.2037	0.2022	-0.7	NA	±20	Average RF
Thionazin	40.0	37.1	0.1328	0.1231	-7.3	NA	±20	Average RF
o-Toluidine	40.0	39.0	2.2277	2.1731	-2.5	NA	±20	Average RF
p-Dimethylaminoazobenzene	40.0	37.8	0.3943	0.3726	-5.5	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
2,4,6-Tribromophenol	40.0	51.9	0.1489	0.1932	29.7*	NA	±20	Average RF
2-Fluorobiphenyl	40.0	38.1	1.2632	1.202	-4.9	NA	±20	Average RF
2-Fluorophenol	40.0	42.0	1.2711	1.3341	5.0	NA	±20	Average RF
Nitrobenzene-d5	40.0	41.3	0.3551	0.3667	3.3	NA	±20	Average RF
Phenol-d6	40.0	42.6	1.6548	1.7626	6.5	NA	±20	Average RF
p-Terphenyl-d14	40.0	37.2	0.863	0.8029	-7.0	NA	±20	Average RF

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/21/24 22:29

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method:	8270E	**Calibration Date:**	6/18/2024
File ID:	I:\ACQUDATA\5977-MS64\Data\082124\D8280.D\	**Calibration ID:**	RC2400152
Signal ID:	1	**Analysis Lot:**	851525
		Units:	ppm

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,2,4,5-Tetrachlorobenzene	40.0	41.0	0.5031	0.5157	2.5	NA	±20	Average RF
1,2,4-Trichlorobenzene	40.0	41.2	0.2882	0.2968	3.0	NA	±20	Average RF
1,2-Dichlorobenzene	40.0	41.5	1.4345	1.4866	3.6	NA	±20	Average RF
1,2-Diphenylhydrazine	40.0	36.5	0.8594	0.7835	-8.8	NA	±20	Average RF
1,3,5-Trinitrobenzene	40.0	47.0	0.0528	0.0779	NA	17.4	±20	Quadratic
1,3-Dichlorobenzene	40.0	41.4	1.4725	1.5232	3.4	NA	±20	Average RF
1,3-Dinitrobenzene	40.0	46.1	0.1651	0.2189	NA	15.4	±20	Quadratic
1,4-Dichlorobenzene	40.0	41.1	1.5259	1.5686	2.8	NA	±20	Average RF
1,4-Naphthoquinone	40.0	39.6	0.3678	0.3639	-1.1	NA	±20	Average RF
1-Methylnaphthalene	40.0	40.7	0.6267	0.6377	1.8	NA	±20	Average RF
1-Naphthylamine	40.0	43.8	0.8506	0.9305	9.4	NA	±20	Average RF
2,3,4,6-Tetrachlorophenol	40.0	46.6	0.208	0.2737	NA	16.4	±20	Quadratic
2,4,5-Trichlorophenol	40.0	47.4	0.3132	0.3712	18.5	NA	±20	Average RF
2,4,6-Trichlorophenol	40.0	47.9	0.2971	0.3555	19.7	NA	±20	Average RF
2,4-Dichlorophenol	40.0	44.9	0.2591	0.2906	12.2	NA	±20	Average RF
2,4-Dimethylphenol	40.0	41.0	0.3561	0.3651	2.5	NA	±20	Average RF
2,4-Dinitrophenol	40.0	54.6	0.0756	0.1377	NA	36.4*	±20	Quadratic
2,4-Dinitrotoluene	40.0	43.1	0.3061	0.3855	NA	7.7	±20	Quadratic
2,6-Dichlorophenol	40.0	44.9	0.2523	0.2832	12.2	NA	±20	Average RF
2,6-Dinitrotoluene	40.0	47.6	0.2503	0.2979	19.0	NA	±20	Average RF
2-Acetylaminofluorene	40.0	38.3	0.4171	0.4501	NA	-4.3	±20	Quadratic
2-Chloronaphthalene	40.0	41.1	1.089	1.1181	2.7	NA	±20	Average RF
2-Chlorophenol	40.0	43.6	1.3836	1.5087	9.0	NA	±20	Average RF
5-Nitro-o-toluidine	40.0	47.7	0.3362	0.4013	19.4	NA	±20	Average RF
2-Methylnaphthalene	40.0	40.3	0.67	0.6752	0.8	NA	±20	Average RF
2-Methylphenol	40.0	42.6	1.2647	1.3468	6.5	NA	±20	Average RF
2-Naphthylamine	40.0	50.2	0.7415	0.9308	25.5*	NA	±20	Average RF
2-Nitroaniline	40.0	44.3	0.3299	0.3651	10.6	NA	±20	Average RF
2-Nitrophenol	40.0	45.7	0.1512	0.1946	NA	14.2	±20	Quadratic
2-Picoline	40.0	41.2	1.571	1.6175	3.0	NA	±20	Average RF
3,3'-Dichlorobenzidine	40.0	41.0	0.3452	0.4133	NA	2.4	±20	Quadratic
3,3'-Dimethylbenzidine	40.0	48.3	0.5993	0.6902	15.2	NA	±20	Average RF
3- and 4-Methylphenol Coelution	40.0	43.3	1.3968	1.5123	8.3	NA	±20	Average RF
3-Methylcholanthrene	40.0	39.7	0.5494	0.5452	-0.8	NA	±20	Average RF
3-Nitroaniline	40.0	49.5	0.2983	0.3688	23.6*	NA	±20	Average RF
4,6-Dinitro-2-methylphenol	40.0	50.3	0.0809	0.1224	NA	25.7*	±20	Quadratic
4-Aminobiphenyl	40.0	44.8	0.6133	0.6873	12.1	NA	±20	Average RF
4-Bromophenyl Phenyl Ether	40.0	40.6	0.1969	0.1998	1.5	NA	±20	Average RF
4-Chloro-3-methylphenol	40.0	44.7	0.2914	0.3254	11.6	NA	±20	Average RF

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/21/24 22:29

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method:	8270E	**Calibration Date:**	6/18/2024
File ID:	I:\ACQUDATA\5977-MS64\Data\082124\D8280.D\	**Calibration ID:**	RC2400152
Signal ID:	1	**Analysis Lot:**	851525
		Units:	ppm

4-Chloroaniline	40.0	41.1	0.3972	0.408	2.7	NA	±20	Average RF
4-Chlorophenyl Phenyl Ether	40.0	39.7	0.6001	0.5953	-0.8	NA	±20	Average RF
4-Nitroaniline	40.0	49.8	0.3175	0.3954	24.5*	NA	±20	Average RF
4-Nitrophenol	40.0	42.1	0.2542	0.2678	5.3	NA	±20	Average RF
4-Nitroquinoline N-Oxide	40.0	37.3	0.0586	0.0616	NA	-6.8	±20	Quadratic
7,12-Dimethylbenz(a)anthracene	40.0	38.4	0.5628	0.54	-4.0	NA	±20	Average RF
Acenaphthene	40.0	40.5	1.14	1.1553	1.3	NA	±20	Average RF
Acenaphthylene	40.0	41.0	1.6138	1.6525	2.4	NA	±20	Average RF
Acetophenone	40.0	39.2	2.0295	1.9902	-1.9	NA	±20	Average RF
Aniline	40.0	42.6	2.0856	2.2218	6.5	NA	±20	Average RF
Anthracene	40.0	40.2	1.0137	1.019	0.5	NA	±20	Average RF
Aramite, Total	40.0	32.2	0.0741	0.0596	-19.6	NA	±20	Average RF
Benzidine	40.0	41.8	0.4459	0.5552	NA	4.5	±20	Quadratic
Benzo(g,h,i)perylene	40.0	42.9	0.857	0.9199	7.3	NA	±20	Average RF
Benzyl Alcohol	40.0	41.8	1.0351	1.0828	4.6	NA	±20	Average RF
2,2'-Oxybis(1-chloropropane)	40.0	34.3	1.7894	1.5344	-14.3	NA	±20	Average RF
Bis(2-chloroethoxy)methane	40.0	36.9	0.4138	0.3817	-7.8	NA	±20	Average RF
Bis(2-chloroethyl) Ether	40.0	38.1	1.4704	1.4022	-4.6	NA	±20	Average RF
Bis(2-ethylhexyl) Phthalate	40.0	27.9	0.9167	0.6396	-30.2*	NA	±20	Average RF
Butyl Benzyl Phthalate	40.0	31.4	0.6606	0.5183	-21.5*	NA	±20	Average RF
Chlorobenzilate	40.0	35.1	0.4531	0.3976	-12.2	NA	±20	Average RF
Di-n-butyl Phthalate	40.0	34.3	1.2311	1.055	-14.3	NA	±20	Average RF
Di-n-octyl Phthalate	40.0	26.9	1.4199	0.9552	-32.7*	NA	±20	Average RF
Diallate	40.0	33.2	0.3024	0.2512	-16.9	NA	±20	Average RF
Dibenzofuran	40.0	41.0	1.5479	1.5879	2.6	NA	±20	Average RF
Diethyl Phthalate	40.0	35.3	1.2655	1.1175	-11.7	NA	±20	Average RF
Dimethoate	40.0	39.7	0.2439	0.2417	-0.9	NA	±20	Average RF
Dimethyl Phthalate	40.0	38.5	1.252	1.206	-3.7	NA	±20	Average RF
Disulfoton	40.0	26.7	0.5323	0.3549	-33.3*	NA	±20	Average RF
Ethyl Methanesulfonate	40.0	38.6	1.0897	1.0524	-3.4	NA	±20	Average RF
Fluoranthene	40.0	43.0	1.0488	1.1271	7.5	NA	±20	Average RF
Fluorene	40.0	41.2	1.2897	1.3291	3.1	NA	±20	Average RF
Hexachlorobutadiene	40.0	39.3	0.164	0.1611	-1.8	NA	±20	Average RF
Hexachlorocyclopentadiene	40.0	37.5	0.1793	0.2057	NA	-6.1	±20	Quadratic
Hexachloroethane	40.0	40.2	0.616	0.6188	0.4	NA	±20	Average RF
Hexachloropropene	40.0	46.0	0.1652	0.1899	15.0	NA	±20	Average RF
Isodrin	40.0	32.9	0.1374	0.1131	-17.7	NA	±20	Average RF
Isophorone	40.0	37.2	0.6974	0.6484	-7.0	NA	±20	Average RF
Isosafrole	40.0	36.9	0.2243	0.2069	-7.8	NA	±20	Average RF
Methapyrilene	40.0	30.7	0.5235	0.402	-23.2*	NA	±20	Average RF
Methyl Methanesulfonate	40.0	38.9	0.775	0.7544	-2.6	NA	±20	Average RF
Methyl Parathion	40.0	42.2	0.2035	0.2146	5.4	NA	±20	Average RF
N-Nitrosodi-n-propylamine	40.0	36.8	1.1421	1.052	-7.9	NA	±20	Average RF

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/21/24 22:29

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method:	8270E	**Calibration Date:**	6/18/2024
File ID:	I:\ACQUDATA\5977-MS64\Data\082124\D8280.D\	**Calibration ID:**	RC2400152
Signal ID:	1	**Analysis Lot:**	851525
		Units:	ppm

N-Nitrosodiethylamine	40.0	35.1	0.6828	0.5986	-12.3	NA	±20	Average RF
N-Nitrosodimethylamine	40.0	40.9	0.9562	0.9765	2.1	NA	±20	Average RF
N-Nitrosodiphenylamine	80.0	80.1	0.5893	0.5901	0.1	NA	±20	Average RF
N-Nitrosomethylethylamine	40.0	40.3	0.5289	0.533	0.8	NA	±20	Average RF
N-Nitrosomorpholine	40.0	38.5	0.9311	0.8968	-3.7	NA	±20	Average RF
N-Nitrosopiperidine	40.0	37.2	0.2385	0.2217	-7.1	NA	±20	Average RF
N-Nitrosopyrrolidine	40.0	41.5	0.7475	0.7756	3.8	NA	±20	Average RF
Naphthalene	40.0	40.5	1.0096	1.0234	1.4	NA	±20	Average RF
Nitrobenzene	40.0	41.6	0.3611	0.3754	4.0	NA	±20	Average RF
O,O,O-Triethyl Phosphorothioate	40.0	36.8	0.6633	0.6104	-8.0	NA	±20	Average RF
Ethyl Parathion	40.0	34.9	0.1652	0.1579	NA	-12.7	±20	Quadratic
Pentachlorobenzene	40.0	40.8	0.4564	0.4656	2.0	NA	±20	Average RF
Pentachloroethane	40.0	40.4	0.4944	0.4996	1.0	NA	±20	Average RF
Pentachloronitrobenzene (PCNB)	40.0	42.8	0.0805	0.0863	7.1	NA	±20	Average RF
Phenacetin	40.0	41.7	0.3657	0.3813	4.3	NA	±20	Average RF
Phenanthrene	40.0	39.8	1.0404	1.0351	-0.5	NA	±20	Average RF
Phenol	40.0	43.3	1.927	2.0858	8.2	NA	±20	Average RF
Phorate	40.0	37.6	0.155	0.1458	-6.0	NA	±20	Average RF
Pronamide	40.0	37.2	0.3396	0.3155	-7.1	NA	±20	Average RF
Pyrene	40.0	39.8	1.3321	1.3269	-0.4	NA	±20	Average RF
Pyridine	40.0	42.4	1.4562	1.5452	6.1	NA	±20	Average RF
Safrole	40.0	37.8	0.2397	0.2265	-5.5	NA	±20	Average RF
Sulfotep	40.0	37.1	0.2037	0.1887	-7.3	NA	±20	Average RF
Thionazin	40.0	33.5	0.1328	0.1113	-16.2	NA	±20	Average RF
o-Toluidine	40.0	39.9	2.2277	2.2232	-0.2	NA	±20	Average RF
p-Dimethylaminoazobenzene	40.0	35.1	0.3943	0.3462	-12.2	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
2,4,6-Tribromophenol	40.0	51.7	0.1489	0.1926	29.3*	NA	±20	Average RF
2-Fluorobiphenyl	40.0	38.5	1.2632	1.2166	-3.7	NA	±20	Average RF
2-Fluorophenol	40.0	42.3	1.2711	1.3456	5.9	NA	±20	Average RF
Nitrobenzene-d5	40.0	41.2	0.3551	0.3662	3.1	NA	±20	Average RF
Phenol-d6	40.0	42.9	1.6548	1.7732	7.2	NA	±20	Average RF
p-Terphenyl-d14	40.0	37.3	0.863	0.805	-6.7	NA	±20	Average RF

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/22/24 10:49

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method:	8270E	**Calibration Date:**	6/18/2024
File ID:	I:\ACQUDATA\5977-MS64\Data\082224\D8303.D\	**Calibration ID:**	RC2400152
Signal ID:	1	**Analysis Lot:**	851703
		Units:	ppm

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,2,4,5-Tetrachlorobenzene	40.0	43.7	0.5031	0.5501	9.4	NA	±20	Average RF
1,2,4-Trichlorobenzene	40.0	44.4	0.2882	0.3198	11.0	NA	±20	Average RF
1,2-Dichlorobenzene	40.0	44.3	1.4345	1.5891	10.8	NA	±20	Average RF
1,2-Diphenylhydrazine	40.0	47.0	0.8594	1.0108	17.6	NA	±20	Average RF
1,3,5-Trinitrobenzene	40.0	50.7	0.0528	0.0874	NA	26.8*	±20	Quadratic
1,3-Dichlorobenzene	40.0	44.4	1.4725	1.6361	11.1	NA	±20	Average RF
1,3-Dinitrobenzene	40.0	47.2	0.1651	0.2252	NA	18.0	±20	Quadratic
1,4-Dichlorobenzene	40.0	44.0	1.5259	1.6785	10.0	NA	±20	Average RF
1,4-Naphthoquinone	40.0	50.0	0.3678	0.4596	24.9*	NA	±20	Average RF
1-Methylnaphthalene	40.0	44.4	0.6267	0.6962	11.1	NA	±20	Average RF
1-Naphthylamine	40.0	54.3	0.8506	1.1551	35.8*	NA	±20	Average RF
2,3,4,6-Tetrachlorophenol	40.0	49.0	0.208	0.2914	NA	22.5*	±20	Quadratic
2,4,5-Trichlorophenol	40.0	51.8	0.3132	0.4052	29.4*	NA	±20	Average RF
2,4,6-Trichlorophenol	40.0	51.9	0.2971	0.3857	29.8*	NA	±20	Average RF
2,4-Dichlorophenol	40.0	48.2	0.2591	0.3125	20.6*	NA	±20	Average RF
2,4-Dimethylphenol	40.0	44.6	0.3561	0.397	11.5	NA	±20	Average RF
2,4-Dinitrophenol	40.0	59.9	0.0756	0.1613	NA	49.7*	±20	Quadratic
2,4-Dinitrotoluene	40.0	45.2	0.3061	0.4079	NA	13.0	±20	Quadratic
2,6-Dichlorophenol	40.0	48.2	0.2523	0.3043	20.6*	NA	±20	Average RF
2,6-Dinitrotoluene	40.0	48.7	0.2503	0.305	21.9*	NA	±20	Average RF
2-Acetylaminofluorene	40.0	50.2	0.4171	0.623	NA	25.6*	±20	Quadratic
2-Chloronaphthalene	40.0	43.4	1.089	1.1807	8.4	NA	±20	Average RF
2-Chlorophenol	40.0	46.6	1.3836	1.6101	16.4	NA	±20	Average RF
5-Nitro-o-toluidine	40.0	57.7	0.3362	0.4846	44.2*	NA	±20	Average RF
2-Methylnaphthalene	40.0	44.6	0.67	0.7471	11.5	NA	±20	Average RF
2-Methylphenol	40.0	46.0	1.2647	1.453	14.9	NA	±20	Average RF
2-Naphthylamine	40.0	62.6	0.7415	1.1596	56.4*	NA	±20	Average RF
2-Nitroaniline	40.0	53.2	0.3299	0.4385	32.9*	NA	±20	Average RF
2-Nitrophenol	40.0	46.3	0.1512	0.1981	NA	15.8	±20	Quadratic
2-Picoline	40.0	50.7	1.571	1.9923	26.8*	NA	±20	Average RF
3,3'-Dichlorobenzidine	40.0	43.1	0.3452	0.4381	NA	7.9	±20	Quadratic
3,3'-Dimethylbenzidine	40.0	48.2	0.5993	0.7802	30.2*	NA	±20	Average RF
3- and 4-Methylphenol Coelution	40.0	47.4	1.3968	1.6563	18.6	NA	±20	Average RF
3-Methylcholanthrene	40.0	53.8	0.5494	0.7383	34.4*	NA	±20	Average RF
3-Nitroaniline	40.0	57.8	0.2983	0.4312	44.6*	NA	±20	Average RF
4,6-Dinitro-2-methylphenol	40.0	53.6	0.0809	0.1342	NA	33.9*	±20	Quadratic
4-Aminobiphenyl	40.0	58.9	0.6133	0.9037	47.4*	NA	±20	Average RF
4-Bromophenyl Phenyl Ether	40.0	44.1	0.1969	0.217	10.2	NA	±20	Average RF
4-Chloro-3-methylphenol	40.0	46.6	0.2914	0.3392	16.4	NA	±20	Average RF

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/22/24 10:49

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method:	8270E	**Calibration Date:**	6/18/2024
File ID:	I:\ACQUDATA\5977-MS64\Data\082224\D8303.D\	**Calibration ID:**	RC2400152
Signal ID:	1	**Analysis Lot:**	851703
		Units:	ppm

4-Chloroaniline	40.0	46.7	0.3972	0.464	16.8	NA	±20	Average RF
4-Chlorophenyl Phenyl Ether	40.0	45.5	0.6001	0.6824	13.7	NA	±20	Average RF
4-Nitroaniline	40.0	58.2	0.3175	0.4622	45.6*	NA	±20	Average RF
4-Nitrophenol	40.0	52.2	0.2542	0.332	30.6*	NA	±20	Average RF
4-Nitroquinoline N-Oxide	40.0	48.3	0.0586	0.0857	NA	20.7*	±20	Quadratic
7,12-Dimethylbenz(a)anthracene	40.0	50.5	0.5628	0.711	26.3*	NA	±20	Average RF
Acenaphthene	40.0	43.1	1.14	1.2277	7.7	NA	±20	Average RF
Acenaphthylene	40.0	43.5	1.6138	1.7549	8.7	NA	±20	Average RF
Acetophenone	40.0	49.9	2.0295	2.531	24.7*	NA	±20	Average RF
Aniline	40.0	52.3	2.0856	2.7277	30.8*	NA	±20	Average RF
Anthracene	40.0	42.6	1.0137	1.0798	6.5	NA	±20	Average RF
Aramite, Total	40.0	50.1	0.0741	0.093	25.4*	NA	±20	Average RF
Benzidine	40.0	48.9	0.4459	0.6388	NA	22.3*	±20	Quadratic
Benzo(g,h,i)perylene	40.0	47.0	0.857	1.0061	17.4	NA	±20	Average RF
Benzyl Alcohol	40.0	46.5	1.0351	1.2043	16.4	NA	±20	Average RF
2,2'-Oxybis(1-chloropropane)	40.0	41.3	1.7894	1.8476	3.3	NA	±20	Average RF
Bis(2-chloroethoxy)methane	40.0	42.8	0.4138	0.4431	7.1	NA	±20	Average RF
Bis(2-chloroethyl) Ether	40.0	43.1	1.4704	1.5838	7.7	NA	±20	Average RF
Bis(2-ethylhexyl) Phthalate	40.0	39.8	0.9167	0.9122	-0.5	NA	±20	Average RF
Butyl Benzyl Phthalate	40.0	40.6	0.6606	0.6702	1.5	NA	±20	Average RF
Chlorobenzilate	40.0	49.4	0.4531	0.5594	23.5*	NA	±20	Average RF
Di-n-butyl Phthalate	40.0	43.8	1.2311	1.3478	9.5	NA	±20	Average RF
Di-n-octyl Phthalate	40.0	41.1	1.4199	1.458	2.7	NA	±20	Average RF
Diallate	40.0	46.4	0.3024	0.3509	16.1	NA	±20	Average RF
Dibenzofuran	40.0	44.2	1.5479	1.7095	10.4	NA	±20	Average RF
Diethyl Phthalate	40.0	42.6	1.2655	1.3466	6.4	NA	±20	Average RF
Dimethoate	40.0	48.0	0.2439	0.2925	19.9	NA	±20	Average RF
Dimethyl Phthalate	40.0	43.4	1.252	1.3593	8.6	NA	±20	Average RF
Disulfoton	40.0	39.8	0.5323	0.5292	-0.6	NA	±20	Average RF
Ethyl Methanesulfonate	40.0	49.6	1.0897	1.3511	24.0*	NA	±20	Average RF
Fluoranthene	40.0	45.9	1.0488	1.2045	14.8	NA	±20	Average RF
Fluorene	40.0	45.4	1.2897	1.4638	13.5	NA	±20	Average RF
Hexachlorobutadiene	40.0	43.9	0.164	0.1801	9.8	NA	±20	Average RF
Hexachlorocyclopentadiene	40.0	45.6	0.1793	0.2533	NA	14.1	±20	Quadratic
Hexachloroethane	40.0	44.2	0.616	0.68	10.4	NA	±20	Average RF
Hexachlorophene	500	500	NA	NA	NA	NA	±20	
Hexachloropropene	40.0	50.6	0.1652	0.2088	26.4*	NA	±20	Average RF
Isodrin	40.0	37.9	0.1374	0.1302	-5.3	NA	±20	Average RF
Isophorone	40.0	43.0	0.6974	0.7499	7.5	NA	±20	Average RF
Isosafrole	40.0	48.3	0.2243	0.2707	20.7*	NA	±20	Average RF
Methapyrilene	40.0	31.5	0.5235	0.4123	-21.2*	NA	±20	Average RF
Methyl Methanesulfonate	40.0	48.5	0.775	0.9392	21.2*	NA	±20	Average RF
Methyl Parathion	40.0	51.2	0.2035	0.2607	28.1*	NA	±20	Average RF

Client: NASA/WSTF/Navarro
Project: White Sands Test Facility/24EC008B
Service Request: R2407792
Date Analyzed: 08/22/24 10:49

Continuing Calibration Verification (CCV) Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
File ID: I:\ACQUDATA\5977-MS64\Data\082224\D8303.D\
Signal ID: 1
Calibration Date: 6/18/2024
Calibration ID: RC2400152
Analysis Lot: 851703
Units: ppm

N-Nitrosodi-n-propylamine	40.0	49.7	1.1421	1.42	24.3*	NA	±20	Average RF
N-Nitrosodiethylamine	40.0	39.1	0.6828	0.6681	-2.1	NA	±20	Average RF
N-Nitrosodimethylamine	40.0	48.7	0.9562	1.1651	21.8*	NA	±20	Average RF
N-Nitrosodiphenylamine	80.0	98.2	0.5893	0.7231	22.7*	NA	±20	Average RF
N-Nitrosomethylethylamine	40.0	49.2	0.5289	0.6512	23.1*	NA	±20	Average RF
N-Nitrosomorpholine	40.0	49.1	0.9311	1.1421	22.7*	NA	±20	Average RF
N-Nitrosopiperidine	40.0	47.6	0.2385	0.2837	18.9	NA	±20	Average RF
N-Nitrosopyrrolidine	40.0	51.4	0.7475	0.9604	28.5*	NA	±20	Average RF
Naphthalene	40.0	43.5	1.0096	1.0977	8.7	NA	±20	Average RF
Nitrobenzene	40.0	43.0	0.3611	0.3881	7.5	NA	±20	Average RF
O,O,O-Triethyl Phosphorothioate	40.0	51.5	0.6633	0.854	28.7*	NA	±20	Average RF
Ethyl Parathion	40.0	47.2	0.1652	0.2242	NA	18.1	±20	Quadratic
Pentachlorobenzene	40.0	44.0	0.4564	0.5017	9.9	NA	±20	Average RF
Pentachloroethane	40.0	43.8	0.4944	0.5415	9.5	NA	±20	Average RF
Pentachloronitrobenzene (PCNB)	40.0	46.3	0.0805	0.0932	15.7	NA	±20	Average RF
Phenacetin	40.0	54.1	0.3657	0.4942	35.1*	NA	±20	Average RF
Phenanthrene	40.0	41.9	1.0404	1.0894	4.7	NA	±20	Average RF
Phenol	40.0	46.4	1.927	2.2332	15.9	NA	±20	Average RF
Phorate	40.0	51.6	0.155	0.2001	29.1*	NA	±20	Average RF
Pronamide	40.0	52.3	0.3396	0.4441	30.8*	NA	±20	Average RF
Pyrene	40.0	41.3	1.3321	1.3755	3.3	NA	±20	Average RF
Pyridine	40.0	50.5	1.4562	1.8372	26.2*	NA	±20	Average RF
Safrole	40.0	40.8	0.2397	0.2442	1.9	NA	±20	Average RF
Sulfotep	40.0	48.2	0.2037	0.2453	20.5	NA	±20	Average RF
Thionazin	40.0	48.3	0.1328	0.1603	20.7*	NA	±20	Average RF
o-Toluidine	40.0	49.9	2.2277	2.7766	24.6*	NA	±20	Average RF
p-Dimethylaminoazobenzene	40.0	48.7	0.3943	0.48	21.7*	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
2,4,6-Tribromophenol	40.0	63.1	0.1489	0.2349	57.7*	NA	±20	Average RF
2-Fluorobiphenyl	40.0	49.1	1.2632	1.5506	22.7*	NA	±20	Average RF
2-Fluorophenol	40.0	51.9	1.2711	1.65	29.8*	NA	±20	Average RF
Nitrobenzene-d5	40.0	48.8	0.3551	0.4332	22.0*	NA	±20	Average RF
Phenol-d6	40.0	52.8	1.6548	2.1852	32.1*	NA	±20	Average RF
p-Terphenyl-d14	40.0	49.4	0.863	1.0651	23.4*	NA	±20	Average RF

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B

Analysis Run Log
Semivolatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**851525
Instrument ID:R-MS-64

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\5977-MS64\Data\082124\D8251.D\	ZZZZZZZ	ZZZZZZZ	8/21/2024	09:15:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8252.D\	Continuing Calibration Verification	RQ2410314-02	8/21/2024	10:43:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8253.D\	ZZZZZZZ	ZZZZZZZ	8/21/2024	11:39:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8254.D\	ZZZZZZZ	ZZZZZZZ	8/21/2024	12:03:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8255.D\	ZZZZZZZ	ZZZZZZZ	8/21/2024	12:27:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8256.D\	ZZZZZZZ	ZZZZZZZ	8/21/2024	12:51:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8259.D\	ZZZZZZZ	ZZZZZZZ	8/21/2024	14:03:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8260.D\	ZZZZZZZ	ZZZZZZZ	8/21/2024	14:27:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8261.D\	ZZZZZZZ	ZZZZZZZ	8/21/2024	14:51:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8262.D\	ZZZZZZZ	ZZZZZZZ	8/21/2024	15:15:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8263.D\	ZZZZZZZ	ZZZZZZZ	8/21/2024	15:39:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8264.D\	ZZZZZZZ	ZZZZZZZ	8/21/2024	16:03:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8265.D\	ZZZZZZZ	ZZZZZZZ	8/21/2024	16:27:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8266.D\	ZZZZZZZ	ZZZZZZZ	8/21/2024	16:52:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8267.D\	ZZZZZZZ	ZZZZZZZ	8/21/2024	17:16:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8268.D\	ZZZZZZZ	ZZZZZZZ	8/21/2024	17:40:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8269.D\	ZZZZZZZ	ZZZZZZZ	8/21/2024	18:04:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8270.D\	ZZZZZZZ	ZZZZZZZ	8/21/2024	18:28:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8271.D\	Continuing Calibration Verification	RQ2410314-02	8/21/2024	18:52:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8272.D\	Continuing Calibration Verification	RQ2410314-02	8/21/2024	19:16:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8274.D\	Lab Control Sample	RQ2410083-02	8/21/2024	20:04:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8275.D\	Duplicate Lab Control Sample	RQ2410083-03	8/21/2024	20:28:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8276.D\	ZZZZZZZ	ZZZZZZZ	8/21/2024	20:52:00	

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B

Analysis Run Log
Semivolatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**851525
Instrument ID:R-MS-64

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\5977-MS64\Data\082124\D8277.D\	ZZZZZZZ	ZZZZZZZ	8/21/2024	21:17:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8278.D\	ZZZZZZZ	ZZZZZZZ	8/21/2024	21:41:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8279.D\	ZZZZZZZ	ZZZZZZZ	8/21/2024	22:05:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8280.D\	Continuing Calibration Verification	RQ2410314-04	8/21/2024	22:29:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8280.D\	ZZZZZZZ	ZZZZZZZ	8/21/2024	22:29:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8282.D\	Continuing Calibration Verification	RQ2410314-04	8/21/2024	23:17:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8282.D\	ZZZZZZZ	ZZZZZZZ	8/21/2024	23:17:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8283.D\	ZZZZZZZ	ZZZZZZZ	8/21/2024	23:41:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8284.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	00:05:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8284.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	00:05:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8285.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	00:29:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8285.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	00:29:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8286.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	00:53:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8287.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	01:17:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8288.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	01:41:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8289.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	02:04:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8290.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	02:28:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8291.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	02:52:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8292.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	03:16:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8293.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	03:40:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8294.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	04:04:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8295.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	04:28:00	
I:\ACQUDATA\5977-MS64\Data\082124\D8296.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	04:52:00	

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B

Analysis Run Log
Semivolatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**851525
Instrument ID:R-MS-64

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\5977-MS64\Data\082124 \D8297.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	05:16:00	

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B

Analysis Run Log
Semivolatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**851703
Instrument ID:R-MS-64

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\5977-MS64\Data\082224\D8302.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	10:33:00	
I:\ACQUDATA\5977-MS64\Data\082224\D8303.D\	Continuing Calibration Verification	RQ2410394-02	8/22/2024	10:49:00	
I:\ACQUDATA\5977-MS64\Data\082224\D8304.D\	Continuing Calibration Verification	RQ2410394-02	8/22/2024	11:34:00	
I:\ACQUDATA\5977-MS64\Data\082224\D8305.D\	Method Blank	RQ2410083-01	8/22/2024	11:58:00	
I:\ACQUDATA\5977-MS64\Data\082224\D8306.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	12:22:00	
I:\ACQUDATA\5977-MS64\Data\082224\D8307.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	12:46:00	
I:\ACQUDATA\5977-MS64\Data\082224\D8309.D\	Continuing Calibration Verification	RQ2410394-02	8/22/2024	14:32:00	
I:\ACQUDATA\5977-MS64\Data\082224\D8310.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	14:57:00	
I:\ACQUDATA\5977-MS64\Data\082224\D8311.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	15:21:00	
I:\ACQUDATA\5977-MS64\Data\082224\D8312.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	15:45:00	
I:\ACQUDATA\5977-MS64\Data\082224\D8313.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	16:09:00	
I:\ACQUDATA\5977-MS64\Data\082224\D8314.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	16:33:00	
I:\ACQUDATA\5977-MS64\Data\082224\D8315.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	16:57:00	
I:\ACQUDATA\5977-MS64\Data\082224\D8316.D\	ZZZZZZZ	ZZZZZZZ	8/22/2024	17:21:00	
I:\ACQUDATA\5977-MS64\Data\082224\D8317.D\	2408140833A 300-001-GSV	R2407792-001	8/22/2024	17:45:00	
I:\ACQUDATA\5977-MS64\Data\082224\D8318.D\	2408150825A 300-002-GSV	R2407792-009	8/22/2024	18:09:00	

Analysis: 8270/625 Analyst: AM Run Method: Tune/8270
Date: 8/23/24 Instr. R-MS-64 Quant Method: 8270 - 080524 (64)
Syringes: 233536 / 225837 ICAL: RC 2400152 LIMS Run#: 951703

Pos.	Sample	Diln.	Stds. ID	File#	OK?	Comments
	Blk			D8300	—	
	Blk			01	✓	
	Tune		236569	02	✓	
	CCV		236972	03	✓	↑
	3,3 CCV			04	✓	
KOA/Tune	R2410083-01		#443361	05	✓	
Tune	R2407398-003		↓	06	✓	No sum. RE
↓	↓ 004		↓	07	✓	↓
	HEXA CCV			08	N	
	HEXA CCV		236949	09	✓	
HEXA/Tune	R2407879-001		#443505	11 10	✓	No sum. RE
	↓ 009		↓	12 11	✓	↓
	R2407719-003		#443361	13 12	✓	
	↓ 005		↓	14 13	✓	
	↓ 007		↓	15 14	✓	
	↓ 009		↓	16 15	✓	
	R2407792-001		↓	17 16	✓	
↓	↓ 009		↓	18 17	✓	
	KO CCV (KO)			19 18	N	Prepped wrong. ~~No Aut 20~~
KO	R2410238-01		#443506	20 19	↓	
↓	↓ 02		↓	21 20	↓	
	↓ 03		↓	22 21	↓	
	R2407770-002		↓	23 22	↓	
↓	↓ 236 003		↓	24 23	↓	
HEXA/Tune	R2410845-01		#443505	10	✓	

AM
8/23/24

All samples = 1 mL + 10 uL Combined IS/Surr.; 236819

Primary : _____ exp: Secondary : _____ exp:
Primary: _____ exp: Secondary : _____ exp:
Reagents:

Analysis: 8270	Analyst: AM	Run Method: TUNE/8270	
Date: 8/21/24	Instr. R-MS-64	Quant Method: 8270-080524 (64)	
Syringes: 233536/229837	ICAL: RC 240052	LIMS Run#: 851525	

Pos.	Sample	Diln.	Stds. ID	File#	OK?	Comments
	BLANK			D8250	✓	
	TUNE		236569	251	✓	
	CCV		236954	252	✓	10:43
	RQ2409865-03		443127	253	✓	
	-04			254	✓	
	-05			255	✓	
TUNE	R2407398-002			256	✓	
	-003			257	N	2.5 ↓
	-004			258	N	
	-005			259	✓	
	-006			260	✓	
	-007			261	✓	
	-008			262	✓	
	-009			263	✓	
	-010			264	✓	
	-011			265	✓	
	-011 MS			266	✓	
	-011 DMS			267	✓	
	-012			268	✓	
	-013			269	✓	
↓	-014			270	✓	
	KF CCV		236914	271	✓	
	3,3-CCV			272	✓	
	RQ2410083-01		443361	273	N	2.5 ↓
	-02			274	✓	
	-03			275	✓	
KF	R2406872-003			276	✓	
	R2407173-004			277	✓	
	-005			278	✓	
	-006			279	✓	10:05 ✓
	CCV		236954	280	✓	10:29
	Hexa CCV		236949	281	N	↓
	3,3-CCV			282	✓	
	RQ2410243-01		443504	283	✓	Repeat for Hexa
	-02			284	✓	
	-03			285	✓	
	R2407750-001			286	✓	
	-001 MS			287	✓	
	-001 DMS			288	✓	
	RQ2401237-01			289	✓	

All samples = 1 mL + 10 uL Combined IS/Surr.;

Primary : _____ exp: Secondary : _____ exp:

Primary: _____ exp: Secondary : _____ exp:

Reagents:

Analysis: See Pg. 21 Analyst: _____ Run Method: _____

Date: _____ Instr. R-MS-64 Quant Method: _____

Syringes: _____ ICAL: RC_____ LIMS Run#: _____

Pos.	Sample	Diln.	Stds. ID	File#	OK?	Comments
	R2407547 (457) -001		443505	DMS290	✓	
AM	-001MS			291	✓	
8/21/24	-001DMS (457)			292	✓	
	R2407547 (457) -002			293	✓	
	-003			294	✓	
	-004			295	✓	
	-005			296	✓	
	-006			297	✓	5:16 ✓
	R2407879-001			298	N	Valex/TICS Hexa ↓
	-009			299	N	↓

AM 8/22/24

All samples = _____mL + _____uL Combined IS/Surr.; See Pg. 21

Primary :_____ exp: Secondary :_____ exp:

Primary:_____ exp: Secondary :_____ exp:

Reagents:

Prep Summary Report

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Semivolatile Organic Compounds by GC/MS

Prep Method: EPA 3510C **Extraction Lot:** 443361
Analytical Method: 8270E **Extraction Date:** 08/19/24 14:27

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
2408140833A 300-001-GSV	R2407792-001	8/14/24	8/16/24	250 mL	1 mL	
2408150825A 300-002-GSV	R2407792-009	8/14/24	8/16/24	250 mL	1 mL	
Method Blank	RQ2410083-01MB	NA	NA	250 mL	1 mL	
Method Blank	RQ2410083-01MB	NA	NA	250 mL	1 mL	
Lab Control Sample	RQ2410083-02LCS	NA	NA	250 mL	1 mL	
Duplicate Lab Control Sample	RQ2410083-03DLCS	NA	NA	250 mL	1 mL	

Preparation Information Benchsheet

Prep Run#: 443361
Team: Semivoa GCMS/EDEGRAY

Prep WorkFlow: OrgExtAq(7)
Prep Method: EPA 3510C

Status: Prepped
Prep Date/Time: 8/19/24 14:27

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410083-01	MB		250mL	625/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
2	RQ2410083-01	MB		250mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
3	RQ2410083-02	LCS		250mL	625/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505; 200.0000 uL/235800; 200.0000 uL/236625	
4	RQ2410083-02	LCS		250mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	200.0000 uL/236625; 200.0000 uL/235800; 100.0000 uL/236505	
5	RQ2410083-03	DLCS		250mL	625/SVO	7	<2	>11	1.00mL	colorless, clear	200.0000 uL/235800; 200.0000 uL/236625; 100.0000 uL/236505	
6	RQ2410083-03	DLCS		250mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	200.0000 uL/235800; 100.0000 uL/236505; 200.0000 uL/236625	
7	R2406872-003RE	DUP-1	.10	270mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
8	R2407173-004RE	GW-6/W	.04	270mL	8270E/SVO	8	<2	>11	1.00mL	yellowish-brown, cloudy	100.0000 uL/236505	
9	R2407173-005RE	GW-7	.05	270mL	8270E/SVO	8	<2	>11	1.00mL	yellowish-brown, cloudy	100.0000 uL/236505	
10	R2407173-006RE	GW-8	.05	260mL	8270E/SVO	8	<2	>11	1.00mL	yellowish-brown, cloudy	100.0000 uL/236505	
11	R2407719-003	2408121415B WW-4-419	.01	250mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
12	R2407719-005	2408121434B WW-4-589	.01	250mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
13	R2407719-007	2408131409B WW-4-848	.01	250mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
14	R2407719-009	2408131415B WW-4-948	.01	250mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
15	R2407792-001	2408140833A 300-001-GSV	.01	250mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
16	R2407792-009	2408150825A 300-002-GSV	.01	250mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
17	R2407196-004	PEO-121 BaseNeut N0724	.01	250mL	625/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	
18	R2407196-004	PEO-121 BaseNeut N0724	.01	250mL	8270E/SVO	7	<2	>11	1.00mL	colorless, clear	100.0000 uL/236505	

Spiking Solutions

Name:	8270 LCS Full List 100 ppm	Inventory ID	235800	Logbook Ref:	Expires On: 10/09/2024
Name:	8270 Soil Surrogate 100-200ppm	Inventory ID	236505	Logbook Ref:	Expires On: 10/09/2024
Name:	OLM/SOM additionals Spike 100ppm	Inventory ID	236625	Logbook Ref:	Expires On: 10/08/2024

Preparation Materials

Eppendorf Pipette Repeater	EXT #27 (232220)	Sulfuric Acid, 50% H2SO4	235526 (236776)	Dichloromethane (Methylene Chloride) 99.9% MeCl2	(236794)
Sodium Hydroxide 50% NaOH	234852 (234852)	pH Paper 0-14	CoA not available (236509)	Prepared Sodium Sulfate Na2SO4	(236813)

Preparation Information Benchsheet

Prep Run#: 443361
Team: Semivoa GCMS/EDEGRAY

Prep WorkFlow: OrgExtAq(7)
Prep Method: EPA 3510C

Status: Prepped
Prep Date/Time: 8/19/24 14:27

Preparation Steps

Step:	Extraction	Step:	Concentration	Step:	Final Volume
Started:	8/19/24 14:27	Started:	8/21/24 12:28	Started:	8/21/24 14:04
Finished:	8/19/24 19:19	Finished:	8/21/24 14:04	Finished:	8/21/24 14:04
By:	EDEGRAY	By:	JVANHEYNINGEN	By:	JVANHEYNINGEN
Comments		Comments		Comments	

Comments: _____

Reviewed By: _____ Date: _____ Spike Witness: JVANHEYNINGEN Date: _____

Chain of Custody

Relinquished By: _____ Date: _____

Received By: _____ Date: _____

Extracts Examined
Yes No

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140833A 300-001-GSV	**Units:**	ug/L
Lab Code:	R2407792-002	**Basis:**	NA

Low Level Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Acenaphthylene	ND U	0.20	0.093	1	08/23/24 20:58	8/21/24	
Benz(a)anthracene	ND U	0.20	0.070	1	08/23/24 20:58	8/21/24	
Benzo(a)pyrene	ND U	0.20	0.073	1	08/23/24 20:58	8/21/24	
Benzo(b)fluoranthene	ND U	0.20	0.068	1	08/23/24 20:58	8/21/24	
Benzo(k)fluoranthene	ND U	0.20	0.069	1	08/23/24 20:58	8/21/24	
Chrysene	ND U	0.20	0.080	1	08/23/24 20:58	8/21/24	
Dibenz(a,h)anthracene	ND U	0.20	0.090	1	08/23/24 20:58	8/21/24	
Hexachlorobenzene	ND U	0.20	0.13	1	08/23/24 20:58	8/21/24	
Indeno(1,2,3-cd)pyrene	ND U	0.20	0.070	1	08/23/24 20:58	8/21/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	86	27 - 133	08/23/24 20:58	
Nitrobenzene-d5	81	31 - 167	08/23/24 20:58	
p-Terphenyl-d14	90	25 - 151	08/23/24 20:58	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150825A 300-002-GSV	**Units:**	ug/L
Lab Code:	R2407792-010	**Basis:**	NA

Low Level Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Acenaphthylene	ND U	0.20	0.093	1	08/23/24 21:26	8/21/24	
Benz(a)anthracene	ND U	0.20	0.070	1	08/23/24 21:26	8/21/24	
Benzo(a)pyrene	ND U	0.20	0.073	1	08/23/24 21:26	8/21/24	
Benzo(b)fluoranthene	ND U	0.20	0.068	1	08/23/24 21:26	8/21/24	
Benzo(k)fluoranthene	ND U	0.20	0.069	1	08/23/24 21:26	8/21/24	
Chrysene	ND U	0.20	0.080	1	08/23/24 21:26	8/21/24	
Dibenz(a,h)anthracene	ND U	0.20	0.090	1	08/23/24 21:26	8/21/24	
Hexachlorobenzene	ND U	0.20	0.13	1	08/23/24 21:26	8/21/24	
Indeno(1,2,3-cd)pyrene	ND U	0.20	0.070	1	08/23/24 21:26	8/21/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	79	27 - 133	08/23/24 21:26	
Nitrobenzene-d5	71	31 - 167	08/23/24 21:26	
p-Terphenyl-d14	84	25 - 151	08/23/24 21:26	

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM651.D
Acq On : 23 Aug 2024 8:58 pm
Operator : EDeGray
Sample : R2407792-002
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 18 11:29:32 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration

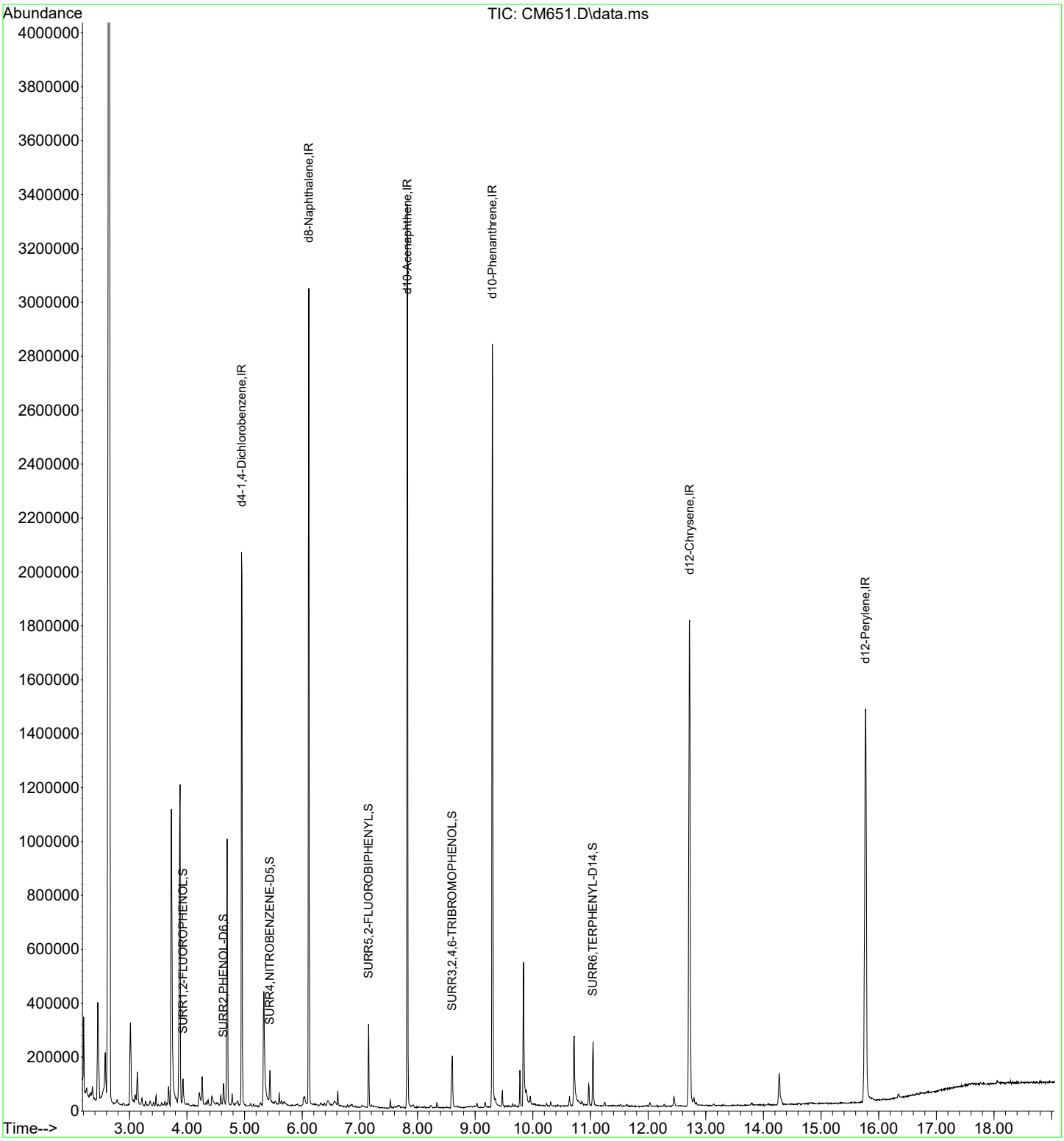
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.947	152	396735	20.00	ppm	-0.02
5) d8-Naphthalene	6.112	136	1461577	20.00	ppm	-0.02
11) d10-Acenaphthene	7.821	164	808841	20.00	ppm	-0.02
18) d10-Phenanthrene	9.296	188	1209864	20.00	ppm	-0.02
23) d12-Chrysene	12.720	240	1101523	20.00	ppm	-0.03
28) d12-Perylene	15.770	264	1116644	20.00	ppm	-0.03
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.932	112	42096	1.58	ppm	0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 39.50%			
3) SURR2,PHENOL-D6	4.632	99	36980	1.14	ppm	0.01
Spiked Amount 4.000	Range 10 - 107		Recovery = 28.50%			
6) SURR4,NITROBENZENE-D5	5.439	82	38820	1.62	ppm	-0.02
Spiked Amount 2.000	Range 37 - 117		Recovery = 81.00%			
12) SURR5,2-FLUOROBIPHENYL	7.148	172	100646	1.72	ppm	-0.02
Spiked Amount 2.000	Range 39 - 119		Recovery = 86.00%			
17) SURR3,2,4,6-TRIBROMOPH...	8.601	330	27603	3.47	ppm	-0.02
Spiked Amount 4.000	Range 28 - 157		Recovery = 86.75%			
25) SURR6,TERPHENYL-D14	11.043	244	99878	1.79	ppm	-0.02
Spiked Amount 2.000	Range 40 - 133		Recovery = 89.50%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM651.D
Acq On : 23 Aug 2024 8:58 pm
Operator : EDeGray
Sample : R2407792-002
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 18 11:29:32 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM652.D
Acq On : 23 Aug 2024 9:26 pm
Operator : EDeGray
Sample : R2407792-010
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 18 11:29:35 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration

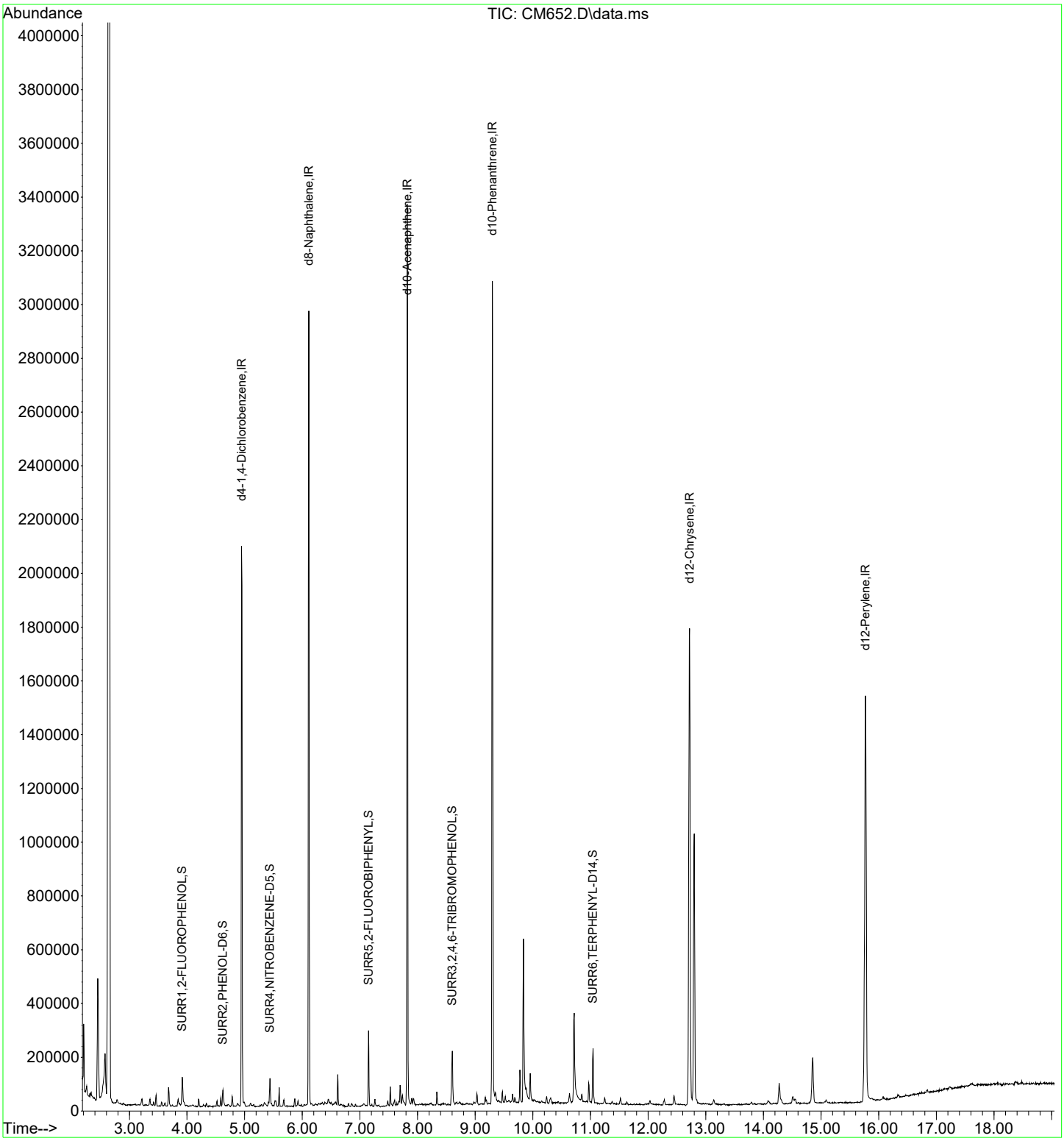
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.947	152	392847	20.00	ppm	-0.02
5) d8-Naphthalene	6.112	136	1446585	20.00	ppm	-0.02
11) d10-Acenaphthene	7.821	164	789867	20.00	ppm	-0.02
18) d10-Phenanthrene	9.296	188	1304187	20.00	ppm	-0.02
23) d12-Chrysene	12.720	240	1051273	20.00	ppm	-0.03
28) d12-Perylene	15.770	264	1050209	20.00	ppm	-0.03
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.916	112	43292	1.64	ppm	-0.02
Spiked Amount 4.000	Range 10 - 105		Recovery = 41.00%			
3) SURR2,PHENOL-D6	4.621	99	33719	1.05	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 26.25%			
6) SURR4,NITROBENZENE-D5	5.439	82	33915	1.43	ppm	-0.02
Spiked Amount 2.000	Range 37 - 117		Recovery = 71.50%			
12) SURR5,2-FLUOROBIPHENYL	7.148	172	89971	1.58	ppm	-0.02
Spiked Amount 2.000	Range 39 - 119		Recovery = 79.00%			
17) SURR3,2,4,6-TRIBROMOPH...	8.601	330	31056	4.00	ppm	-0.02
Spiked Amount 4.000	Range 28 - 157		Recovery = 100.00%			
25) SURR6,TERPHENYL-D14	11.043	244	88913	1.67	ppm	-0.02
Spiked Amount 2.000	Range 40 - 133		Recovery = 83.50%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM652.D
Acq On : 23 Aug 2024 9:26 pm
Operator : EDeGray
Sample : R2407792-010
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 18 11:29:35 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM643.D
Acq On : 23 Aug 2024 5:12 pm
Operator : EDeGray
Sample : RQ2410246-01
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 10:04:44 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:38:49 2024
Response via : Initial Calibration

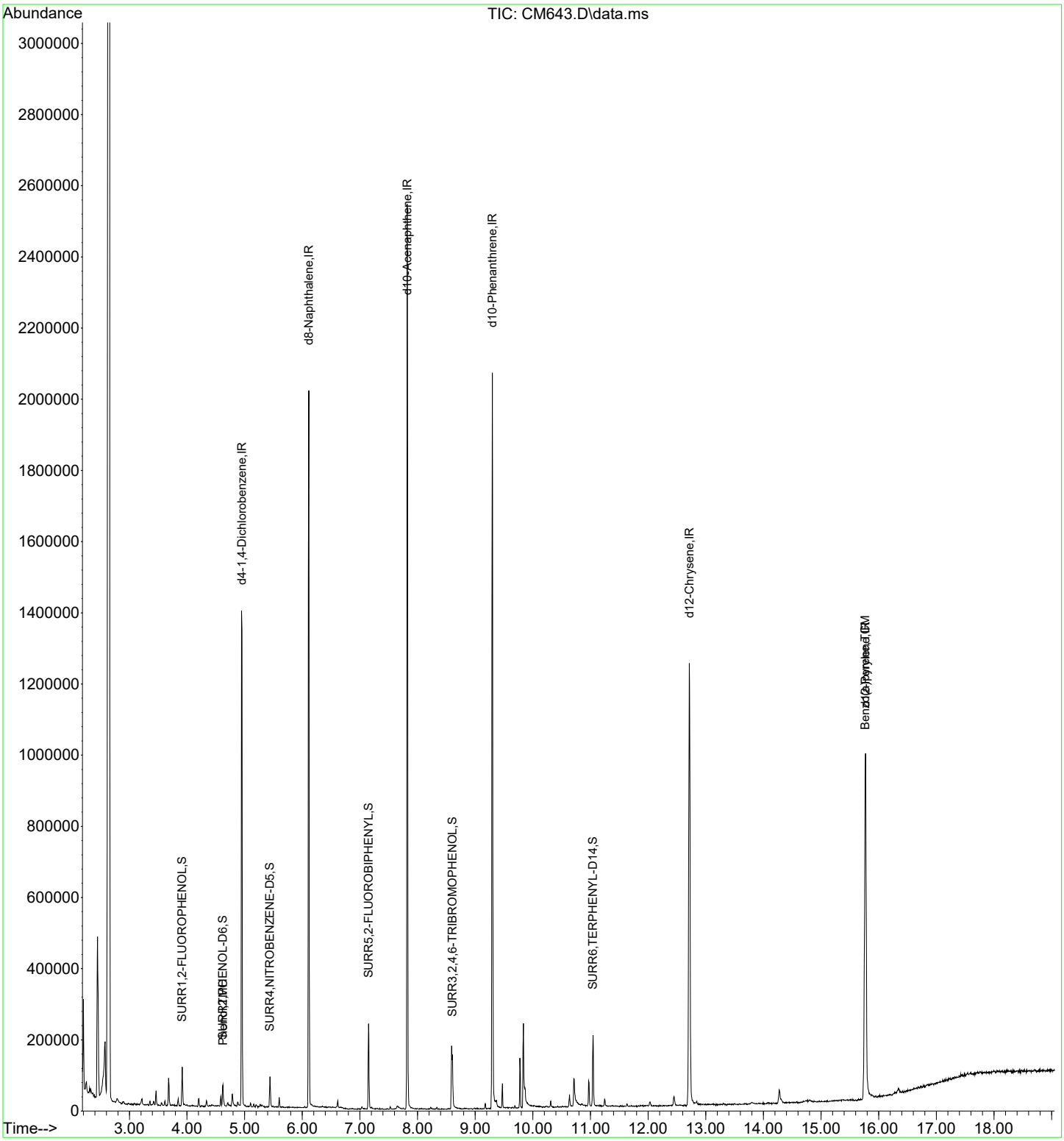
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.952	152	270495	20.00	ppm	-0.01
5) d8-Naphthalene	6.112	136	1022008	20.00	ppm	-0.02
11) d10-Acenaphthene	7.821	164	588625	20.00	ppm	-0.02
18) d10-Phenanthrene	9.296	188	890987	20.00	ppm	-0.02
23) d12-Chrysene	12.715	240	746410	20.00	ppm	-0.04
28) d12-Perylene	15.771	264	723789	20.00	ppm	-0.04
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.916	112	39134	2.15	ppm	-0.02
Spiked Amount 4.000	Range 10 - 105		Recovery = 53.75%			
3) SURR2,PHENOL-D6	4.621	99	30189	1.36	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 34.00%			
6) SURR4,NITROBENZENE-D5	5.439	82	29702	1.77	ppm	-0.01
Spiked Amount 2.000	Range 37 - 117		Recovery = 88.50%			
12) SURR5,2-FLUOROBIPHENYL	7.148	172	86381	2.03	ppm	-0.01
Spiked Amount 2.000	Range 39 - 119		Recovery = 101.50%			
17) SURR3,2,4,6-TRIBROMOPH...	8.607	330	24610	4.25	ppm	-0.01
Spiked Amount 4.000	Range 28 - 157		Recovery = 106.25%			
25) SURR6,TERPHENYL-D14	11.043	244	86643	2.30	ppm	-0.02
Spiked Amount 2.000	Range 40 - 133		Recovery = 115.00%			
Target Compounds						Qvalue
4) Phenol	4.627	94	556	0.023	ppm	# 40
20) Phenanthrene	9.322	178	456	Below Cal		59
21) Anthracene	9.322	178	456	Below Cal		60
22) Fluoranthene	10.573	202	285	Below Cal		62
26) Benzo(a)anthracene	12.715	228	1808	Below Cal		76
31) Benzo(a)pyrene	15.765	252	2654	0.074	ppm	77

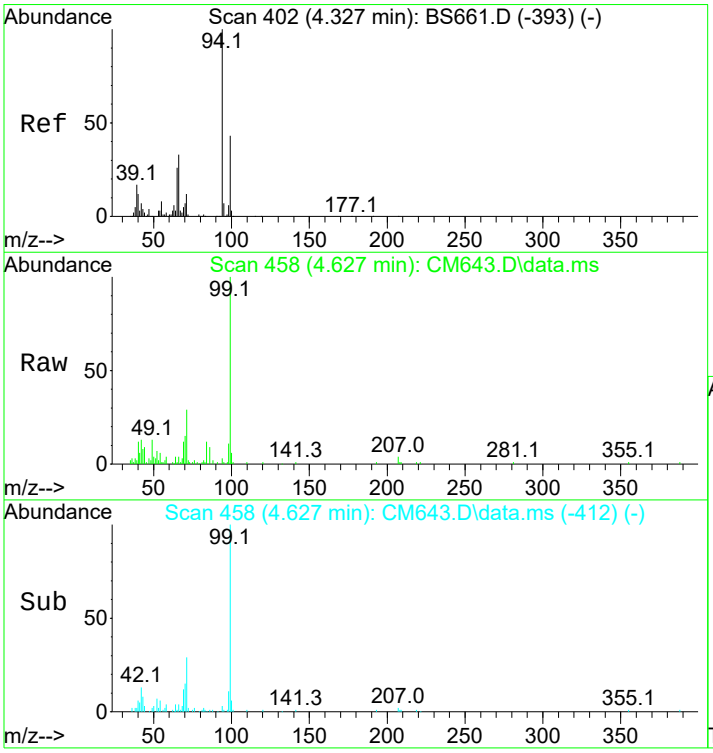
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM643.D
Acq On : 23 Aug 2024 5:12 pm
Operator : EDeGray
Sample : RQ2410246-01
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 10:04:44 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:38:49 2024
Response via : Initial Calibration

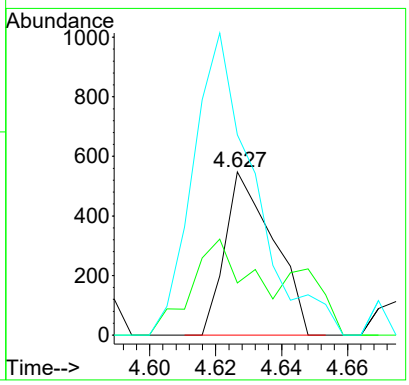


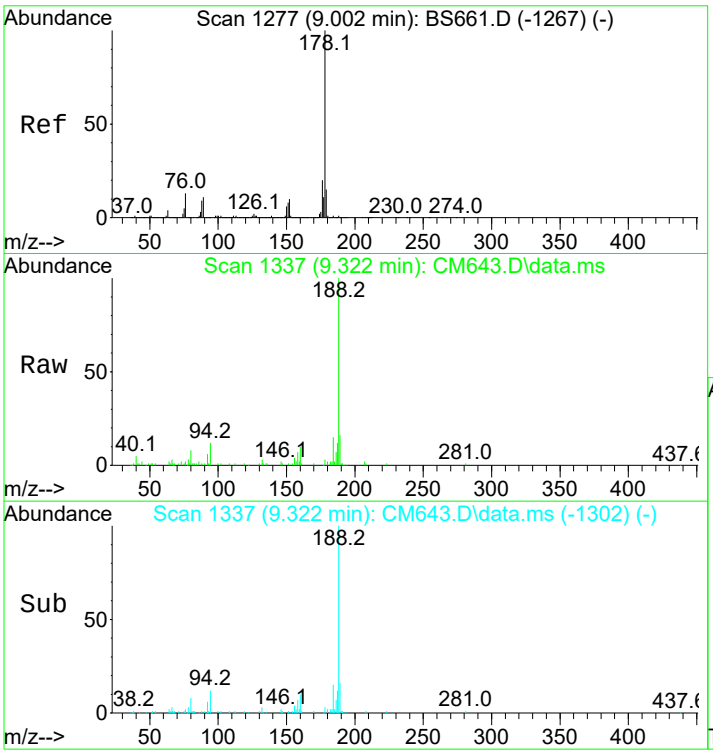


#4
Phenol
Concen: 0.02 ppm
RT: 4.627 min Scan# 458
Delta R.T. -0.004 min
Lab File: CM643.D
Acq: 23 Aug 2024 5:12 pm

Tgt Ion: 94 Resp: 556

Ion	Ratio	Lower	Upper
94	100		
65	11.7	0.0	54.2
66	80.1	1.9	61.9#

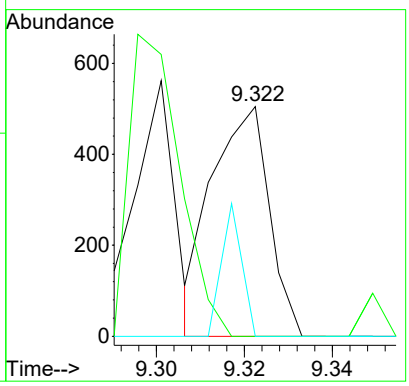


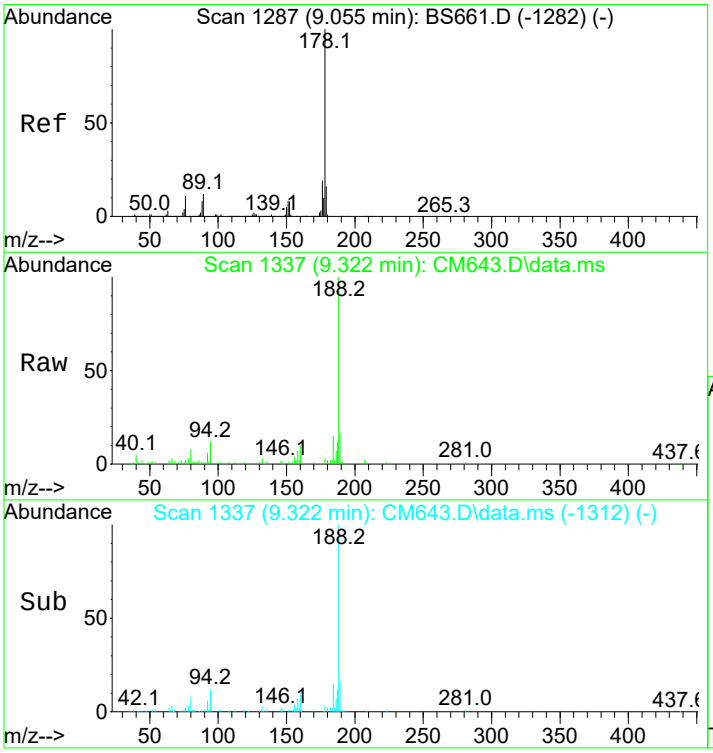


#20
Phenanthrene
Concen: Below Cal
RT: 9.322 min Scan# 1337
Delta R.T. -0.016 min
Lab File: CM643.D
Acq: 23 Aug 2024 5:12 pm

Tgt Ion:178 Resp: 456

Ion	Ratio	Lower	Upper
178	100		
179	0.0	0.0	35.8
176	0.0	0.0	39.9

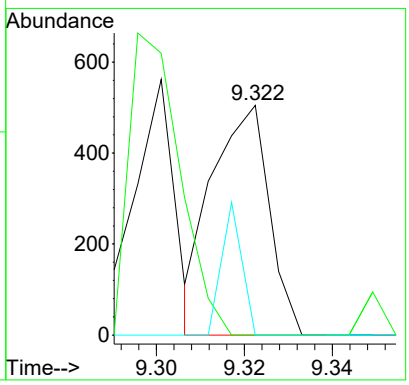


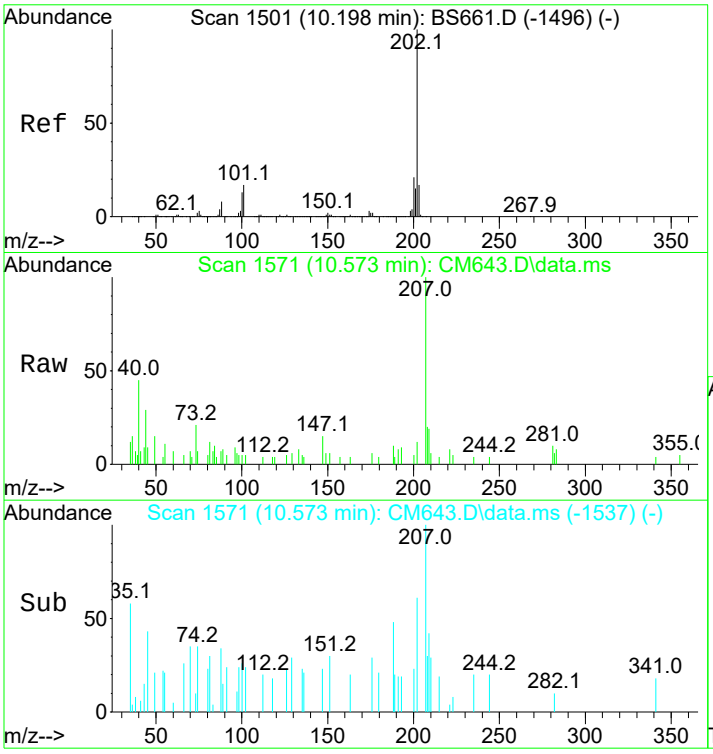


#21
Anthracene
Concen: Below Cal
RT: 9.322 min Scan# 1337
Delta R.T. -0.066 min
Lab File: CM643.D
Acq: 23 Aug 2024 5:12 pm

Tgt Ion:178 Resp: 456

Ion	Ratio	Lower	Upper
178	100		
179	0.0	0.0	35.6
176	0.0	0.0	39.5

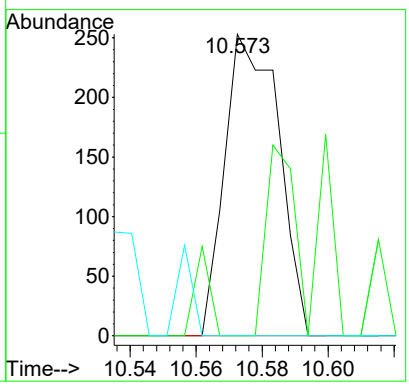


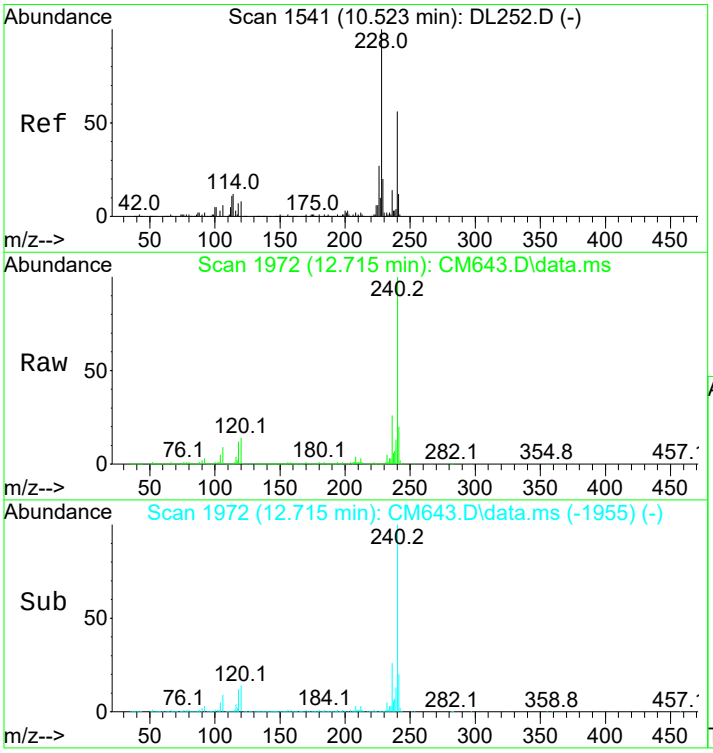


#22
Fluoranthene
Concen: Below Cal
RT: 10.573 min Scan# 1571
Delta R.T. -0.016 min
Lab File: CM643.D
Acq: 23 Aug 2024 5:12 pm

Tgt Ion:202 Resp: 285

Ion	Ratio	Lower	Upper
202	100		
101	0.0	0.0	34.9
203	0.0	0.0	37.2

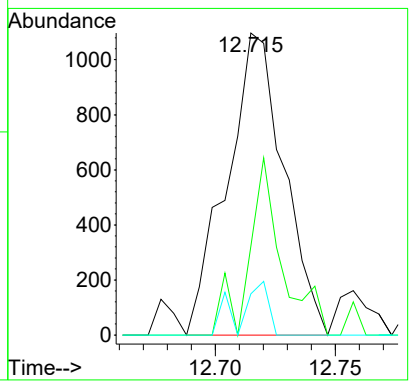


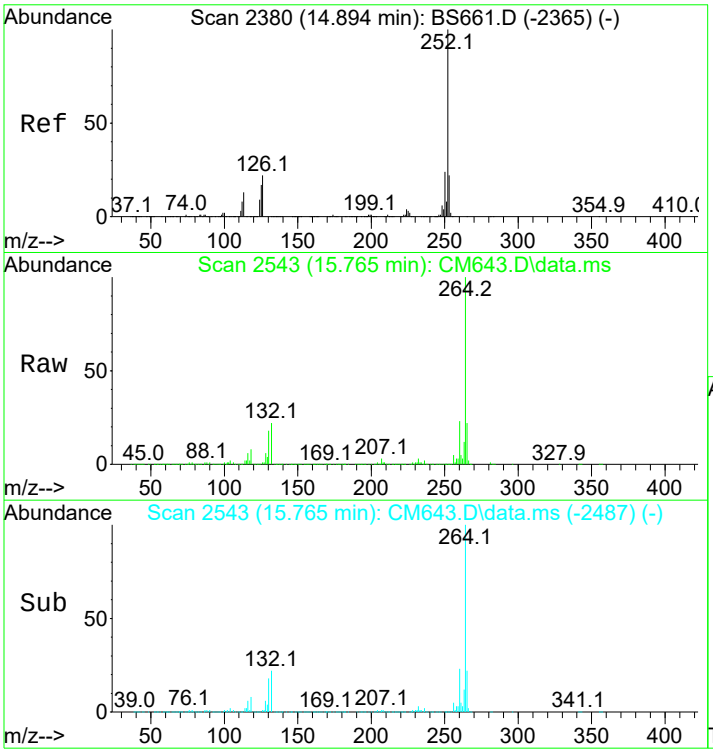


#26
Benzo(a)anthracene
Concen: Below Cal
RT: 12.715 min Scan# 1972
Delta R.T. -0.010 min
Lab File: CM643.D
Acq: 23 Aug 2024 5:12 pm

Tgt Ion:228 Resp: 1808

Ion	Ratio	Lower	Upper
228	100		
229	29.4	0.0	39.6
226	13.7	7.4	47.4

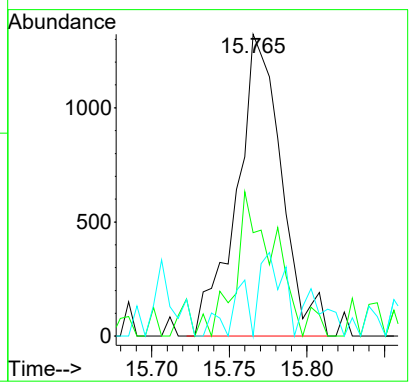




#31
Benzo(a)pyrene
Concen: 0.07 ppm
RT: 15.765 min Scan# 2543
Delta R.T. 0.097 min
Lab File: CM643.D
Acq: 23 Aug 2024 5:12 pm

Tgt Ion:252 Resp: 2654

Ion	Ratio	Lower	Upper
252	100		
253	28.1	2.0	42.0
125	0.0	0.0	36.0



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM643.D
Acq On : 23 Aug 2024 5:12 pm
Operator : EDeGray
Sample : RQ2410246-01
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 18 11:29:08 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration

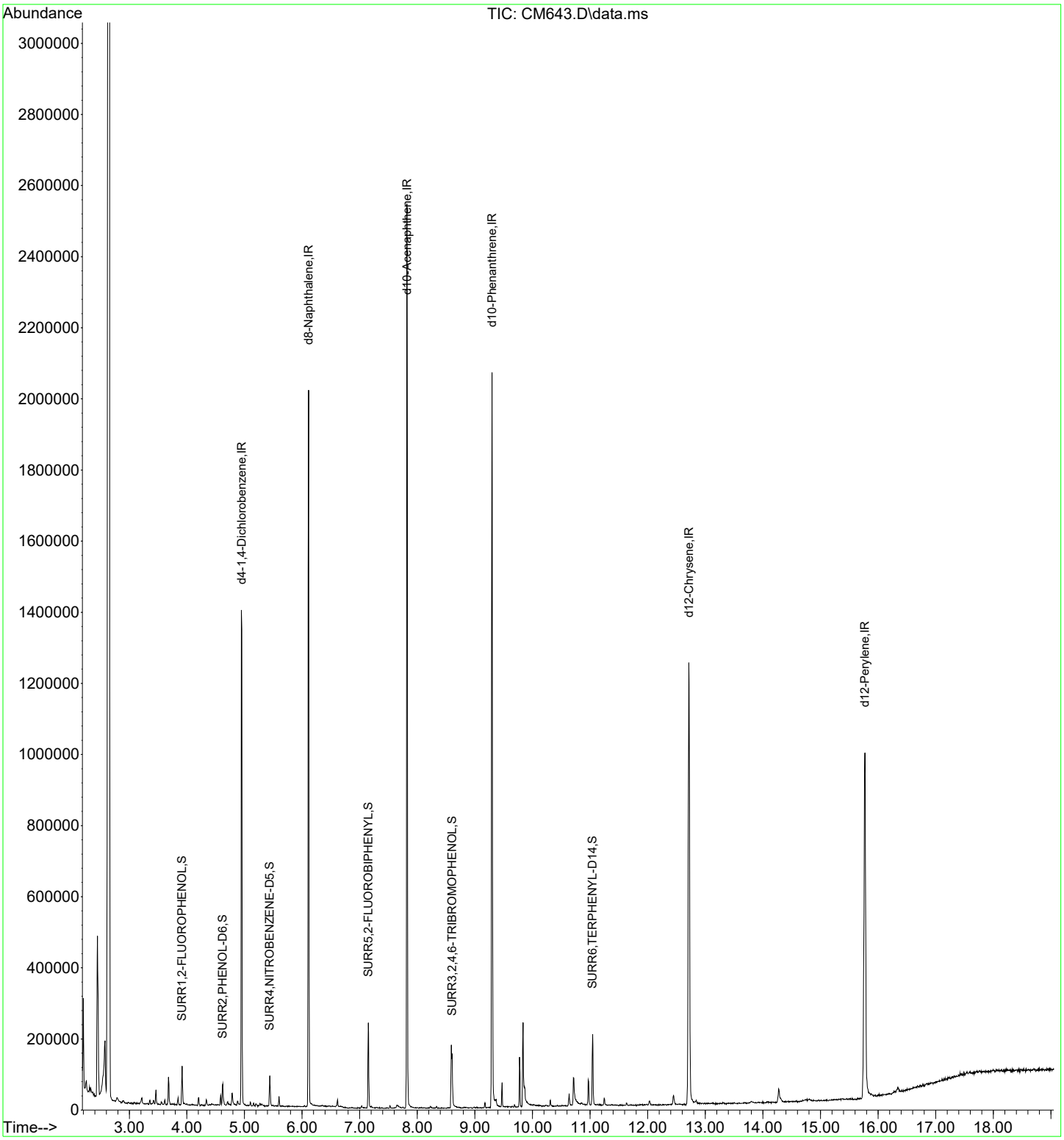
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.952	152	270495	20.00	ppm	-0.02
5) d8-Naphthalene	6.112	136	1022008	20.00	ppm	-0.02
11) d10-Acenaphthene	7.821	164	588625	20.00	ppm	-0.02
18) d10-Phenanthrene	9.296	188	890987	20.00	ppm	-0.02
23) d12-Chrysene	12.715	240	746410	20.00	ppm	-0.04
28) d12-Perylene	15.771	264	723879	20.00	ppm	-0.03
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.916	112	39134	2.15	ppm	-0.02
Spiked Amount 4.000	Range 10 - 105		Recovery = 53.75%			
3) SURR2,PHENOL-D6	4.621	99	30189	1.36	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 34.00%			
6) SURR4,NITROBENZENE-D5	5.439	82	29702	1.77	ppm	-0.02
Spiked Amount 2.000	Range 37 - 117		Recovery = 88.50%			
12) SURR5,2-FLUOROBIPHENYL	7.148	172	86381	2.03	ppm	-0.02
Spiked Amount 2.000	Range 39 - 119		Recovery = 101.50%			
17) SURR3,2,4,6-TRIBROMOPH...	8.607	330	24610	4.25	ppm	-0.01
Spiked Amount 4.000	Range 28 - 157		Recovery = 106.25%			
25) SURR6,TERPHENYL-D14	11.043	244	86643	2.30	ppm	-0.02
Spiked Amount 2.000	Range 40 - 133		Recovery = 115.00%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM643.D
Acq On : 23 Aug 2024 5:12 pm
Operator : EDeGray
Sample : RQ2410246-01
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 18 11:29:08 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM644.D
Acq On : 23 Aug 2024 5:40 pm
Operator : EDeGray
Sample : RQ2410246-02
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 18 11:29:11 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration

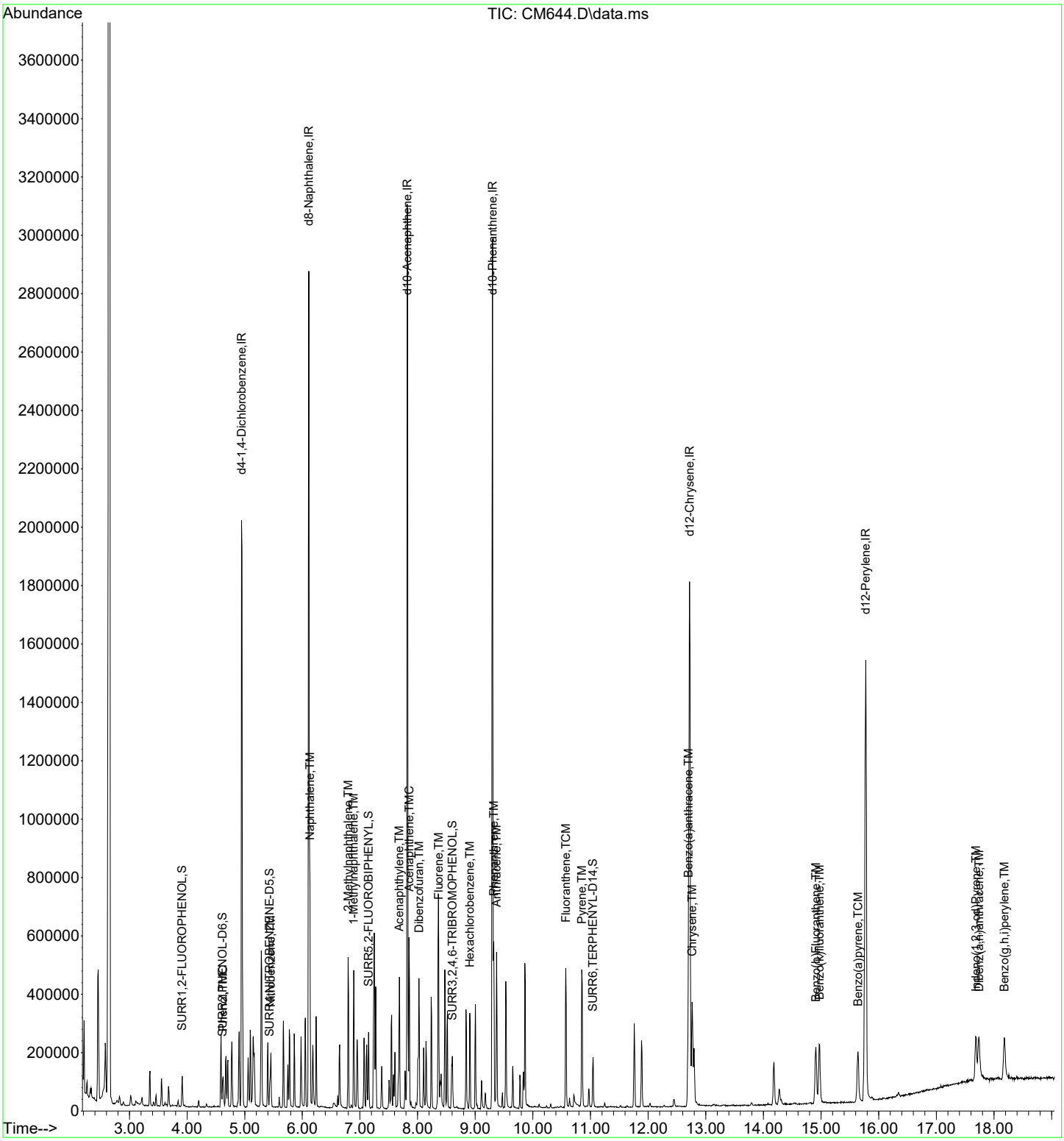
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.947	152	377677	20.00	ppm	-0.02
5) d8-Naphthalene	6.112	136	1427200	20.00	ppm	-0.02
11) d10-Acenaphthene	7.821	164	779094	20.00	ppm	-0.02
18) d10-Phenanthrene	9.301	188	1238194	20.00	ppm	-0.02
23) d12-Chrysene	12.720	240	1040762	20.00	ppm	-0.03
28) d12-Perylene	15.776	264	1079633	20.00	ppm	-0.03
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.916	112	39320	1.55	ppm	-0.02
Spiked Amount 4.000	Range 10 - 105		Recovery = 38.75%			
3) SURR2,PHENOL-D6	4.616	99	31277	1.01	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 25.25%			
6) SURR4,NITROBENZENE-D5	5.433	82	28996	1.24	ppm	-0.02
Spiked Amount 2.000	Range 37 - 117		Recovery = 62.00%			
12) SURR5,2-FLUOROBIPHENYL	7.148	172	83708	1.49	ppm	-0.02
Spiked Amount 2.000	Range 39 - 119		Recovery = 74.50%			
17) SURR3,2,4,6-TRIBROMOPH...	8.606	330	24529	3.20	ppm	-0.01
Spiked Amount 4.000	Range 28 - 157		Recovery = 80.00%			
25) SURR6,TERPHENYL-D14	11.042	244	75357	1.43	ppm	-0.02
Spiked Amount 2.000	Range 40 - 133		Recovery = 71.50%			
Target Compounds						Qvalue
4) Phenol	4.626	94	34037	1.030	ppm	98
7) Nitrobenzene	5.454	77	59349	2.608	ppm	91
8) Naphthalene	6.133	128	217157	2.268	ppm	97
9) 2-Methylnaphthalene	6.795	142	153364	2.505	ppm	99
10) 1-Methylnaphthalene	6.891	142	141669	2.468	ppm	99
13) Acenaphthylene	7.682	152	207078	2.560	ppm	100
14) Acenaphthene	7.853	153	143144	2.449	ppm	97
15) Dibenzofuran	8.024	168	192860	2.536	ppm	94
16) Fluorene	8.366	166	147939	2.318	ppm	100
19) Hexachlorobenzene	8.906	284	53129	2.744	ppm	92
20) Phenanthrene	9.322	178	216263	2.530	ppm	97
21) Anthracene	9.370	178	219358	2.579	ppm	98
22) Fluoranthene	10.572	202	238898	2.596	ppm	95
24) Pyrene	10.850	202	239474	2.697	ppm	99
26) Benzo(a)anthracene	12.699	228	189414	2.679	ppm	99
27) Chrysene	12.763	228	189128	2.772	ppm	99
29) Benzo(b)Fluoranthene	14.910	252	152273	2.427	ppm	86
30) Benzo(k)fluoranthene	14.974	252	154117	2.234	ppm	99
31) Benzo(a)pyrene	15.642	252	137860	2.568	ppm	95
32) Indeno(1,2,3-cd)Pyrene	17.688	276	123665	3.089	ppm	88
33) Dibenz(a,h)anthracene	17.742	278	137280	2.837	ppm	95
34) Benzo(g,h,i)perylene	18.180	276	130838	2.440	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM644.D
Acq On : 23 Aug 2024 5:40 pm
Operator : EDeGray
Sample : RQ2410246-02
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 18 11:29:11 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM645.D
Acq On : 23 Aug 2024 6:08 pm
Operator : EDeGray
Sample : RQ2410246-03
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 18 11:29:14 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration

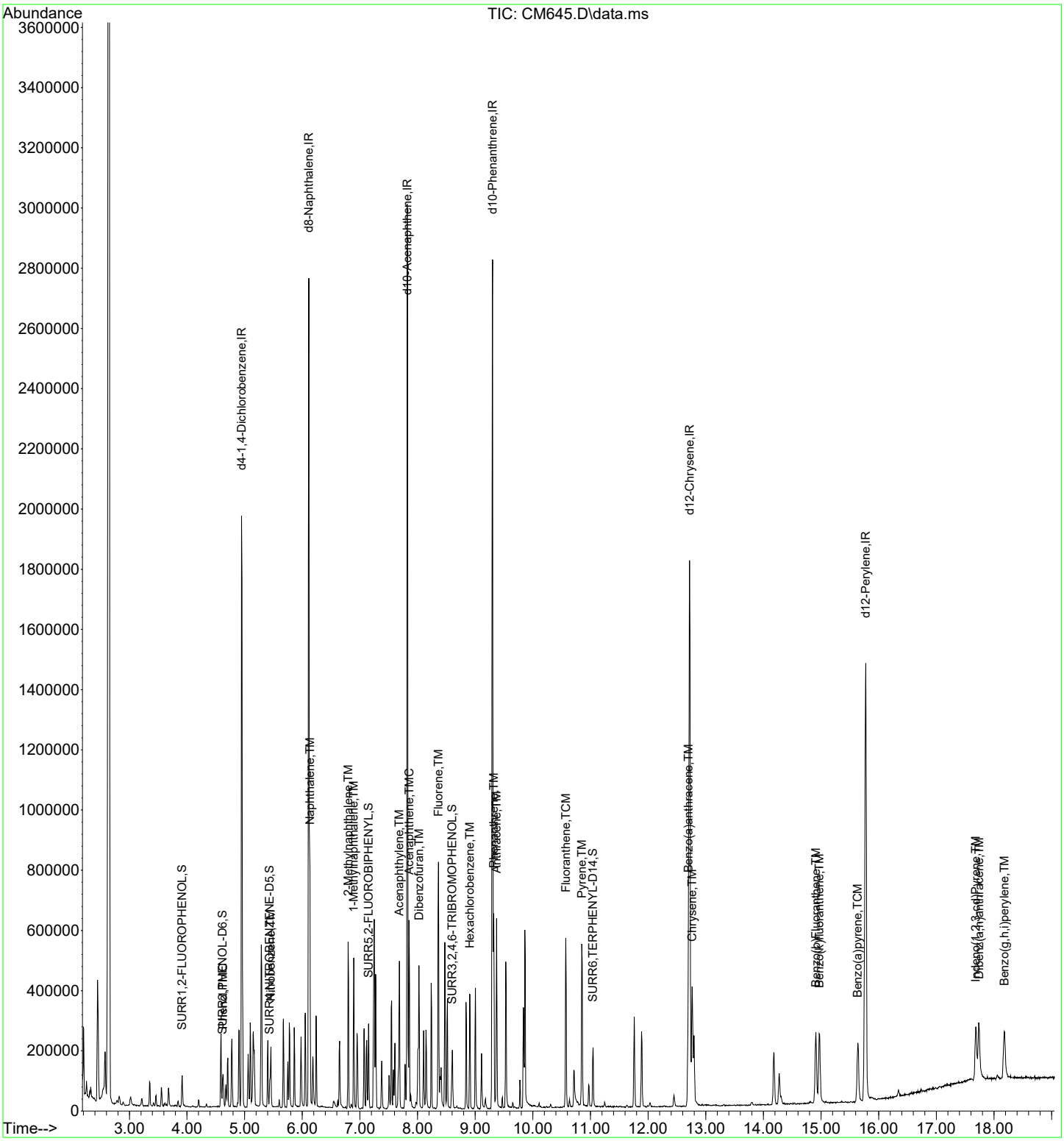
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.947	152	359807	20.00	ppm	-0.02
5) d8-Naphthalene	6.112	136	1364770	20.00	ppm	-0.02
11) d10-Acenaphthene	7.821	164	730811	20.00	ppm	-0.02
18) d10-Phenanthrene	9.301	188	1200985	20.00	ppm	-0.02
23) d12-Chrysene	12.720	240	1003354	20.00	ppm	-0.03
28) d12-Perylene	15.776	264	1018122	20.00	ppm	-0.03
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.916	112	39534	1.63	ppm	-0.02
Spiked Amount 4.000	Range 10 - 105		Recovery = 40.75%			
3) SURR2,PHENOL-D6	4.616	99	32193	1.09	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 27.25%			
6) SURR4,NITROBENZENE-D5	5.433	82	29327	1.31	ppm	-0.02
Spiked Amount 2.000	Range 37 - 117		Recovery = 65.50%			
12) SURR5,2-FLUOROBIPHENYL	7.148	172	89329	1.69	ppm	-0.02
Spiked Amount 2.000	Range 39 - 119		Recovery = 84.50%			
17) SURR3,2,4,6-TRIBROMOPH...	8.601	330	28010	3.90	ppm	-0.02
Spiked Amount 4.000	Range 28 - 157		Recovery = 97.50%			
25) SURR6,TERPHENYL-D14	11.043	244	85335	1.68	ppm	-0.02
Spiked Amount 2.000	Range 40 - 133		Recovery = 84.00%			
Target Compounds						Qvalue
4) Phenol	4.627	94	35838	1.139	ppm	98
7) Nitrobenzene	5.455	77	62422	2.868	ppm	94
8) Naphthalene	6.133	128	222919	2.435	ppm	98
9) 2-Methylnaphthalene	6.796	142	160513	2.741	ppm	99
10) 1-Methylnaphthalene	6.892	142	149778	2.728	ppm	99
13) Acenaphthylene	7.682	152	221441	2.919	ppm	98
14) Acenaphthene	7.853	153	151394	2.761	ppm	98
15) Dibenzofuran	8.024	168	203037	2.847	ppm	94
16) Fluorene	8.361	166	165677	2.767	ppm	96
19) Hexachlorobenzene	8.906	284	58341	3.107	ppm	91
20) Phenanthrene	9.322	178	244202	2.970	ppm	98
21) Anthracene	9.370	178	252785	3.090	ppm	96
22) Fluoranthene	10.573	202	268924	3.043	ppm	96
24) Pyrene	10.850	202	279625	3.266	ppm	99
26) Benzo(a)anthracene	12.699	228	210377	3.104	ppm	98
27) Chrysene	12.763	228	215110	3.288	ppm	99
29) Benzo(b)Fluoranthene	14.910	252	177721	3.004	ppm	90
30) Benzo(k)fluoranthene	14.969	252	181120	2.800	ppm	99
31) Benzo(a)pyrene	15.637	252	159389	3.149	ppm	96
32) Indeno(1,2,3-cd)Pyrene	17.683	276	144013	3.814	ppm	87
33) Dibenz(a,h)anthracene	17.742	278	156686	3.434	ppm	97
34) Benzo(g,h,i)perylene	18.180	276	148240	2.931	ppm	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM645.D
Acq On : 23 Aug 2024 6:08 pm
Operator : EDeGray
Sample : RQ2410246-03
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 18 11:29:14 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM638.D
Acq On : 23 Aug 2024 2:50 pm
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 09:53:37 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:38:49 2024
Response via : Initial Calibration

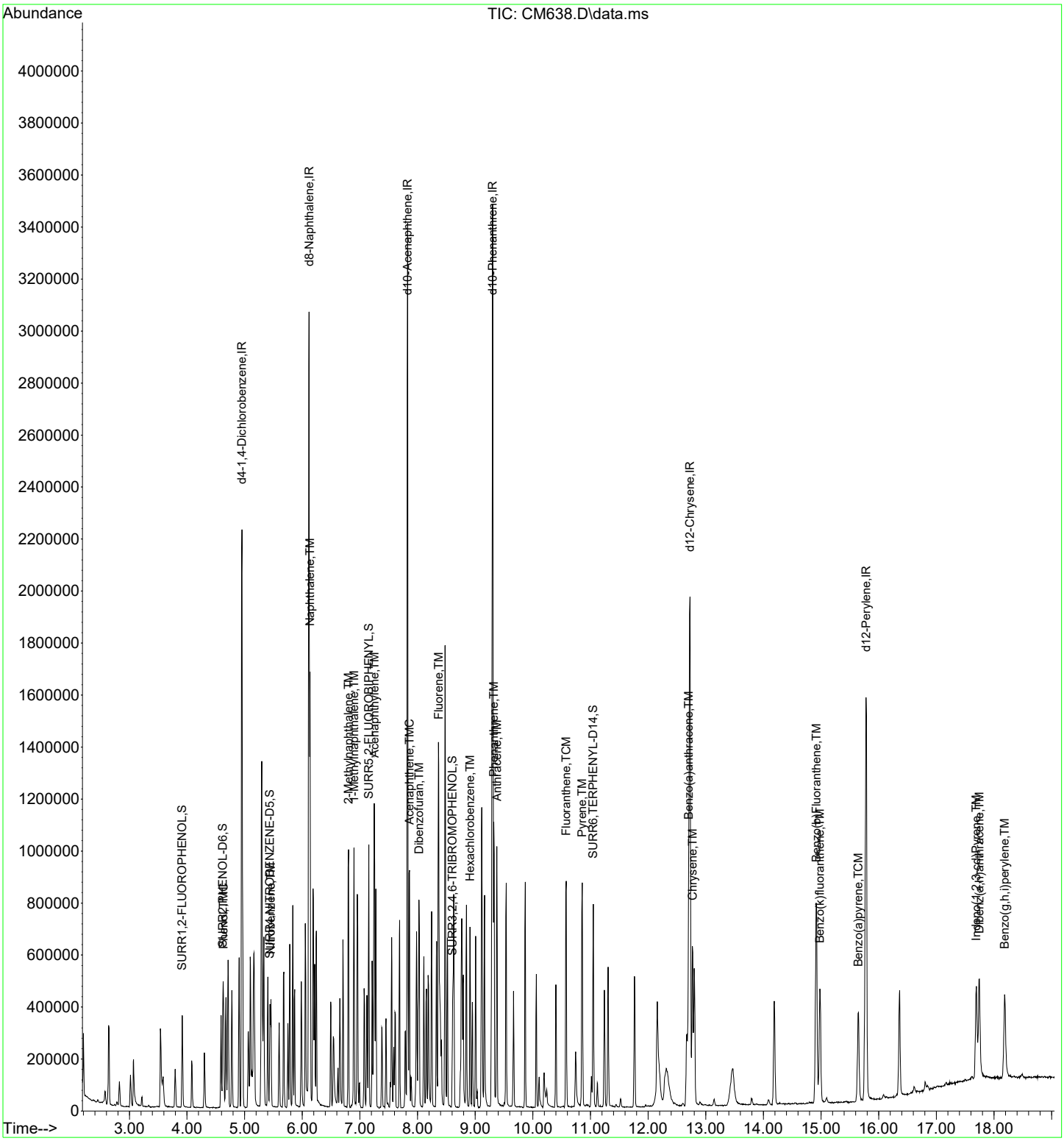
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.952	152	407864	20.00	ppm	-0.01
5) d8-Naphthalene	6.117	136	1581778	20.00	ppm	-0.01
11) d10-Acenaphthene	7.827	164	782995	20.00	ppm	-0.01
18) d10-Phenanthrene	9.301	188	1389015	20.00	ppm	-0.01
23) d12-Chrysene	12.725	240	1108250	20.00	ppm	-0.02
28) d12-Perylene	15.781	264	1106336	20.00	ppm	-0.02
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.916	112	127763	4.66	ppm	-0.02
Spiked Amount 4.000	Range 10 - 105		Recovery = 116.50%#			
3) SURR2,PHENOL-D6	4.621	99	160136	4.79	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 119.75%#			
6) SURR4,NITROBENZENE-D5	5.439	82	127535	4.91	ppm	-0.01
Spiked Amount 2.000	Range 37 - 117		Recovery = 245.50%#			
12) SURR5,2-FLUOROBIPHENYL	7.153	172	309837	5.48	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 274.00%#			
17) SURR3,2,4,6-TRIBROMOPH...	8.606	330	48294	6.27	ppm	-0.01
Spiked Amount 4.000	Range 28 - 157		Recovery = 156.75%			
25) SURR6,TERPHENYL-D14	11.048	244	306105	5.46	ppm	-0.02
Spiked Amount 2.000	Range 40 - 133		Recovery = 273.00%#			
Target Compounds						Qvalue
4) Phenol	4.632	94	164763	4.618	ppm	97
7) Nitrobenzene	5.455	77	126563	5.018	ppm	96
8) Naphthalene	6.133	128	435847	4.108	ppm	98
9) 2-Methylnaphthalene	6.801	142	309859	4.566	ppm	99
10) 1-Methylnaphthalene	6.897	142	287624	4.520	ppm	97
13) Acenaphthylene	7.250	152	97093	5.041	ppm	95
14) Acenaphthene	7.859	153	248780	4.235	ppm	96
15) Dibenzofuran	8.024	168	349064	4.568	ppm	93
16) Fluorene	8.366	166	292173	4.554	ppm	99
19) Hexachlorobenzene	8.911	284	104748	4.823	ppm	96
20) Phenanthrene	9.322	178	415603	4.487	ppm	98
21) Anthracene	9.376	178	413143	4.457	ppm	99
22) Fluoranthene	10.578	202	430568	4.326	ppm	98
24) Pyrene	10.856	202	429823	4.545	ppm	99
26) Benzo(a)anthracene	12.704	228	347276	4.717	ppm	98
27) Chrysene	12.768	228	342961	4.811	ppm	99
29) Benzo(b)Fluoranthene	14.921	252	333798	5.192	ppm	98
30) Benzo(k)fluoranthene	14.980	252	325345	4.704	ppm	98
31) Benzo(a)pyrene	15.648	252	272904	4.962	ppm	96
32) Indeno(1,2,3-cd)Pyrene	17.694	276	276911	6.749	ppm	95
33) Dibenz(a,h)anthracene	17.747	278	315445	6.363	ppm	93
34) Benzo(g,h,i)perylene	18.185	276	285752	5.200	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM638.D
Acq On : 23 Aug 2024 2:50 pm
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 09:53:37 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:38:49 2024
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM638.D
Acq On : 23 Aug 2024 2:50 pm
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 18 11:28:53 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	20.000	20.000	0.0	66	-0.02
2	S	SURR1,2-FLUOROPHENOL	5.000	4.660	6.8	61	-0.02
3	S	SURR2,PHENOL-D6	5.000	4.792	4.2	61	0.00
4	TMC	Phenol	5.000	4.618	7.6	58	0.00
5	IR	d8-Naphthalene	20.000	20.000	0.0	72	-0.01
6	S	SURR4,NITROBENZENE-D5	5.000	4.911	1.8	71	-0.02
7	TM	Nitrobenzene	5.000	5.001	-0.0	66	-0.02
8	TM	Naphthalene	5.000	4.109	17.8	65	-0.02
9	TM	2-Methylnaphthalene	5.000	4.566	8.7	69	-0.01
10	TM	1-Methylnaphthalene	5.000	4.520	9.6	70	-0.01
11	IR	d10-Acenaphthene	20.000	20.000	0.0	74	-0.01
12	S	SURR5,2-FLUOROBIPHENYL	5.000	5.478	-9.6	76	-0.01
13	TM	Acenaphthylene	5.000	4.357	12.9	68	-0.01
14	TMC	Acenaphthene	5.000	4.235	15.3	68	-0.01
15	TM	Dibenzofuran	5.000	4.568	8.6	67	-0.01
16	TM	Fluorene	5.000	4.554	8.9	66	-0.01
17	S	SURR3,2,4,6-TRIBROMOPHENOL	5.000	6.274	-25.5#	86	-0.01
18	IR	d10-Phenanthrene	20.000	20.000	0.0	74	-0.02
19	TM	Hexachlorobenzene	5.000	4.823	3.5	72	-0.01
20	TM	Phenanthrene	5.000	4.487	10.3	66	-0.02
21	TM	Anthracene	5.000	4.457	10.9	65	-0.01
22	TCM	Fluoranthene	5.000	4.326	13.5	63	-0.01
23	IR	d12-Chrysene	20.000	20.000	0.0	66	-0.03
24	TM	Pyrene	5.000	4.545	9.1	63	-0.02
25	S	SURR6,TERPHENYL-D14	5.000	5.463	-9.3	72	-0.02
26	TM	Benzo(a)anthracene	5.000	4.717	5.7	60	-0.02
27	TM	Chrysene	5.000	4.811	3.8	61	-0.03
28	IR	d12-Perylene	20.000	20.000	0.0	64	-0.02
29	TM	Benzo(b)Fluoranthene	5.000	5.193	-3.9	61	-0.03
30	TM	Benzo(k)fluoranthene	5.000	4.704	5.9	56	-0.03
31	TCM	Benzo(a)pyrene	5.000	4.962	0.8	59	-0.02
32	TM	Indeno(1,2,3-cd)Pyrene	5.000	6.749	-35.0#	71	-0.02
33	TM	Dibenz(a,h)anthracene	5.000	6.363	-27.3#	69	-0.02
34	TM	Benzo(g,h,i)perylene	5.000	5.210	-4.2	65	-0.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM638.D
Acq On : 23 Aug 2024 2:50 pm
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 18 11:28:53 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration

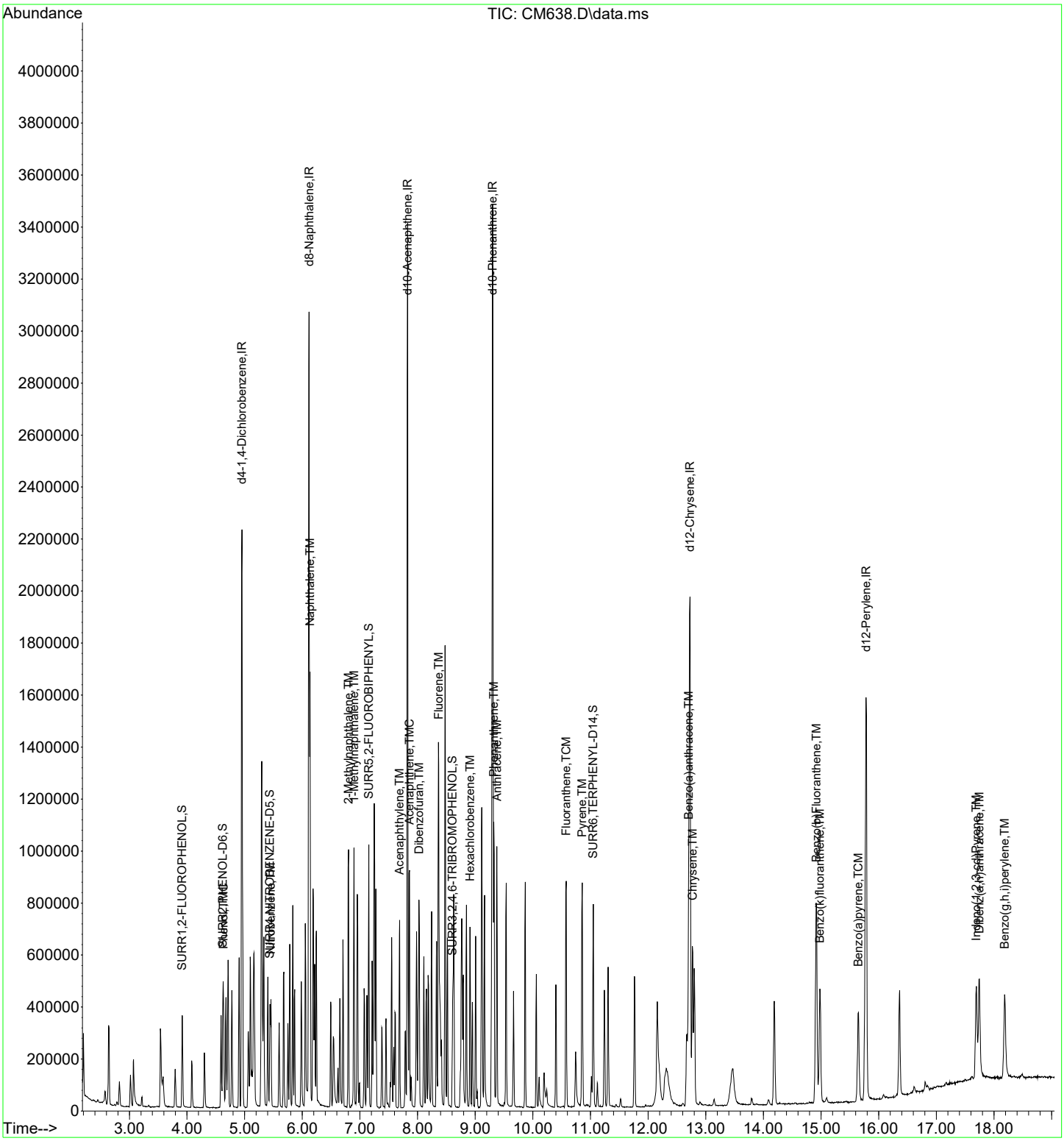
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.952	152	407864	20.00	ppm	-0.02
5) d8-Naphthalene	6.117	136	1581778	20.00	ppm	-0.01
11) d10-Acenaphthene	7.827	164	782995	20.00	ppm	-0.01
18) d10-Phenanthrene	9.301	188	1389015	20.00	ppm	-0.02
23) d12-Chrysene	12.725	240	1108250	20.00	ppm	-0.03
28) d12-Perylene	15.781	264	1106329	20.00	ppm	-0.02
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.916	112	127763	4.66	ppm	-0.02
Spiked Amount 4.000	Range 10 - 105		Recovery = 116.50%#			
3) SURR2,PHENOL-D6	4.621	99	160136	4.79	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 119.75%#			
6) SURR4,NITROBENZENE-D5	5.439	82	127535	4.91	ppm	-0.02
Spiked Amount 2.000	Range 37 - 117		Recovery = 245.50%#			
12) SURR5,2-FLUOROBIPHENYL	7.153	172	309837	5.48	ppm	-0.01
Spiked Amount 2.000	Range 39 - 119		Recovery = 274.00%#			
17) SURR3,2,4,6-TRIBROMOPH...	8.606	330	48294	6.27	ppm	-0.01
Spiked Amount 4.000	Range 28 - 157		Recovery = 156.75%			
25) SURR6,TERPHENYL-D14	11.048	244	306105	5.46	ppm	-0.02
Spiked Amount 2.000	Range 40 - 133		Recovery = 273.00%#			
Target Compounds						Qvalue
4) Phenol	4.632	94	164763	4.618	ppm	95
7) Nitrobenzene	5.455	77	126133	5.001	ppm	99
8) Naphthalene	6.133	128	435972	4.109	ppm	98
9) 2-Methylnaphthalene	6.801	142	309859	4.566	ppm	98
10) 1-Methylnaphthalene	6.897	142	287624	4.520	ppm	99
13) Acenaphthylene	7.688	152	354168	4.357	ppm	99
14) Acenaphthene	7.859	153	248780	4.235	ppm	99
15) Dibenzofuran	8.024	168	349064	4.568	ppm	96
16) Fluorene	8.366	166	292173	4.554	ppm	97
19) Hexachlorobenzene	8.911	284	104748	4.823	ppm	89
20) Phenanthrene	9.322	178	415603	4.487	ppm	97
21) Anthracene	9.376	178	413143	4.457	ppm	96
22) Fluoranthene	10.578	202	430568	4.326	ppm	96
24) Pyrene	10.856	202	429823	4.545	ppm	99
26) Benzo(a)anthracene	12.704	228	347276	4.717	ppm	97
27) Chrysene	12.768	228	342961	4.811	ppm	99
29) Benzo(b)Fluoranthene	14.921	252	333798	5.193	ppm	94
30) Benzo(k)fluoranthene	14.980	252	325345	4.704	ppm	96
31) Benzo(a)pyrene	15.648	252	272904	4.962	ppm	97
32) Indeno(1,2,3-cd)Pyrene	17.694	276	276911	6.749	ppm	91
33) Dibenz(a,h)anthracene	17.747	278	315445	6.363	ppm	96
34) Benzo(g,h,i)perylene	18.185	276	286283	5.210	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM638.D
Acq On : 23 Aug 2024 2:50 pm
Operator : EDeGray
Sample : CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 18 11:28:53 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration



GC/MS QA-QC Check Report

Tune File : I:\ACQUDATA\5973C\DATA\082324\CM637.D
Tune Time : 23 Aug 2024 2:25 pm

Daily Calibration File : I:\ACQUDATA\5973C\DATA\082324\CM638.D

(2FP)	[PHL]	(NBZ)	(FBP)	(DCB)	(NPT)	(ANT)
				407864	1581780	782995

(TPH)	(PHN)	(CRY)	(PRY)
	1389020	1108250	1106340

File	Sample	Surrogate Recovery %				Internal Standard Responses		
CM638.D								
	CCV	117*	120*	246*	274*	407864	1581778	782995
		157	273*			1389015	1108250	1106336
CM639.D								
	RQ2410364-	79	53	133*	144*	323960	1218133	716102
		167*	173*			1034410	905492	907683
CM640.D								
	RQ2410364-	74	50	118*	147*	380280	1426818	796980
		187*	171*			1240470	1060645	1048825
CM641.D								
	RQ2410364-	85	57	137*	161*	343706	1320525	735287
		189*	178*			1129822	931608	947362
CM642.D								
	R2407603-0	76	53	136*	156*	370580	1374226	794117
		199*	194*			1242017	1007076	1015934
CM643.D								
	RQ2410246-	54	34	89	102	270495	1022008	588625
		106	115			890987	746410	723789
CM644.D								
	RQ2410246-	39	25	62	74	377677	1427200	779094
		80	72			1238194	1040762	1079582
CM645.D								
	RQ2410246-	41	27	65	85	359807	1364770	730811
		97	84			1200985	1003354	1018218
CM646.D								
	R2407677-0	57	48	74	82	376226	1405806	759875
		103	86			1234012	1010570	1024414
CM647.D								
	R2407677-0	51	46	70	76	378348	1399589	792844
		82	83			1180300	1040429	1060986
CM648.D								
	R2407677-0	63	55	81	79	414463	1463866	806523
		86	86			1280538	1098234	1091672
CM649.D								
	R2407677-0	50	45	69	71	428635	1590117	894282
		76	73			1324245	1187301	1142209
CM650.D								
	R2407789-0	61	47	75	85	389418	1461876	840444
		71	93			1221006	1034015	1002452
CM651.D								

1st EDG 08/26/24
2nd BA 08/26/24

	R2407792-0	39	28	81	86	396735	1461577	808841
		87	90			1209864	1101523	1116644
CM652.D								
	R2407792-0	41	26	71	79	392847	1446585	789867
		100	84			1304187	1051273	1050781
CM653.D								
	R2407803-0	45	29	75	82	383303	1418849	799722
		88	81			1231271	1076433	1073434
CM654.D								
	R2407839-0	45	38	55	59	389094	1443782	830862
		55	65			1199656	1086653	1074264
CM655.D								
	R2407841-0	54	47	70	78	380917	1405044	754217
		105	83			1229209	1004521	1038401
CM656.D								
	R2407879-0	43	27	75	76	405655	1487381	898760
		80	90			1275564	1113070	1072901
CM657.D								
	R2407879-0	30	19	51	53	424953	1541460	891163
		54	56			1282955	1127208	1124163
CM658.D								
	RQ2410365-	51	34	80	90	375513	1358205	783327
		88	103			1111784	952207	977835
CM659.D								
	RQ2410365-	43	30	76	88	408712	1539419	822961
		100	84			1308662	1119706	1178794
CM660.D								
	RQ2410365-	50	34	79	96	374005	1430920	769390
		109	97			1226482	1028449	1044375
CM661.D								
	R2408016-0	47	30	80	89	358777	1326688	783087
		81	103			1057720	949494	956691

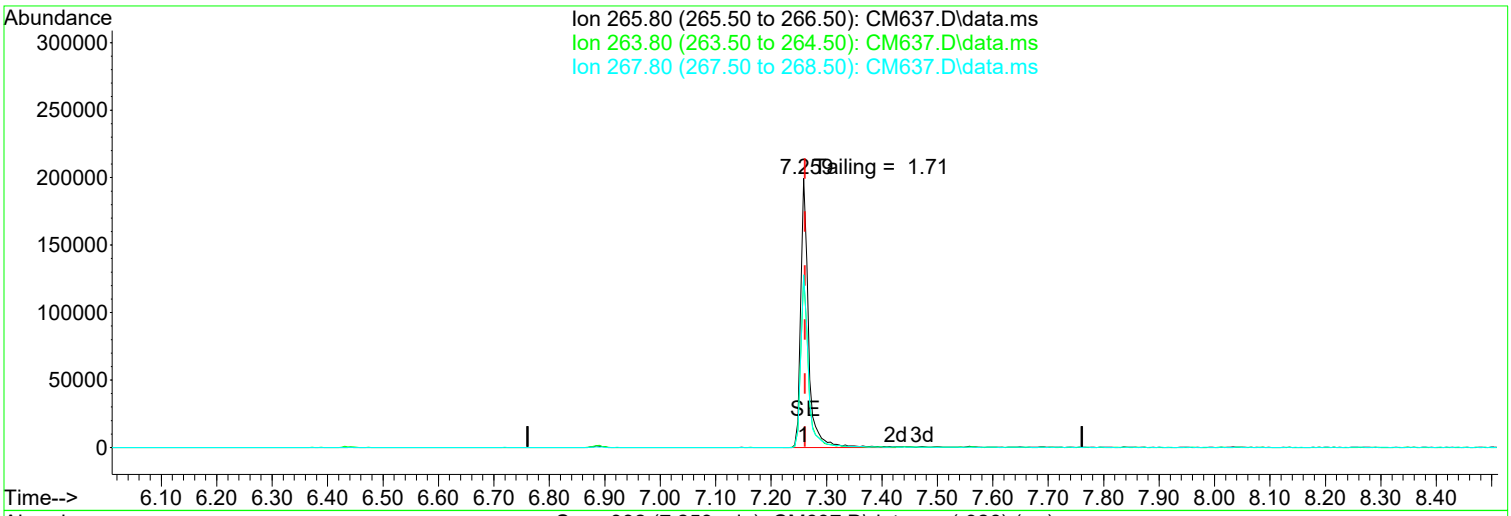
(fails) - fails 12hr time check * - fails criteria

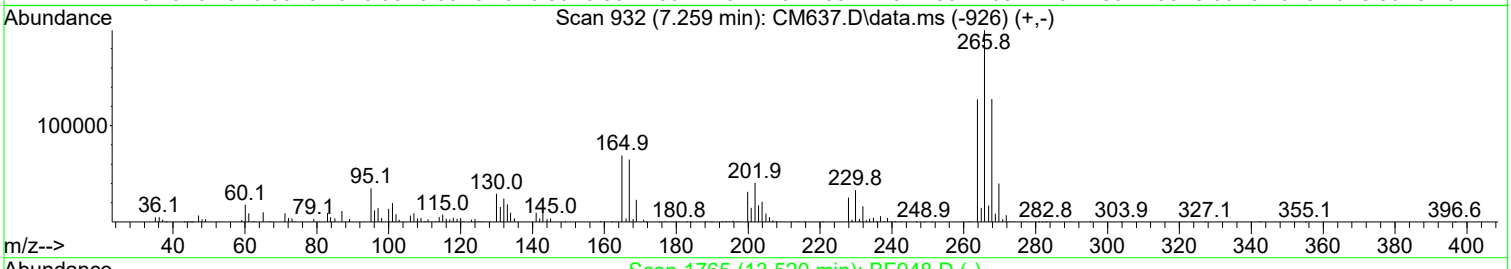
Created: Mon Aug 26 09:59:56 2024 5973C

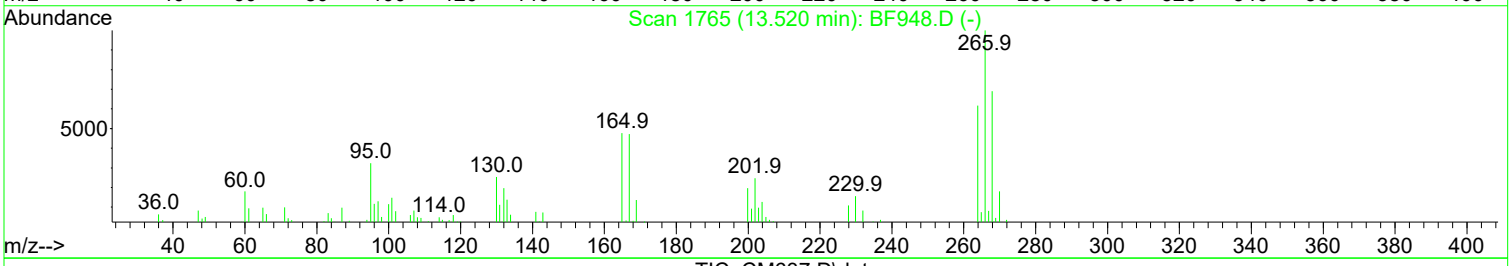
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM637.D
Acq On : 23 Aug 2024 2:25 pm
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 23 14:40:00 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\TUNE-E.m
Quant Title : TUNE CHECK
QLast Update : Thu Aug 22 14:32:14 2024
Response via : Initial Calibration







TIC: CM637.D\data.ms

(5) Pentachlorophenol (TCM)

7.259min (-0.002) 46.50 ppm

response 195737

Ion	Exp%	Act%
265.80	100.00	100.00
263.80	64.00	64.00
267.80	65.40	64.20
0.00	0.00	0.00

Manual Integration:

After

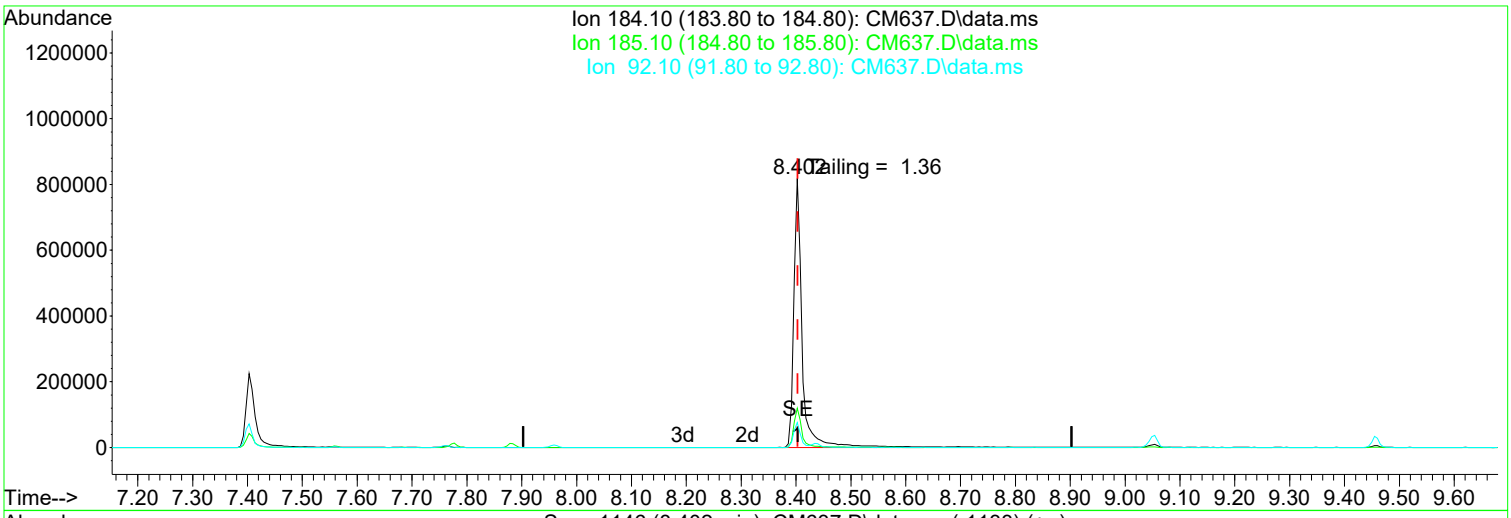
Other - Tailing

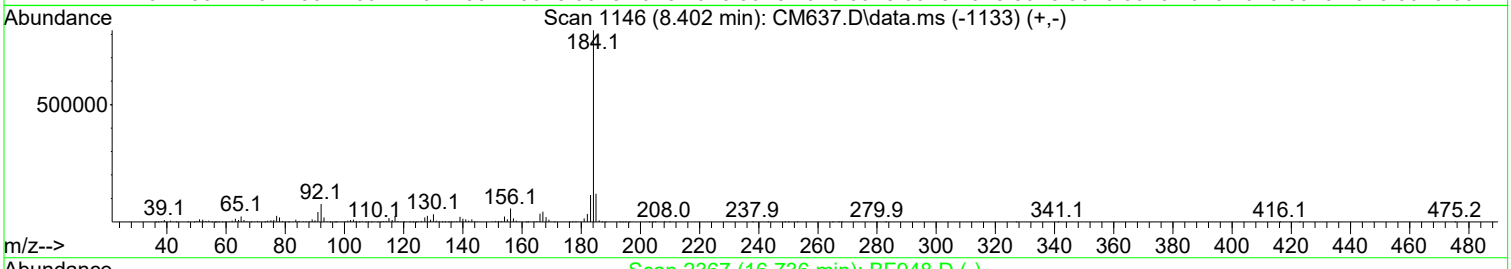
08/23/24

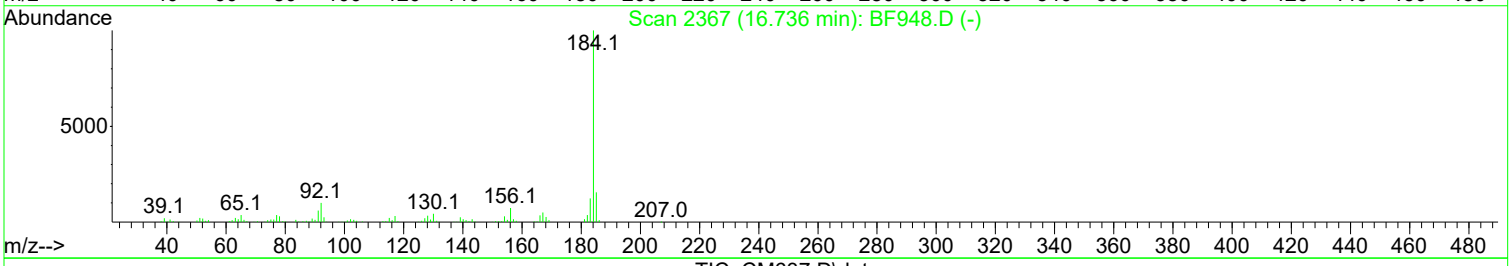
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM637.D
Acq On : 23 Aug 2024 2:25 pm
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 23 14:40:00 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\TUNE-E.m
Quant Title : TUNE CHECK
QLast Update : Thu Aug 22 14:32:14 2024
Response via : Initial Calibration







TIC: CM637.D\data.ms

(8) Benzidine (T)

8.402min (-0.001) 39.15 ppm

response 878960

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	14.20	14.68
92.10	9.80	9.29
0.00	0.00	0.00

Manual Integration:

After

Other - Tailing

08/23/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM637.D
Acq On : 23 Aug 2024 2:25 pm
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 23 14:40:00 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\TUNE-E.m
Quant Title : TUNE CHECK
QLast Update : Thu Aug 22 14:32:14 2024
Response via : Initial Calibration

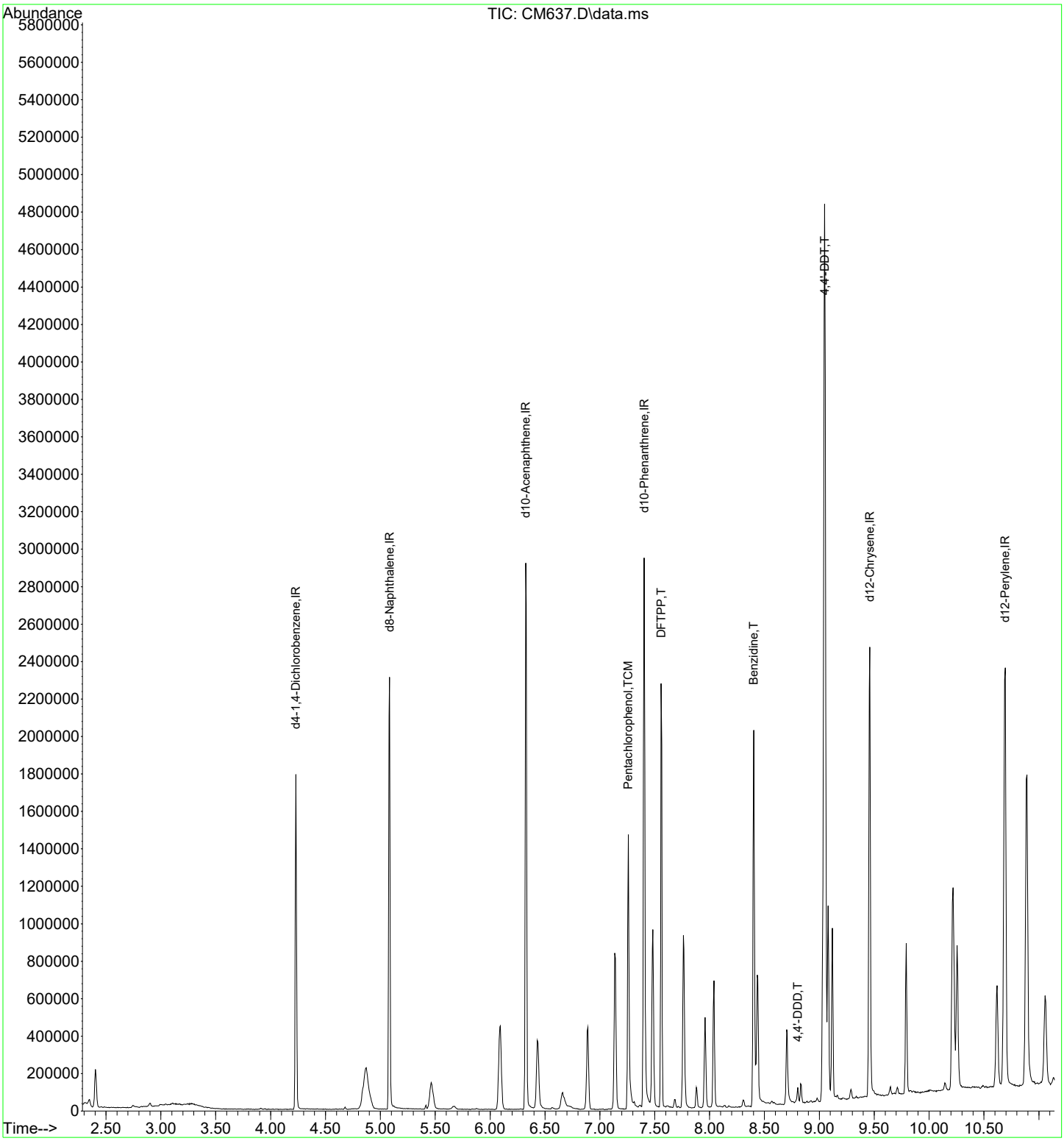
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.230	152	276378	20.00	ppm	0.00
2) d8-Naphthalene	5.085	136	1068205	20.00	ppm	0.00
3) d10-Acenaphthene	6.324	164	639099	20.00	ppm	0.00
4) d10-Phenanthrene	7.403	188	975125	20.00	ppm	0.00
7) d12-Chrysene	9.460	240	848905	20.00	ppm	0.00
12) d12-Perylene	10.694	264	1132002	20.00	ppm	-0.19
Target Compounds						Qvalue
5) Pentachlorophenol	7.259	266	195737	46.499	ppm	99
6) DFTPP	7.558	198	213304	40.600	ppm	96
8) Benzidine	8.402	184	878960	39.146	ppm	99
9) 4,4'-DDE	8.039	246	106	N.D.		
10) 4,4'-DDD	8.803	235	13420	1.111	ppm	91
11) 4,4'-DDT	9.049	235	475126	45.912	ppm	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM637.D
Acq On : 23 Aug 2024 2:25 pm
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 23 14:40:00 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\TUNE-E.m
Quant Title : TUNE CHECK
QLast Update : Thu Aug 22 14:32:14 2024
Response via : Initial Calibration

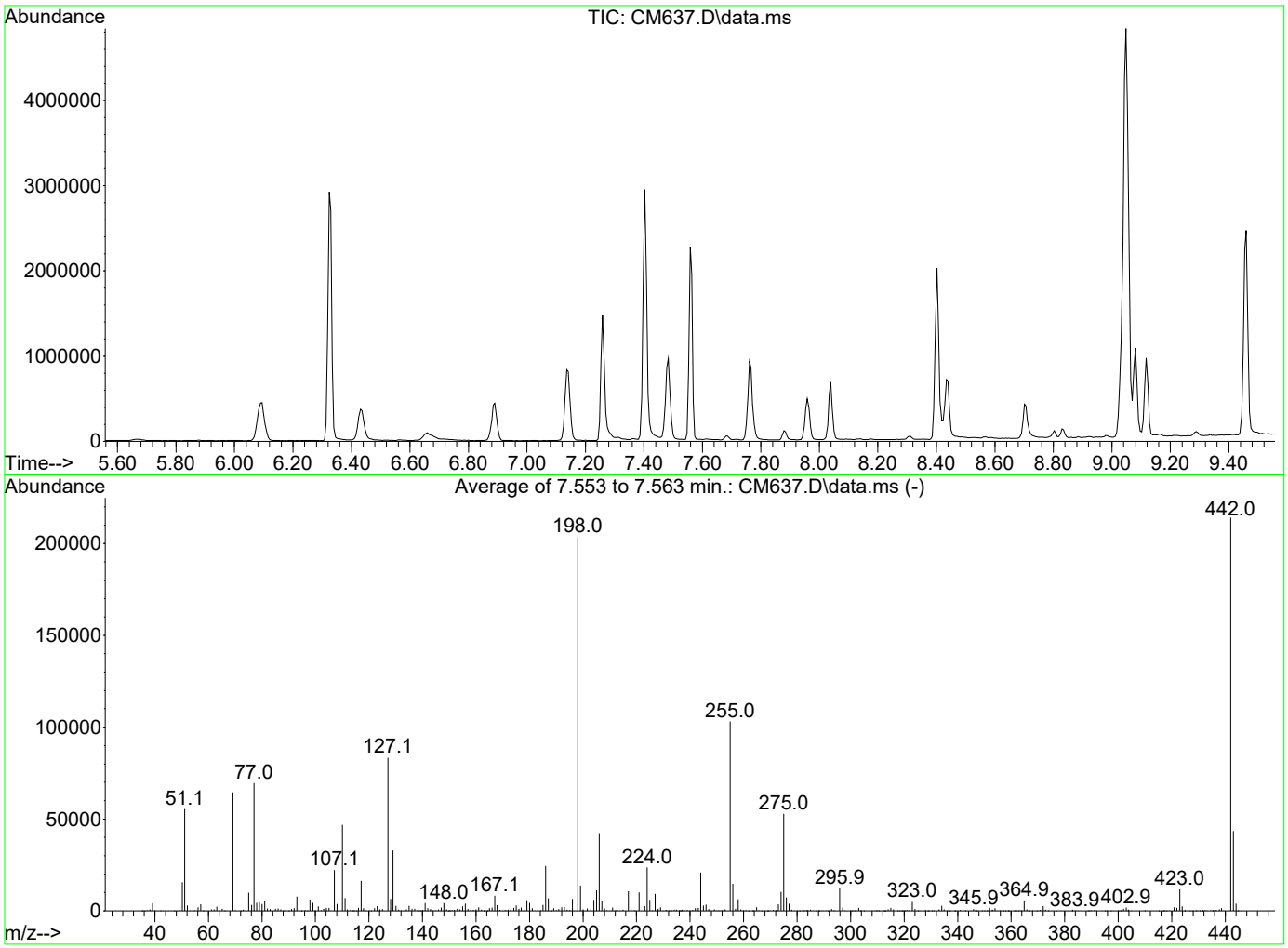


1st EDG 08/26/24
2nd BA 08/26/24

Data Path : I:\ACQUDATA\5973C\DATA\082324\
Data File : CM637.D
Acq On : 23 Aug 2024 2:25 pm
Operator : EDeGray
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : I:\ACQUDATA\5973C\METHODS\TUNE-E.m
Title : TUNE CHECK
Last Update : Thu Aug 22 14:32:14 2024



Spectrum Information: Average of 7.553 to 7.563 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	31.7	64463	PASS
70	69	0.00	2	0.5	345	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	203581	PASS
199	198	5	9	6.8	13797	PASS
365	198	1	200	2.8	5736	PASS
441	443	0.01	150	92.5	40264	PASS
442	442	100	100	100.0	214128	PASS
443	442	15	24	20.3	43515	PASS

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM486phenol.D
Acq On : 12 Aug 2024 7:41 pm
Operator : B.Allgeier
Sample : ICV
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 13:14:40 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 13:14:38 2024
Response via : Initial Calibration

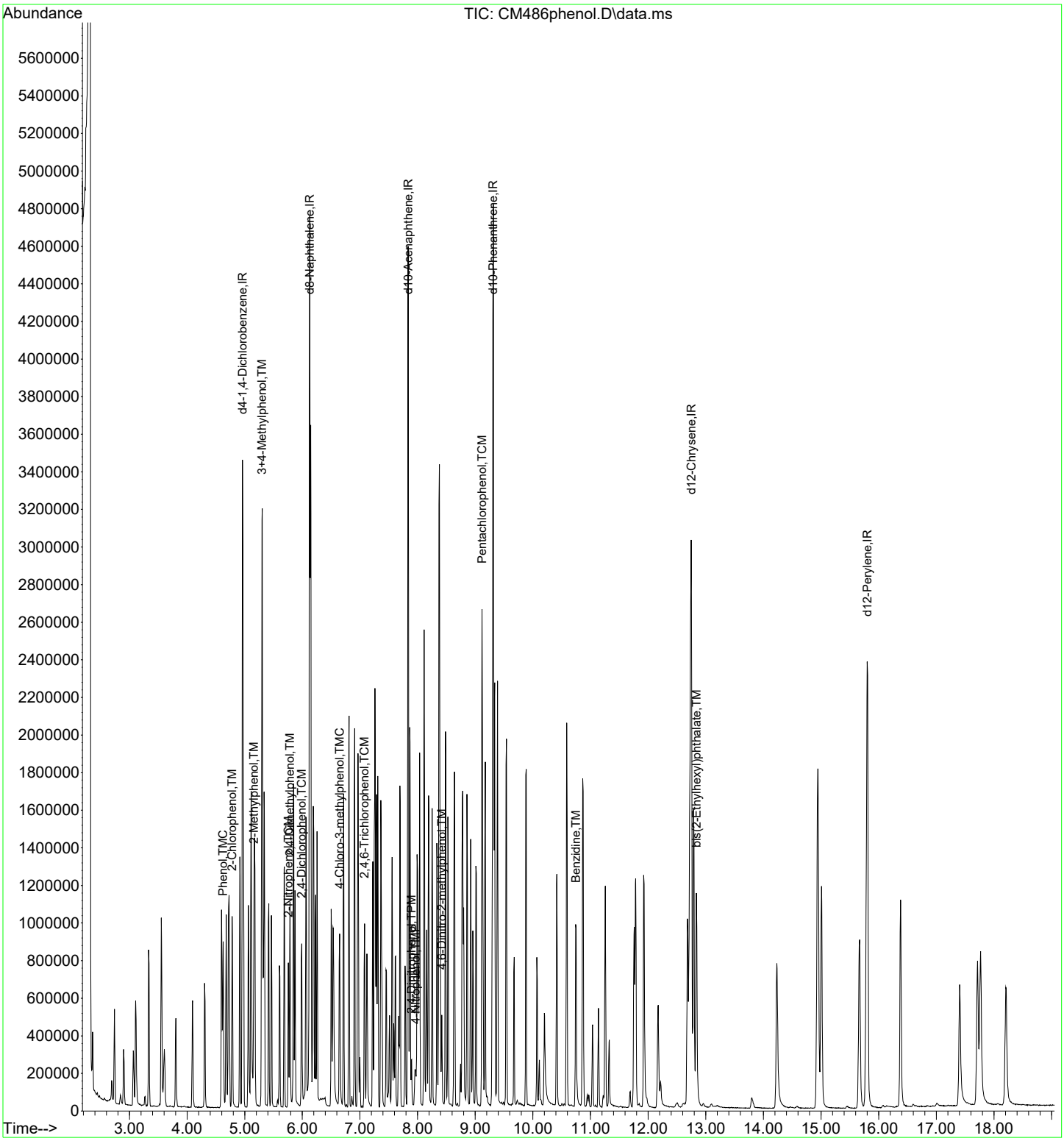
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.963	152	589730	20.00	ppm		0.00
8) d8-Naphthalene	6.128	136	2165623	20.00	ppm		0.00
14) d10-Acenaphthene	7.837	164	1066296	20.00	ppm		0.00
20) d10-Phenanthrene	9.312	188	1839473	20.00	ppm		0.00
23) d12-Chrysene	12.747	240	1690123	20.00	ppm		0.00
27) d12-Perylene	15.802	264	1732550	20.00	ppm		0.00
System Monitoring Compounds							
2) SURR1,2-FLUOROPHENOL	0.000	112	0d	0.00	ppm		
Spiked Amount 4.000	Range 10 - 105		Recovery =	0.00%#			
3) SURR2,PHENOL-D6	0.000	99	0d	0.00	ppm		
Spiked Amount 4.000	Range 10 - 107		Recovery =	0.00%#			
9) SURR4,NITROBENZENE-D5	0.000	82	0d	0.00	ppm		
Spiked Amount 2.000	Range 37 - 117		Recovery =	0.00%#			
16) SURR5,2-FLUOROBIPHENYL	0.000	172	0d	0.00	ppm		
Spiked Amount 2.000	Range 39 - 119		Recovery =	0.00%#			
19) SURR3,2,4,6-TRIBROMOPH...	0.000	330	0	0.00	ppm		
Spiked Amount 4.000	Range 28 - 157		Recovery =	0.00%#			
25) SURR6,TERPHENYL-D14	0.000	244	0d	0.00	ppm		
Spiked Amount 2.000	Range 40 - 133		Recovery =	0.00%#			
Target Compounds							Qvalue
4) Phenol	4.626	94	396053	7.678	ppm		79
5) 2-Chlorophenol	4.781	128	329452	7.569	ppm		99
6) 2-Methylphenol	5.161	108	295923	7.735	ppm		99
7) 3+4-Methylphenol	5.299	108	278180	7.992	ppm	#	72
10) 2-Nitrophenol	5.759	139	166713	8.303	ppm		92
11) 2,4-Dimethylphenol	5.786	107	249285	6.137	ppm		97
12) 2,4-Dichlorophenol	5.989	162	227019	7.883	ppm		98
13) 4-Chloro-3-methylphenol	6.646	107	255418	7.700	ppm		99
15) 2,4,6-Trichlorophenol	7.078	196	159097	8.081	ppm		97
17) 2,4-Dinitrophenol	7.896	184	48946	7.802	ppm		90
18) 4-Nitrophenol	7.965	65	94882m	7.850	ppm		
21) 4,6-Dinitro-2-methylph...	8.419	198	73580	7.981	ppm		94
22) Pentachlorophenol	9.119	266	87584	7.166	ppm		98
24) Benzidine	10.749	184	541176	10.542	ppm		99
26) bis(2-Ethylhexyl)phtha...	12.837	149	584820	7.934	ppm		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM486phenol.D
Acq On : 12 Aug 2024 7:41 pm
Operator : B.Allgeier
Sample : ICV
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 13:14:40 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 13:14:38 2024
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM486phenol.D
Acq On : 12 Aug 2024 7:41 pm
Operator : B.Allgeier
Sample : ICV
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 13:14:40 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 13:14:38 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

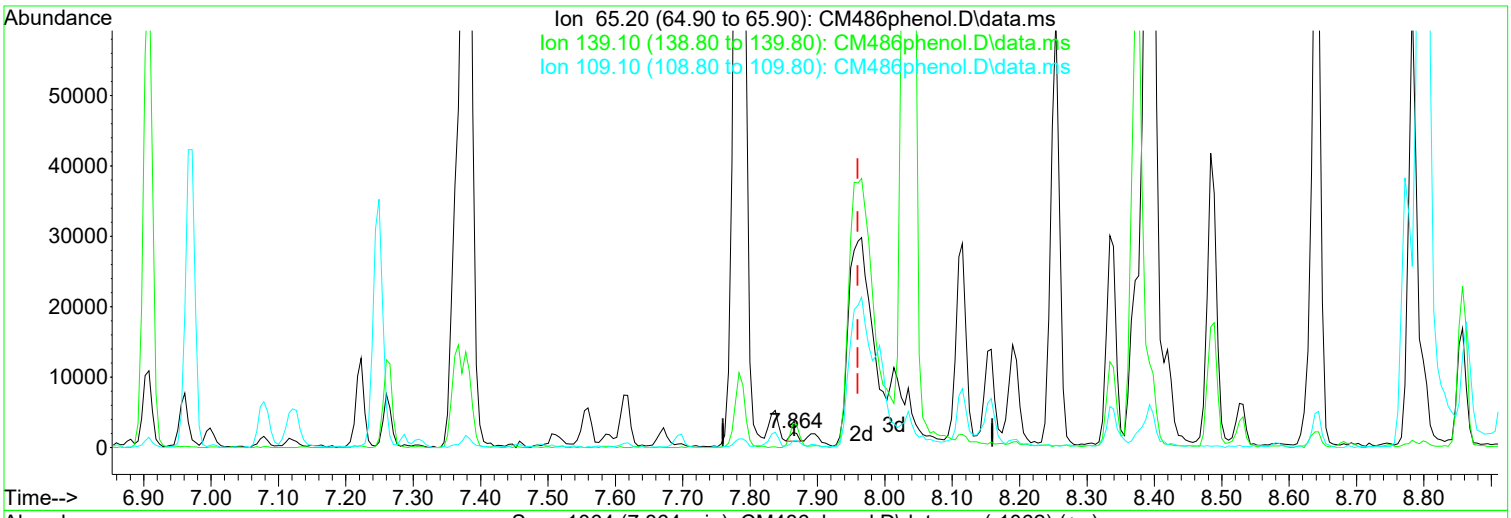
		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	20.000	20.000	0.0	90	0.00
2	S	SURR1,2-FLUOROPHENOL	8.000	0.000	100.0#	0	-3.93#
3	S	SURR2,PHENOL-D6	8.000	0.000	100.0#	0	-4.62#
4	TMC	Phenol	8.000	7.678	4.0	84	0.00
5	TM	2-Chlorophenol	8.000	7.569	5.4	83	0.00
6	TM	2-Methylphenol	8.000	7.735	3.3	88	0.00
7	TM	3+4-Methylphenol	8.000	7.992	0.1	101	0.00
8	IR	d8-Naphthalene	20.000	20.000	0.0	95	0.00
9	S	SURR4,NITROBENZENE-D5	8.000	0.000	100.0#	0	-5.45#
10	TCM	2-Nitrophenol	8.000	8.303	-3.8	91	0.00
11	TM	2,4-Dimethylphenol	8.000	6.137	23.3#	86	0.00
12	TCM	2,4-Dichlorophenol	8.000	7.883	1.5	99	0.00
13	TMC	4-Chloro-3-methylphenol	8.000	7.700	3.7	84	0.00
14	IR	d10-Acenaphthene	20.000	20.000	0.0	94	0.00
15	TCM	2,4,6-Trichlorophenol	8.000	8.081	-1.0	84	0.00
16	S	SURR5,2-FLUOROBIPHENYL	8.000	0.000	100.0#	0	-7.16#
17	TPM	2,4-Dinitrophenol	8.000	7.802	2.5	88	0.00
18	TMP	4-Nitrophenol	8.000	7.850	1.9	89	0.00
19	S	SURR3,2,4,6-TRIBROMOPHENOL	8.000	0.000	100.0#	0	-8.62#
20	IR	d10-Phenanthrene	20.000	20.000	0.0	95	0.00
21	TM	4,6-Dinitro-2-methylphenol	8.000	7.981	0.2	94	0.00
22	TCM	Pentachlorophenol	8.000	7.166	10.4	75	0.00
23	IR	d12-Chrysene	20.000	20.000	0.0	98	0.00
24	TM	Benzidine	8.000	10.542	-31.8#	132	0.00
25	S	SURR6,TERPHENYL-D14	8.000	0.000	100.0#	0	-11.06#
26	TM	bis(2-Ethylhexyl)phthalate	8.000	7.934	0.8	94	0.00
27	IR	d12-Perylene	20.000	20.000	0.0	99	0.00

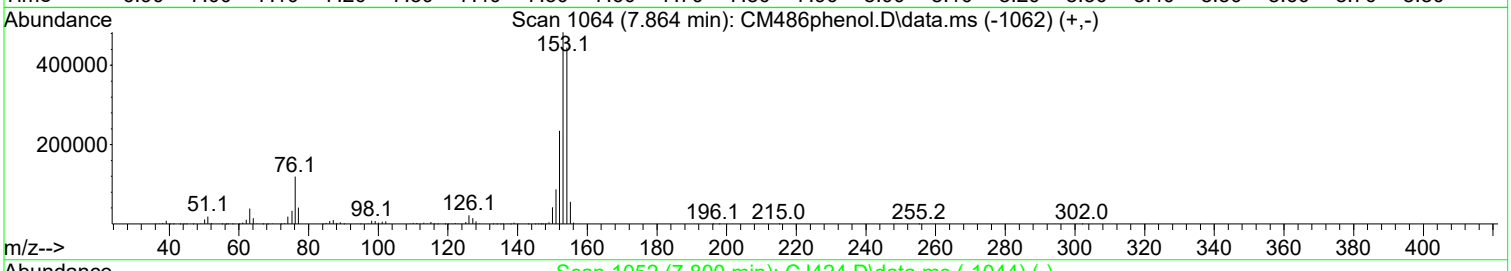
(#) = Out of Range SPCC's out = 0 CCC's out = 0

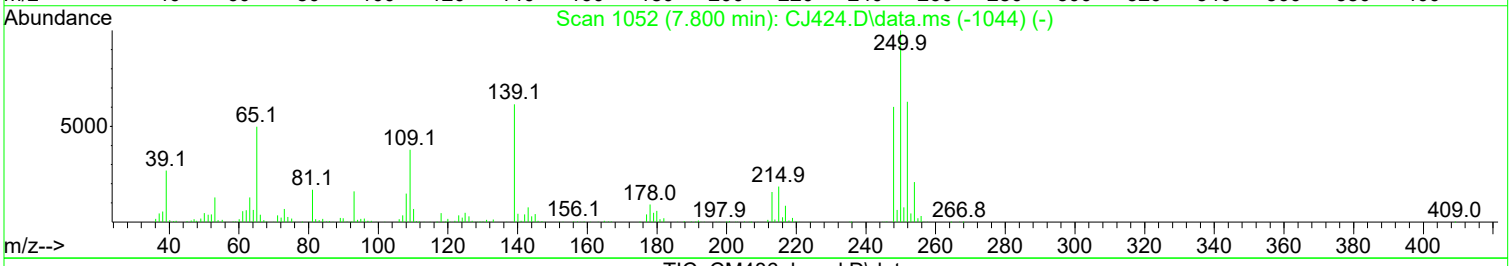
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM486phenol.D
Acq On : 12 Aug 2024 7:41 pm
Operator : B.Allgeier
Sample : ICV
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 13:13:29 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 12:30:36 2024
Response via : Initial Calibration







TIC: CM486phenol.D\data.ms

(18) 4-Nitrophenol (TMP)

7.864min (-0.096) 0.52 ppm

response 971

Ion	Exp%	Act%
65.20	100.00	100.00
139.10	250.30	258.58
109.10	57.10	58.24
0.00	0.00	0.00

Manual Integration:

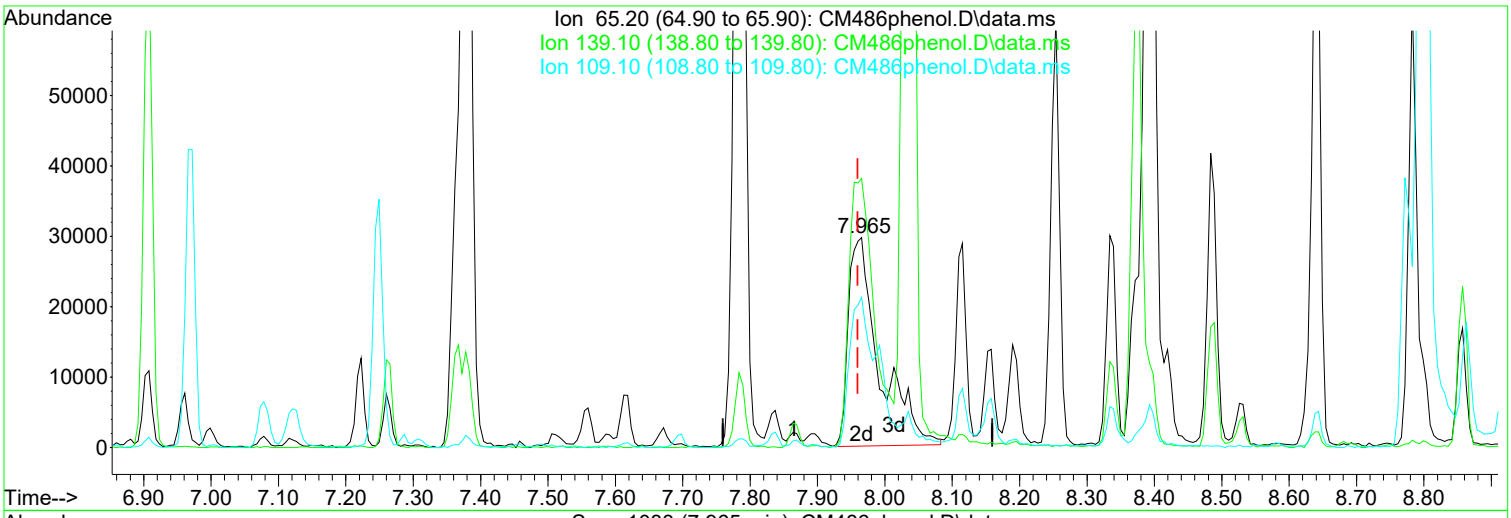
Before

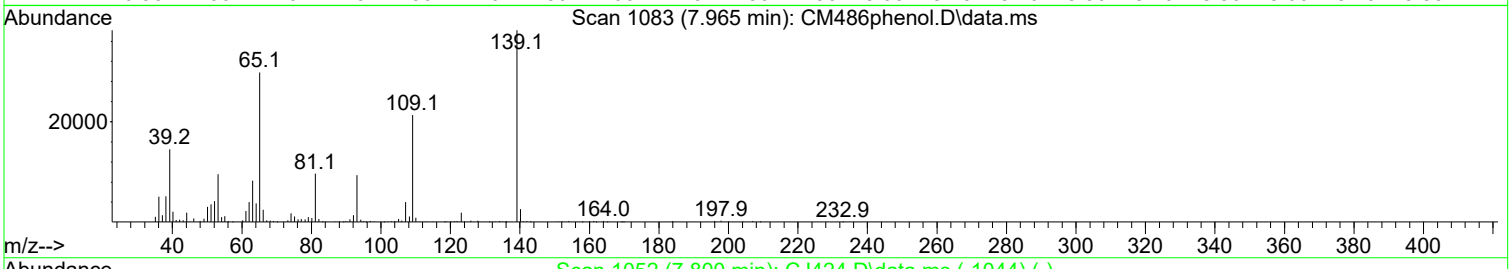
08/26/24

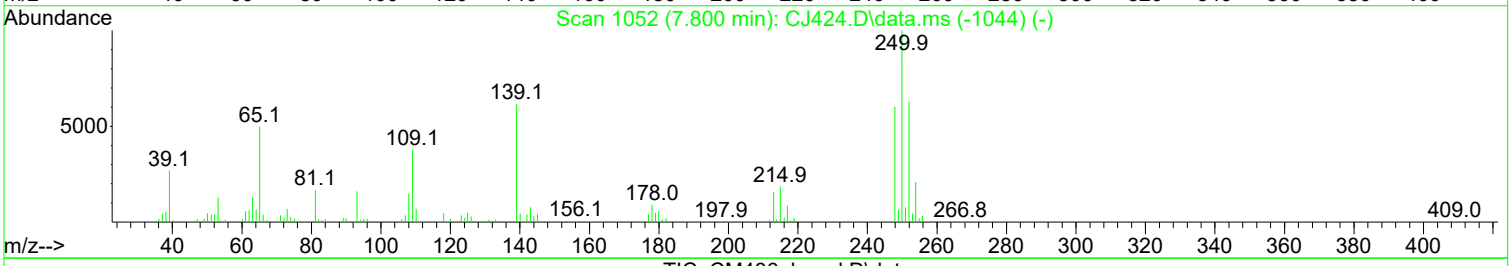
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM486phenol.D
Acq On : 12 Aug 2024 7:41 pm
Operator : B.Allgeier
Sample : ICV
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 26 13:14:40 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 13:14:38 2024
Response via : Initial Calibration







TIC: CM486phenol.D\data.ms

(18) 4-Nitrophenol (TMP)

7.965min (+ 0.005) 7.85 ppm m

response 94882

Ion	Exp%	Act%
65.20	100.00	100.00
139.10	250.30	128.19#
109.10	57.10	71.60
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/26/24

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM486.D
Acq On : 12 Aug 2024 7:41 pm
Operator : B.Allgeier
Sample : ICV
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 04 10:22:41 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	20.000	20.000	0.0	90	0.00
2	S	SURR1,2-FLUOROPHENOL	8.000	0.000	100.0#	0	-3.93#
3	S	SURR2,PHENOL-D6	8.000	0.000	100.0#	0	-4.62#
4	TMC	Phenol	8.000	7.678	4.0	84	0.00
5	IR	d8-Naphthalene	20.000	20.000	0.0	95	0.00
6	S	SURR4,NITROBENZENE-D5	8.000	0.000	100.0#	0	-5.45#
7	TM	Nitrobenzene	8.000	8.916	-11.5	91	0.00
8	TM	Naphthalene	8.000	6.212	22.4#	89	0.00
9	TM	2-Methylnaphthalene	8.000	6.707	16.2	99	0.00
10	TM	1-Methylnaphthalene	8.000	6.463	19.2	98	0.00
11	IR	d10-Acenaphthene	20.000	20.000	0.0	94	0.00
12	S	SURR5,2-FLUOROBIPHENYL	8.000	0.000	100.0#	0	-7.16#
13	TM	Acenaphthylene	8.000	7.422	7.2	99	0.00
14	TMC	Acenaphthene	8.000	6.632	17.1	90	0.00
15	TM	Dibenzofuran	8.000	7.369	7.9	89	0.00
16	TM	Fluorene	8.000	6.946	13.2	88	0.00
17	S	SURR3,2,4,6-TRIBROMOPHENOL	8.000	0.000	100.0#	0	-8.62#
18	IR	d10-Phenanthrene	20.000	20.000	0.0	95	0.00
19	TM	Hexachlorobenzene	8.000	7.143	10.7	87	0.00
20	TM	Phenanthrene	8.000	7.373	7.8	88	0.00
21	TM	Anthracene	8.000	7.735	3.3	91	0.00
22	TCM	Fluoranthene	8.000	7.523	6.0	91	0.00
23	IR	d12-Chrysene	20.000	20.000	0.0	98	0.00
24	TM	Pyrene	8.000	6.379	20.3#	92	0.00
25	S	SURR6,TERPHENYL-D14	8.000	0.000	100.0#	0	-11.06#
26	TM	Benzo(a)anthracene	8.000	7.724	3.4	94	0.00
27	TM	Chrysene	8.000	7.527	5.9	92	0.00
28	IR	d12-Perylene	20.000	20.000	0.0	99	0.00
29	TM	Benzo(b)Fluoranthene	8.000	8.288	-3.6	98	0.00
30	TM	Benzo(k)fluoranthene	8.000	7.662	4.2	94	0.00
31	TCM	Benzo(a)pyrene	8.000	8.237	-3.0	99	0.00
32	TM	Indeno(1,2,3-cd)Pyrene	8.000	9.119	-14.0	96	0.00
33	TM	Dibenz(a,h)anthracene	8.000	8.320	-4.0	91	0.00
34	TM	Benzo(g,h,i)perylene	8.000	6.395	20.1#	86	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM486.D
Acq On : 12 Aug 2024 7:41 pm
Operator : B.Allgeier
Sample : ICV
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 04 10:22:41 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration

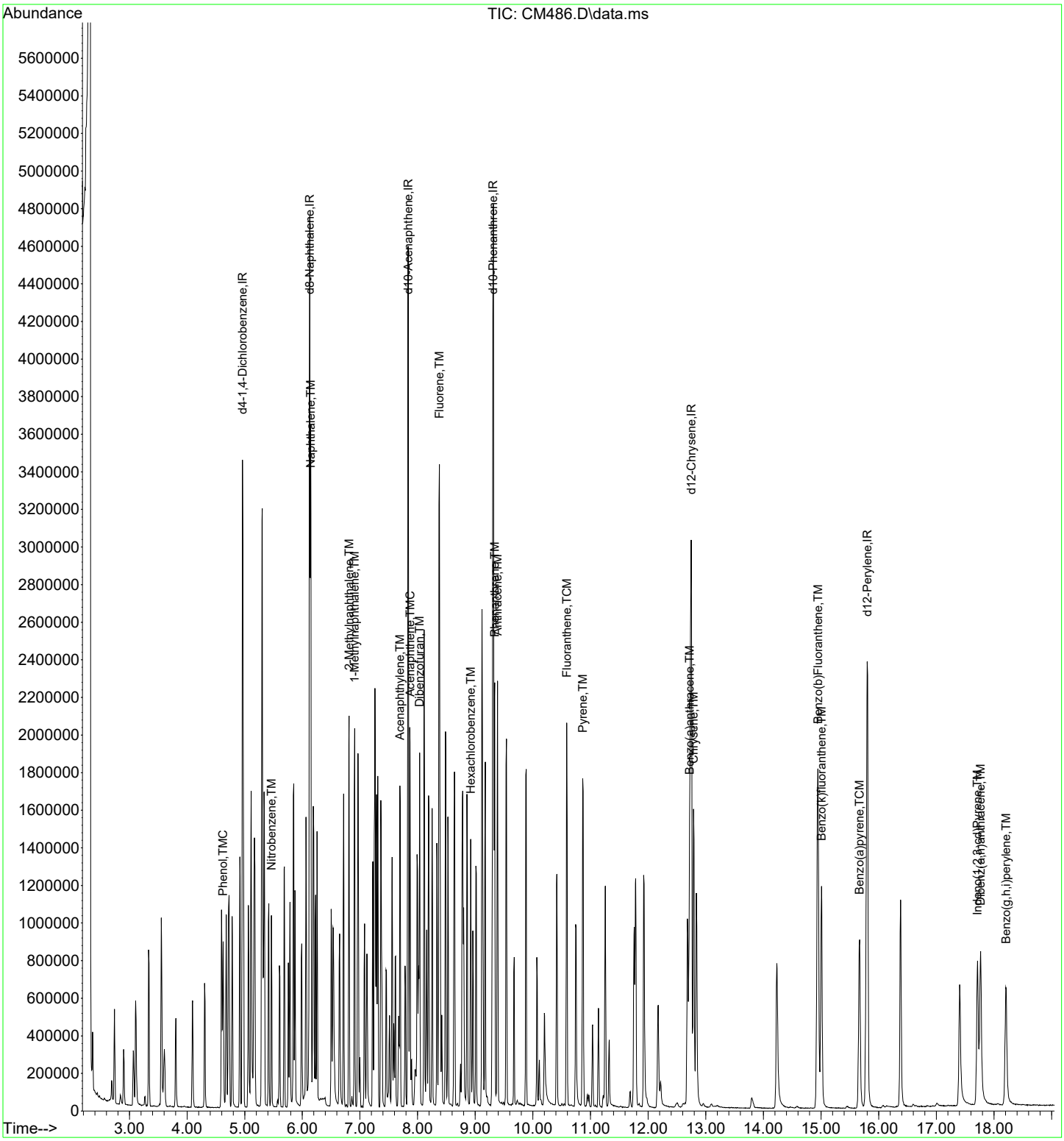
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	589730	20.00	ppm	0.00
5) d8-Naphthalene	6.128	136	2165623	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1066296	20.00	ppm	0.00
18) d10-Phenanthrene	9.312	188	1839473	20.00	ppm	0.00
23) d12-Chrysene	12.747	240	1690123	20.00	ppm	0.00
28) d12-Perylene	15.802	264	1732550	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	0.000	112	0d	0.00	ppm	
Spiked Amount 4.000	Range 10 - 105		Recovery =	0.00%#		
3) SURR2,PHENOL-D6	0.000	99	0d	0.00	ppm	
Spiked Amount 4.000	Range 10 - 107		Recovery =	0.00%#		
6) SURR4,NITROBENZENE-D5	0.000	82	0d	0.00	ppm	
Spiked Amount 2.000	Range 37 - 117		Recovery =	0.00%#		
12) SURR5,2-FLUOROBIPHENYL	0.000	172	0d	0.00	ppm	
Spiked Amount 2.000	Range 39 - 119		Recovery =	0.00%#		
17) SURR3,2,4,6-TRIBROMOPH...	0.000	330	0	0.00	ppm	
Spiked Amount 4.000	Range 28 - 157		Recovery =	0.00%#		
25) SURR6,TERPHENYL-D14	0.000	244	0d	0.00	ppm	
Spiked Amount 2.000	Range 40 - 133		Recovery =	0.00%#		
Target Compounds						Qvalue
4) Phenol	4.626	94	396053	7.678	ppm	97
7) Nitrobenzene	5.465	77	307907	8.916	ppm	99
8) Naphthalene	6.149	128	902450	6.212	ppm	98
9) 2-Methylnaphthalene	6.811	142	623169	6.707	ppm	99
10) 1-Methylnaphthalene	6.907	142	563049	6.463	ppm	98
13) Acenaphthylene	7.693	152	821648	7.422	ppm	99
14) Acenaphthene	7.869	153	530540	6.632	ppm	99
15) Dibenzofuran	8.035	168	766832	7.369	ppm	97
16) Fluorene	8.377	166	606860	6.946	ppm	99
19) Hexachlorobenzene	8.922	284	205449	7.143	ppm	97
20) Phenanthrene	9.338	178	863736	7.373	ppm	99
21) Anthracene	9.386	178	906186	7.735	ppm	99
22) Fluoranthene	10.588	202	931308	7.523	ppm	99
24) Pyrene	10.866	202	920024	6.379	ppm	98
26) Benzo(a)anthracene	12.720	228	848588	7.724	ppm	99
27) Chrysene	12.789	228	801256	7.527	ppm	99
29) Benzo(b)Fluoranthene	14.948	252	834316	8.288	ppm	97
30) Benzo(k)fluoranthene	15.006	252	811235	7.662	ppm	100
31) Benzo(a)pyrene	15.669	252	709537	8.237	ppm	100
32) Indeno(1,2,3-cd)Pyrene	17.715	276	585870	9.119	ppm	98
33) Dibenz(a,h)anthracene	17.768	278	645971	8.320	ppm	98
34) Benzo(g,h,i)perylene	18.212	276	550310	6.395	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM486.D
Acq On : 12 Aug 2024 7:41 pm
Operator : B.Allgeier
Sample : ICV
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 04 10:22:41 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Wed Sep 04 10:22:14 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM485phenol.D
Acq On : 12 Aug 2024 7:12 pm
Operator : B.Allgeier
Sample : 15 STD
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 26 11:35:33 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration

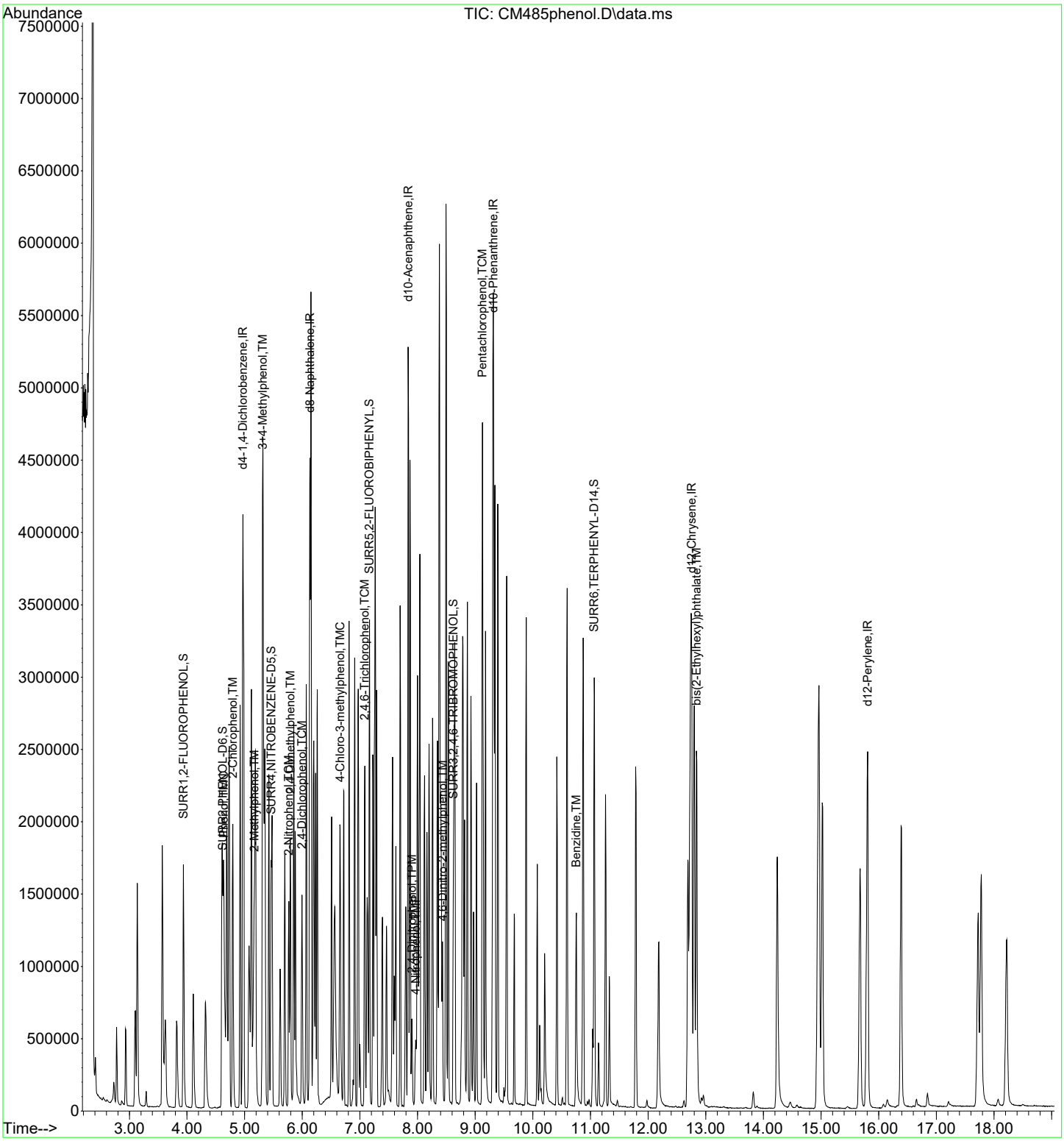
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.968	152	676581	20.00	ppm		0.00
8) d8-Naphthalene	6.133	136	2345151	20.00	ppm		0.00
14) d10-Acenaphthene	7.837	164	1279405	20.00	ppm		0.00
20) d10-Phenanthrene	9.317	188	1979860	20.00	ppm		0.00
23) d12-Chrysene	12.752	240	1735935	20.00	ppm		0.00
27) d12-Perylene	15.808	264	1754099	20.00	ppm		0.00
System Monitoring Compounds							
2) SURR1,2-FLUOROPHENOL	3.937	112	694439	15.27	ppm		0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 381.75%#				
3) SURR2,PHENOL-D6	4.621	99	787347	14.20	ppm		0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 355.00%#				
9) SURR4,NITROBENZENE-D5	5.460	82	648328	16.86	ppm		0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 843.00%#				
16) SURR5,2-FLUOROBIPHENYL	7.164	172	1045722	10.87	ppm		0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 543.50%#				
19) SURR3,2,4,6-TRIBROMOPH...	8.623	330	187796	14.93	ppm		0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 373.25%#				
25) SURR6,TERPHENYL-D14	11.064	244	1169748	13.51	ppm		0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 675.50%#				
Target Compounds							Qvalue
4) Phenol	4.637	94	897464	15.165	ppm		75
5) 2-Chlorophenol	4.792	128	739686	14.807	ppm		95
6) 2-Methylphenol	5.166	108	527210	11.990	ppm		97
7) 3+4-Methylphenol	5.310	108	413121	10.355	ppm	#	48
10) 2-Nitrophenol	5.764	139	346520	15.937	ppm		96
11) 2,4-Dimethylphenol	5.791	107	484827	11.021	ppm		98
12) 2,4-Dichlorophenol	5.994	162	406734	13.054	ppm		98
13) 4-Chloro-3-methylphenol	6.657	107	589988	16.428	ppm		97
15) 2,4,6-Trichlorophenol	7.084	196	386537	16.364	ppm		97
17) 2,4-Dinitrophenol	7.901	184	125867	19.969	ppm		86
18) 4-Nitrophenol	7.965	65	218948m	22.655	ppm		
21) 4,6-Dinitro-2-methylph...	8.436	198	178789	20.538	ppm		83
22) Pentachlorophenol	9.125	266	215705	16.398	ppm		97
24) Benzidine	10.754	184	827503	15.583	ppm		100
26) bis(2-Ethylhexyl)phtha...	12.838	149	1191966	19.772	ppm		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM485phenol.D
Acq On : 12 Aug 2024 7:12 pm
Operator : B.Allgeier
Sample : 15 STD
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 26 11:35:33 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM485.D
Acq On : 12 Aug 2024 7:12 pm
Operator : B.Allgeier
Sample : 15 STD
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 22 10:33:47 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

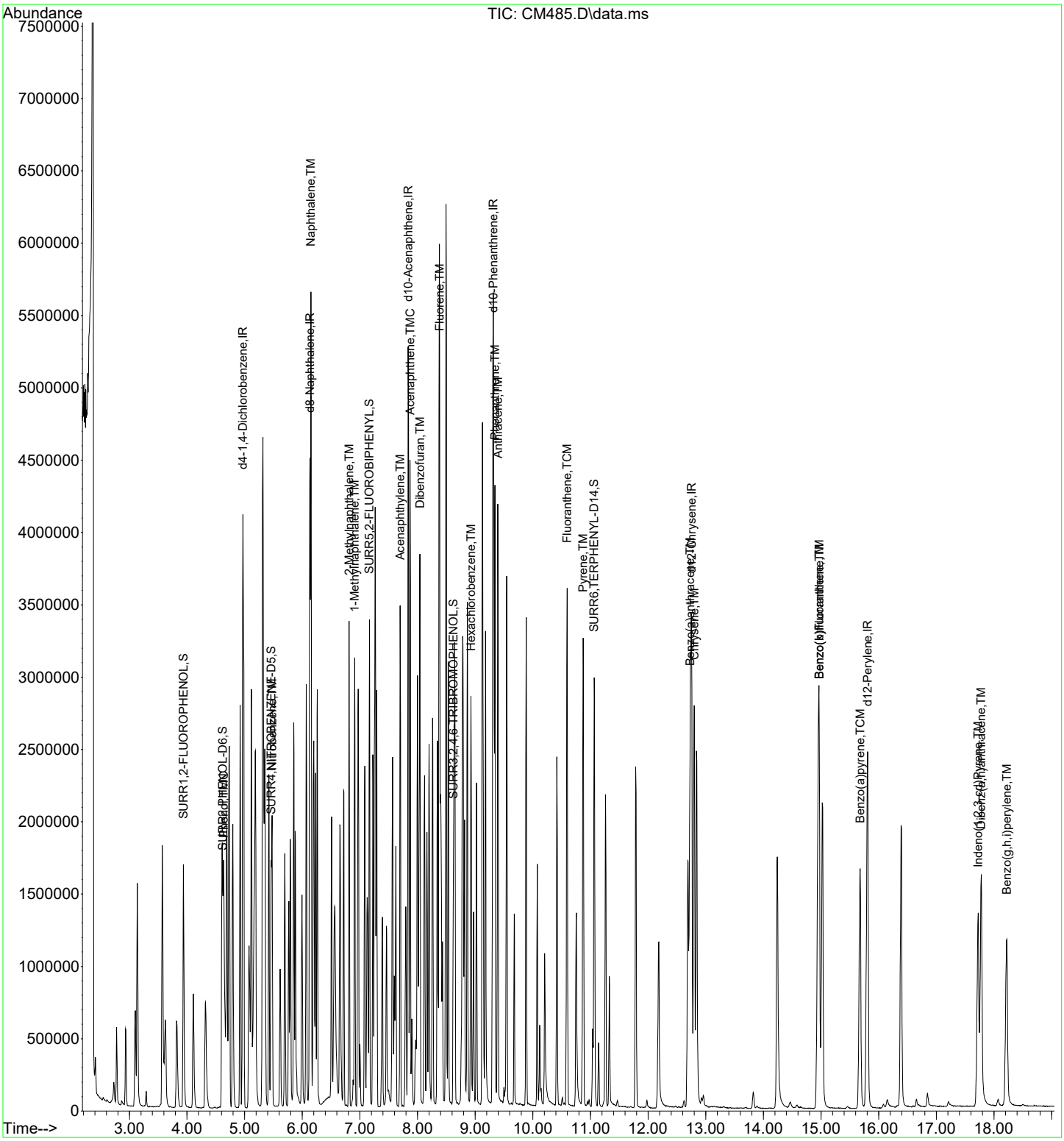
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.968	152	676581	20.00	ppm	0.00
5) d8-Naphthalene	6.133	136	2345151	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1279405	20.00	ppm	0.00
18) d10-Phenanthrene	9.317	188	1979860	20.00	ppm	0.00
23) d12-Chrysene	12.752	240	1735935	20.00	ppm	0.00
28) d12-Perylene	15.808	264	1754099	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.937	112	694439	15.88	ppm	0.01
Spiked Amount 4.000	Range 10 - 105		Recovery = 397.00%#			
3) SURR2,PHENOL-D6	4.621	99	787347	14.94	ppm	0.01
Spiked Amount 4.000	Range 10 - 107		Recovery = 373.50%#			
6) SURR4,NITROBENZENE-D5	5.460	82	648328	18.91	ppm	0.02
Spiked Amount 2.000	Range 37 - 117		Recovery = 945.50%#			
12) SURR5,2-FLUOROBIPHENYL	7.164	172	1045722	9.80	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 490.00%#			
17) SURR3,2,4,6-TRIBROMOPH...	8.623	330	187796	17.59	ppm	0.01
Spiked Amount 4.000	Range 28 - 157		Recovery = 439.75%#			
25) SURR6,TERPHENYL-D14	11.064	244	1169748	12.58	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 629.00%#			
Target Compounds						Qvalue
4) Phenol	4.637	94	897464	16.168	ppm	95
7) Nitrobenzene	5.476	77	647247	19.515	ppm	98
8) Naphthalene	6.149	128	1633804	10.741	ppm	95
9) 2-Methylnaphthalene	6.812	142	990630	9.582	ppm	97
10) 1-Methylnaphthalene	6.908	142	924211	9.672	ppm	98
13) Acenaphthylene	7.698	152	1622473m	48.232	ppm	
14) Acenaphthene	7.869	153	1154926	12.445	ppm	95
15) Dibenzofuran	8.040	168	1527381	12.645	ppm	88
16) Fluorene	8.382	166	1156023	11.989	ppm	97
19) Hexachlorobenzene	8.927	284	423893	13.481	ppm	93
20) Phenanthrene	9.344	178	1673726	12.027	ppm	96
21) Anthracene	9.392	178	1691436	12.509	ppm	95
22) Fluoranthene	10.594	202	1717942	11.251	ppm	97
24) Pyrene	10.872	202	1703697	11.980	ppm	98
26) Benzo(a)anthracene	12.731	228	1610600	13.525	ppm	98
27) Chrysene	12.800	228	1548335	13.915	ppm	96
29) Benzo(b)Fluoranthene	14.969	252	1532597	16.647	ppm	98
30) Benzo(k)fluoranthene	14.969	252	1495058	15.894	ppm	97
31) Benzo(a)pyrene	15.680	252	1323966	17.194	ppm	98
32) Indeno(1,2,3-cd)Pyrene	17.726	276	1109186	19.346	ppm	87
33) Dibenz(a,h)anthracene	17.779	278	1253205	17.424	ppm	95
34) Benzo(g,h,i)perylene	18.223	276	1020957	12.716	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM485.D
Acq On : 12 Aug 2024 7:12 pm
Operator : B.Allgeier
Sample : 15 STD
Misc :
ALS Vial : 13 Sample Multiplier: 1

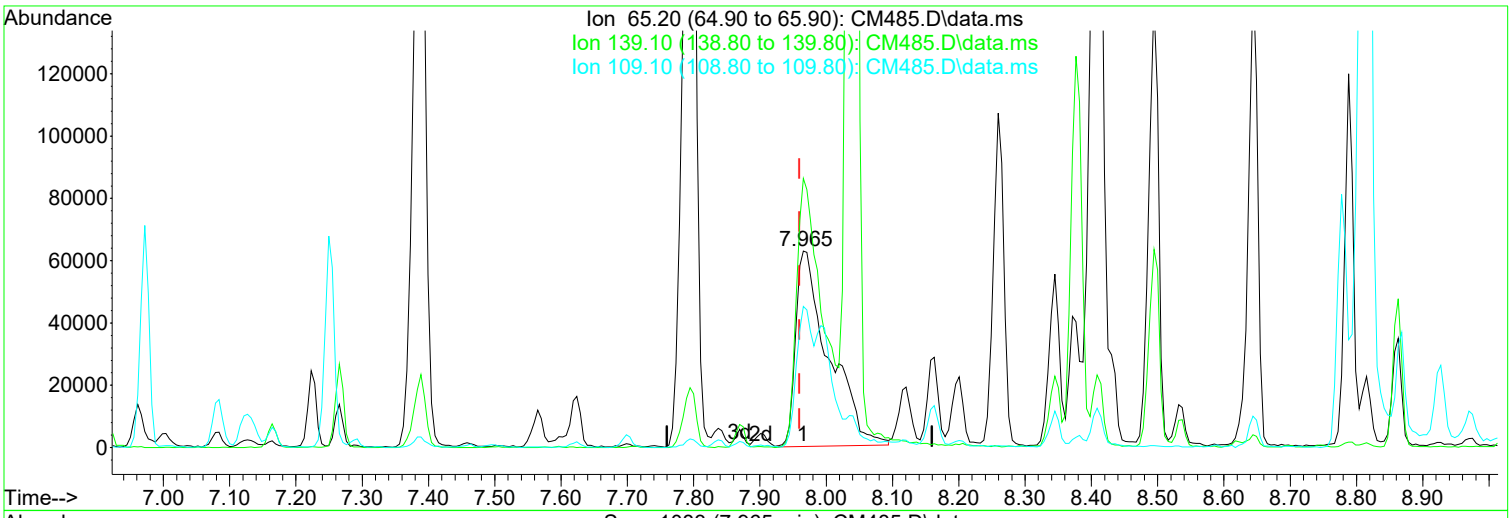
Quant Time: Aug 22 10:33:47 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

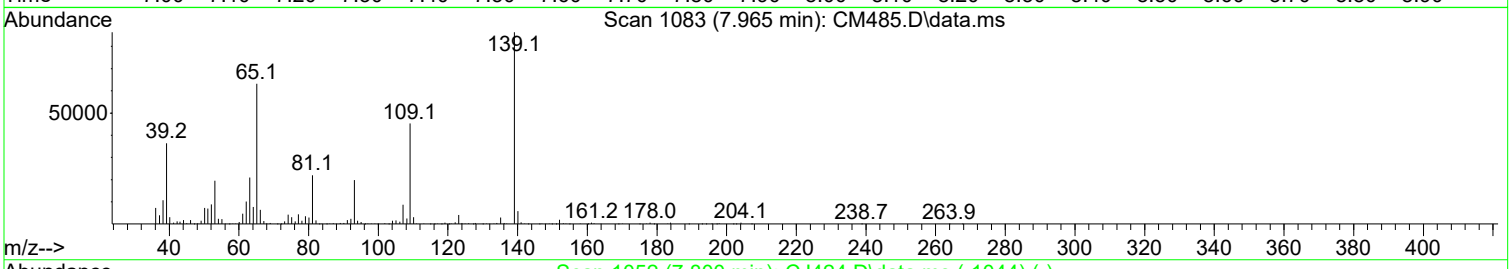


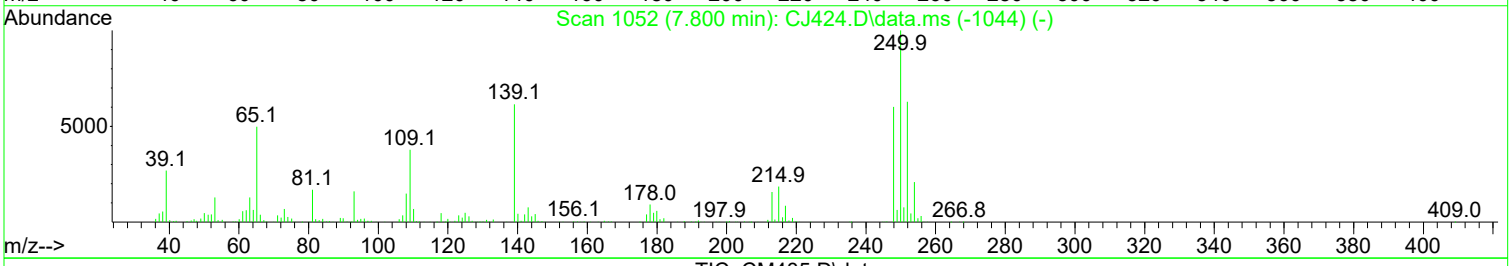
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM485.D
Acq On : 12 Aug 2024 7:12 pm
Operator : B.Allgeier
Sample : 15 STD
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 26 11:35:33 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM485.D\data.ms

(18) 4-Nitrophenol (TMP)

7.965min (+ 0.005) 22.66 ppm m

response 218948

Ion	Exp%	Act%
65.20	100.00	100.00
139.10	250.30	136.83#
109.10	57.10	71.77
0.00	0.00	0.00

Manual Integration:

After

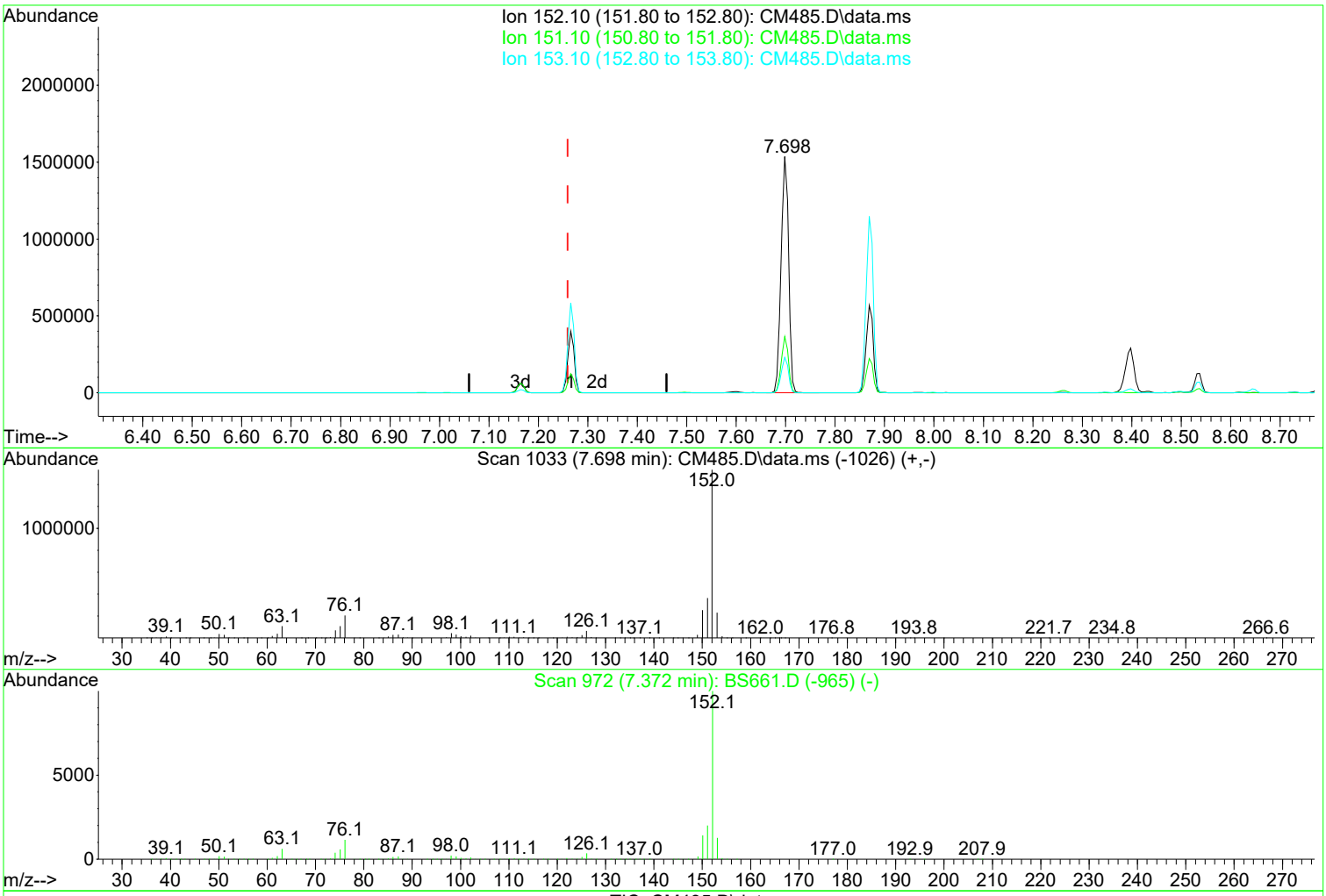
Poor integration.

08/26/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM485.D
Acq On : 12 Aug 2024 7:12 pm
Operator : B.Allgeier
Sample : 15 STD
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 22 10:33:47 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration



TIC: CM485.D\data.ms

(13) Acenaphthylene (TM)

7.698min (+ 0.438) 48.23 ppm m

response 1622473

Ion	Exp%	Act%
152.10	100.00	100.00
151.10	27.20	23.80
153.10	150.80	15.00#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

09/04/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM484phenol.D
Acq On : 12 Aug 2024 6:44 pm
Operator : B.Allgeier
Sample : 10 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 11:35:30 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration

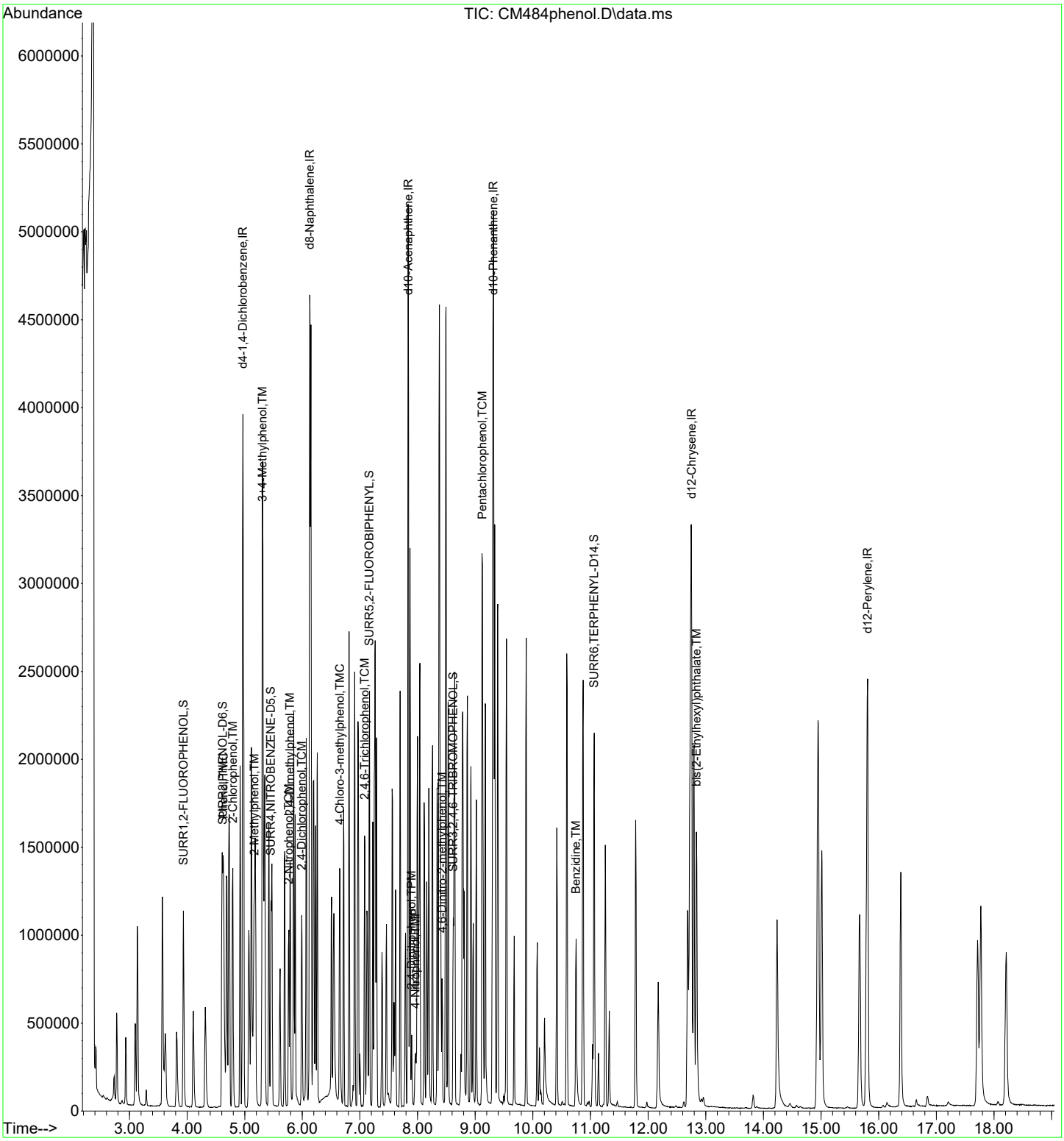
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.968	152	674780	20.00	ppm		0.00
8) d8-Naphthalene	6.128	136	2347369	20.00	ppm		0.00
14) d10-Acenaphthene	7.837	164	1203867	20.00	ppm		0.00
20) d10-Phenanthrene	9.317	188	1987808	20.00	ppm		0.00
23) d12-Chrysene	12.752	240	1738759	20.00	ppm		0.00
27) d12-Perylene	15.808	264	1756548	20.00	ppm		0.00
System Monitoring Compounds							
2) SURR1,2-FLUOROPHENOL	3.937	112	466397	10.28	ppm		0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 257.00%#				
3) SURR2,PHENOL-D6	4.621	99	564725	10.21	ppm		0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 255.25%#				
9) SURR4,NITROBENZENE-D5	5.454	82	430521	11.18	ppm		0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 559.00%#				
16) SURR5,2-FLUOROBIPHENYL	7.164	172	708989	7.83	ppm		0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 391.50%#				
19) SURR3,2,4,6-TRIBROMOPH...	8.617	330	128329	10.84	ppm		0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 271.00%#				
25) SURR6,TERPHENYL-D14	11.064	244	815684	9.40	ppm		0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 470.00%#				
Target Compounds							Qvalue
4) Phenol	4.632	94	594469	10.072	ppm		73
5) 2-Chlorophenol	4.792	128	505564	10.147	ppm		95
6) 2-Methylphenol	5.166	108	410618	9.364	ppm		97
7) 3+4-Methylphenol	5.305	108	331922	8.342	ppm	#	66
10) 2-Nitrophenol	5.764	139	241671	11.104	ppm		94
11) 2,4-Dimethylphenol	5.786	107	355706	8.079	ppm		99
12) 2,4-Dichlorophenol	5.989	162	282305	9.052	ppm		98
13) 4-Chloro-3-methylphenol	6.651	107	391067	10.879	ppm		98
15) 2,4,6-Trichlorophenol	7.084	196	246322	11.082	ppm		98
17) 2,4-Dinitrophenol	7.896	184	74061	12.487	ppm		96
18) 4-Nitrophenol	7.960	65	145313m	15.979	ppm		
21) 4,6-Dinitro-2-methylph...	8.425	198	109530	12.532	ppm		96
22) Pentachlorophenol	9.125	266	147241	11.148	ppm		99
24) Benzidine	10.749	184	554994	10.434	ppm		99
26) bis(2-Ethylhexyl)phtha...	12.837	149	800690	13.260	ppm		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM484phenol.D
Acq On : 12 Aug 2024 6:44 pm
Operator : B.Allgeier
Sample : 10 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 11:35:30 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM484.D
Acq On : 12 Aug 2024 6:44 pm
Operator : B.Allgeier
Sample : 10 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 22 10:33:44 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

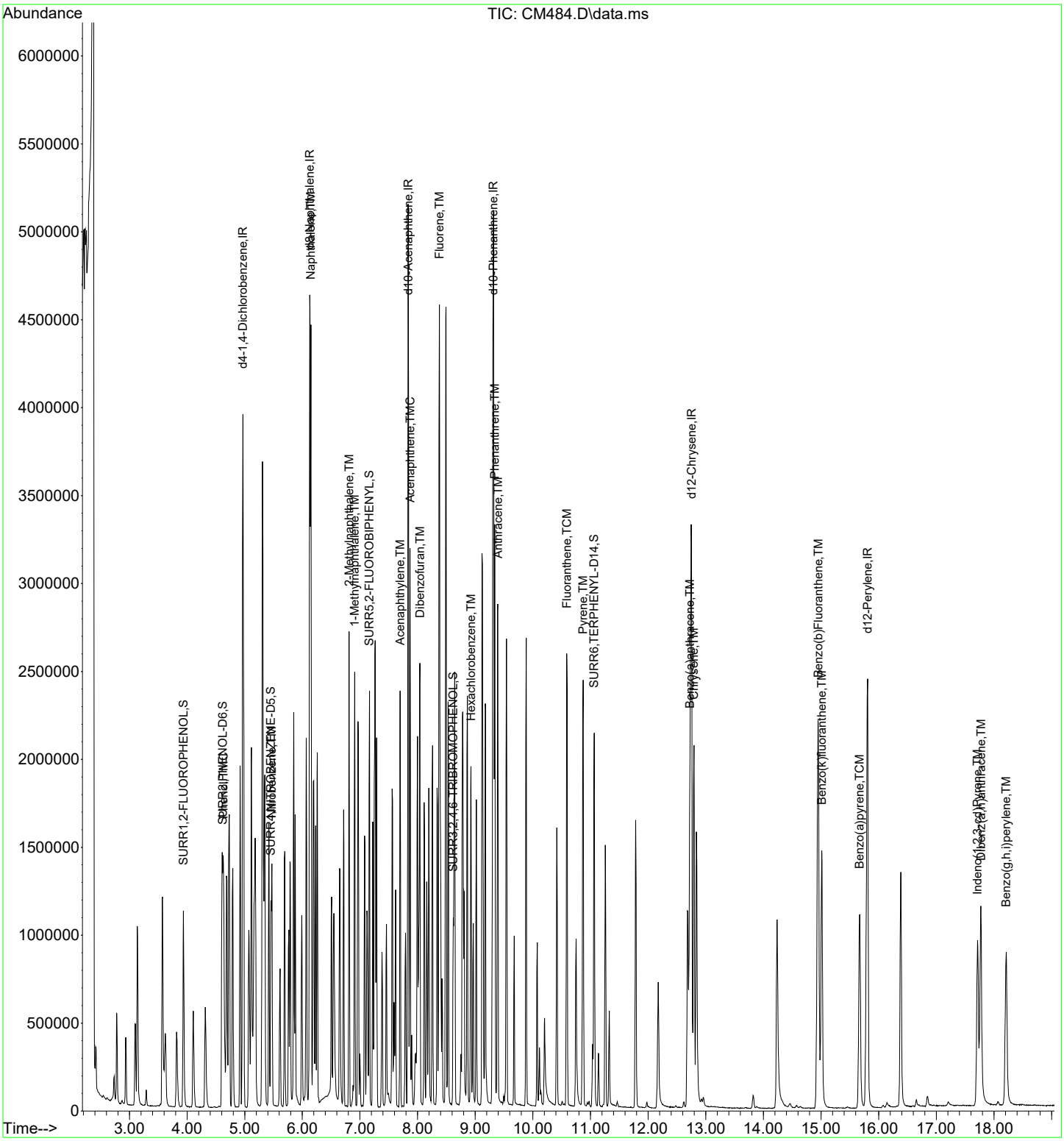
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.968	152	674780	20.00	ppm	0.00
5) d8-Naphthalene	6.128	136	2347369	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1203867	20.00	ppm	0.00
18) d10-Phenanthrene	9.317	188	1987808	20.00	ppm	0.00
23) d12-Chrysene	12.752	240	1738759	20.00	ppm	0.00
28) d12-Perylene	15.808	264	1756548	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.937	112	466397	10.69	ppm	0.01
Spiked Amount 4.000	Range 10 - 105		Recovery = 267.25%#			
3) SURR2,PHENOL-D6	4.621	99	564725	10.75	ppm	0.01
Spiked Amount 4.000	Range 10 - 107		Recovery = 268.75%#			
6) SURR4,NITROBENZENE-D5	5.454	82	430521	12.55	ppm	0.01
Spiked Amount 2.000	Range 37 - 117		Recovery = 627.50%#			
12) SURR5,2-FLUOROBIPHENYL	7.164	172	708989	7.06	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 353.00%#			
17) SURR3,2,4,6-TRIBROMOPH...	8.617	330	128329	12.78	ppm	0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 319.50%#			
25) SURR6,TERPHENYL-D14	11.064	244	815684	8.76	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 438.00%#			
Target Compounds						Qvalue
4) Phenol	4.632	94	594469	10.738	ppm	92
7) Nitrobenzene	5.470	77	440051	13.256	ppm	99
8) Naphthalene	6.149	128	1243621	8.168	ppm	99
9) 2-Methylnaphthalene	6.811	142	769755	7.439	ppm	97
10) 1-Methylnaphthalene	6.907	142	704479	7.365	ppm	99
13) Acenaphthylene	7.698	152	1087887m	34.369	ppm	
14) Acenaphthene	7.869	153	762388	8.730	ppm	95
15) Dibenzofuran	8.040	168	1092291	9.610	ppm	92
16) Fluorene	8.377	166	848996	9.357	ppm	96
19) Hexachlorobenzene	8.927	284	294099	9.316	ppm	97
20) Phenanthrene	9.338	178	1200970	8.595	ppm	97
21) Anthracene	9.392	178	1230763	9.065	ppm	99
22) Fluoranthene	10.588	202	1261740	8.230	ppm	98
24) Pyrene	10.871	202	1221216	8.574	ppm	98
26) Benzo(a)anthracene	12.725	228	1119385	9.385	ppm	99
27) Chrysene	12.795	228	1072394	9.622	ppm	97
29) Benzo(b)Fluoranthene	14.953	252	1033909	11.215	ppm	99
30) Benzo(k)fluoranthene	15.012	252	1075453	11.417	ppm	97
31) Benzo(a)pyrene	15.669	252	889744	11.538	ppm	99
32) Indeno(1,2,3-cd)Pyrene	17.715	276	743547	12.950	ppm	86
33) Dibenz(a,h)anthracene	17.774	278	870489	12.086	ppm	93
34) Benzo(g,h,i)perylene	18.212	276	756910	9.414	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM484.D
Acq On : 12 Aug 2024 6:44 pm
Operator : B.Allgeier
Sample : 10 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

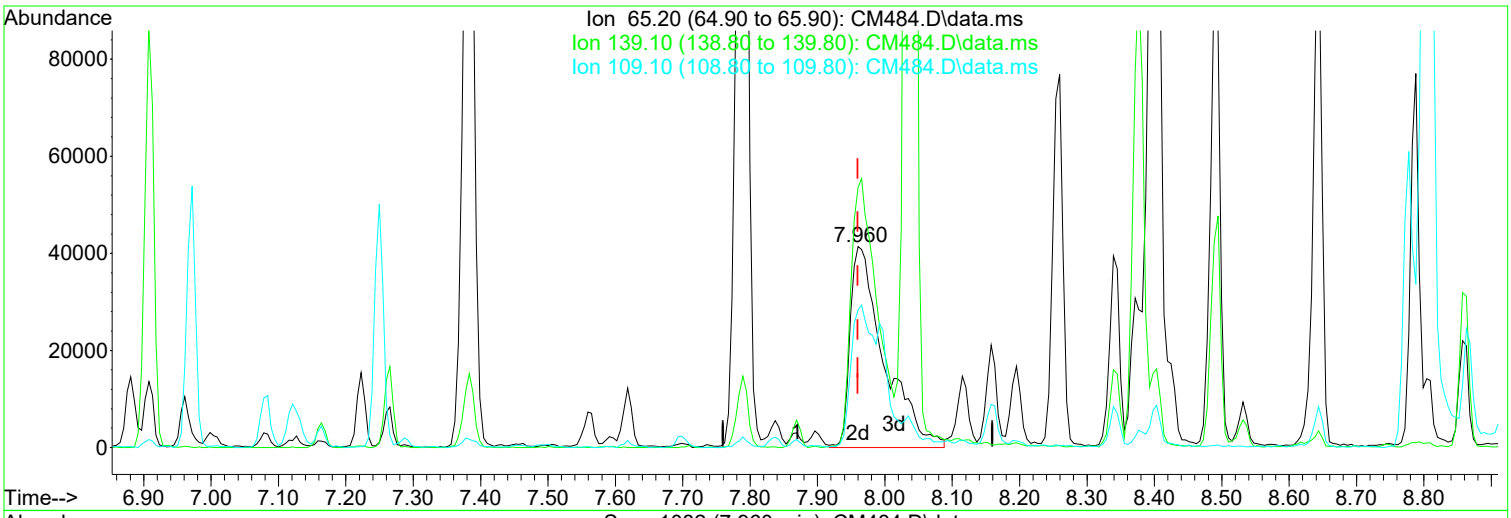
Quant Time: Aug 22 10:33:44 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

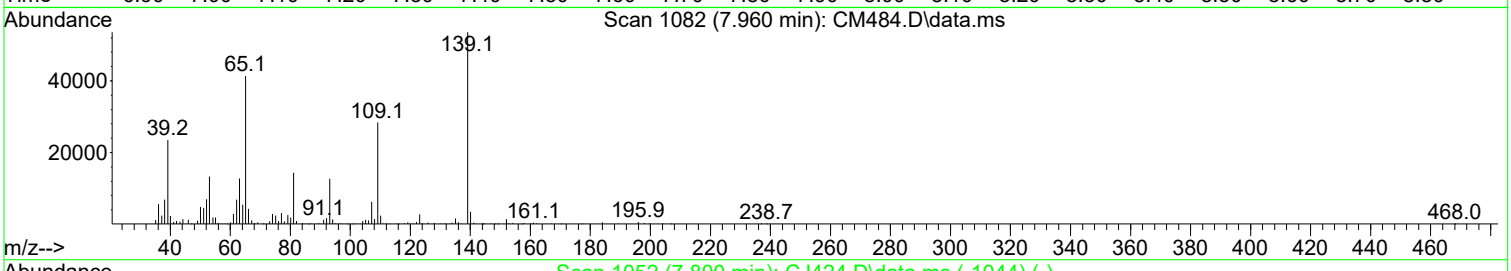


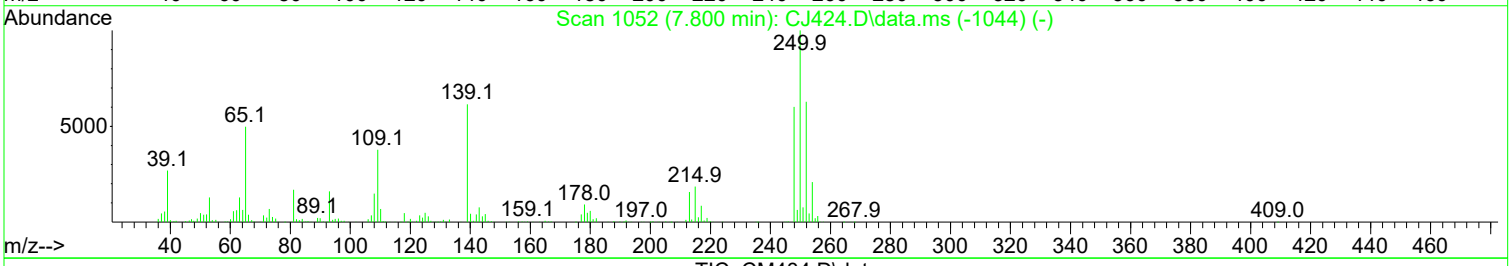
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM484.D
Acq On : 12 Aug 2024 6:44 pm
Operator : B.Allgeier
Sample : 10 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 26 11:35:30 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM484.D\data.ms

(18) 4-Nitrophenol (TMP)

7.960min (-0.000) 15.98 ppm m

response 145313

Ion	Exp%	Act%
65.20	100.00	100.00
139.10	250.30	129.49#
109.10	57.10	68.52
0.00	0.00	0.00

Manual Integration:

After

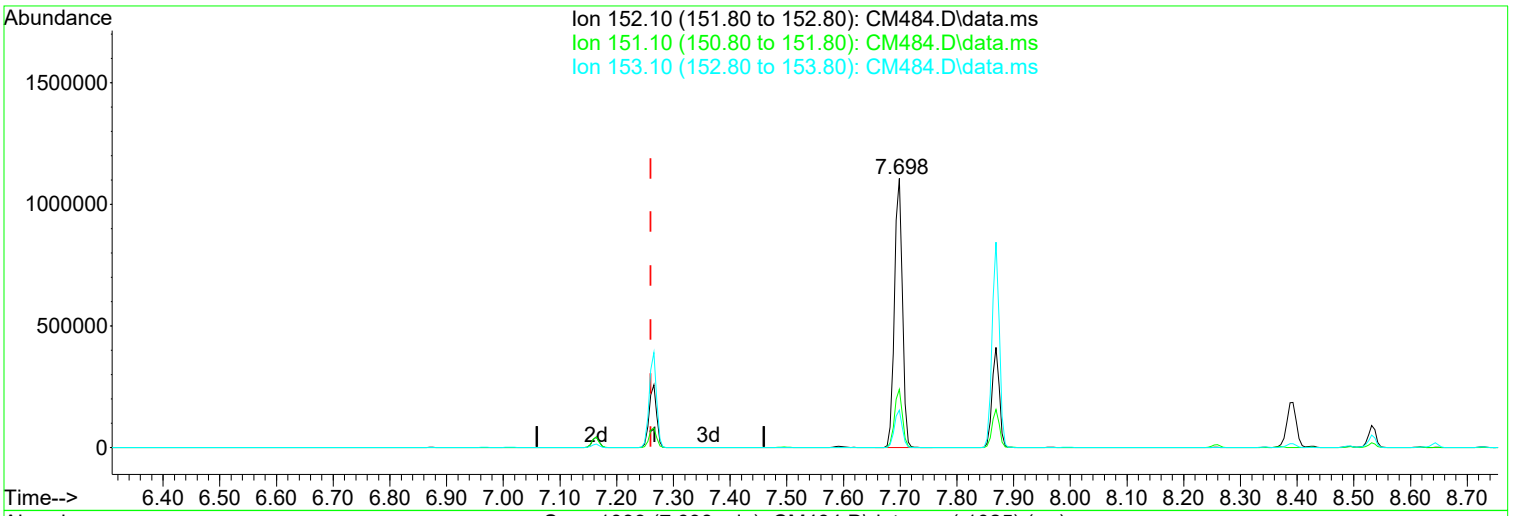
Poor integration.

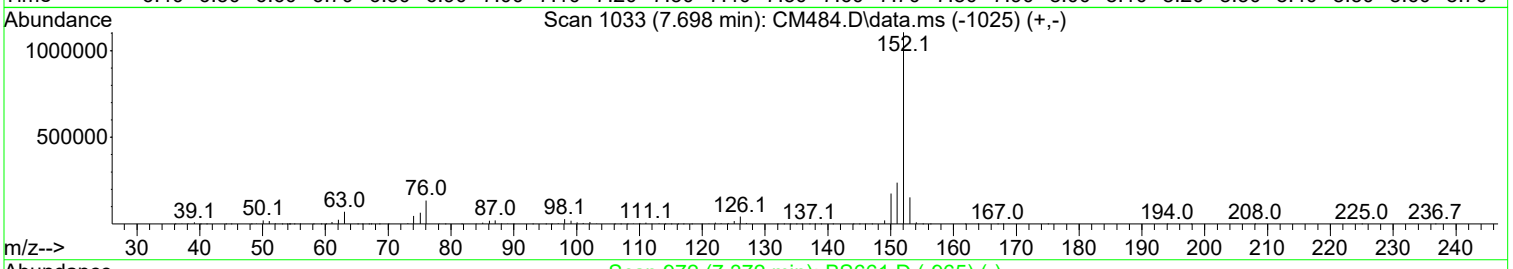
08/26/24

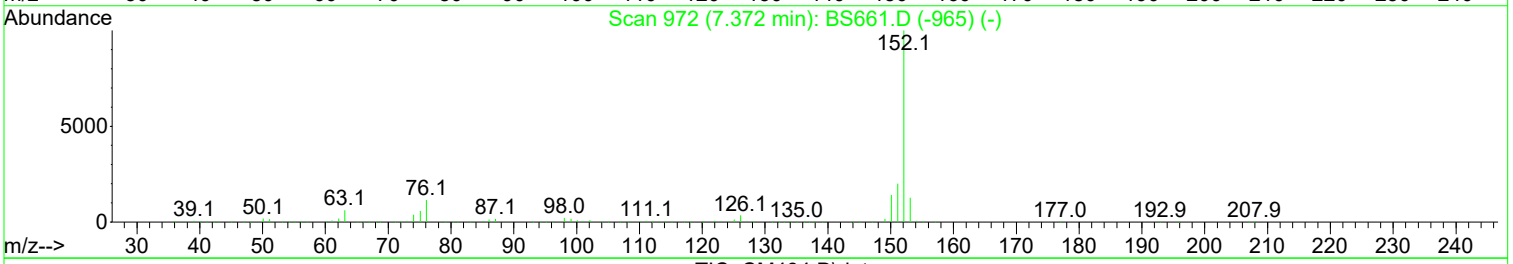
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM484.D
Acq On : 12 Aug 2024 6:44 pm
Operator : B.Allgeier
Sample : 10 STD
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 22 10:33:44 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration







TIC: CM484.D\data.ms

(13) Acenaphthylene (TM)

7.698min (+ 0.438) 34.37 ppm m

response 1087887

Ion	Exp%	Act%
152.10	100.00	100.00
151.10	27.20	21.60
153.10	150.80	13.91#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

09/04/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM483phenol.D
Acq On : 12 Aug 2024 6:15 pm
Operator : B.Allgeier
Sample : 8 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 26 11:35:27 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration

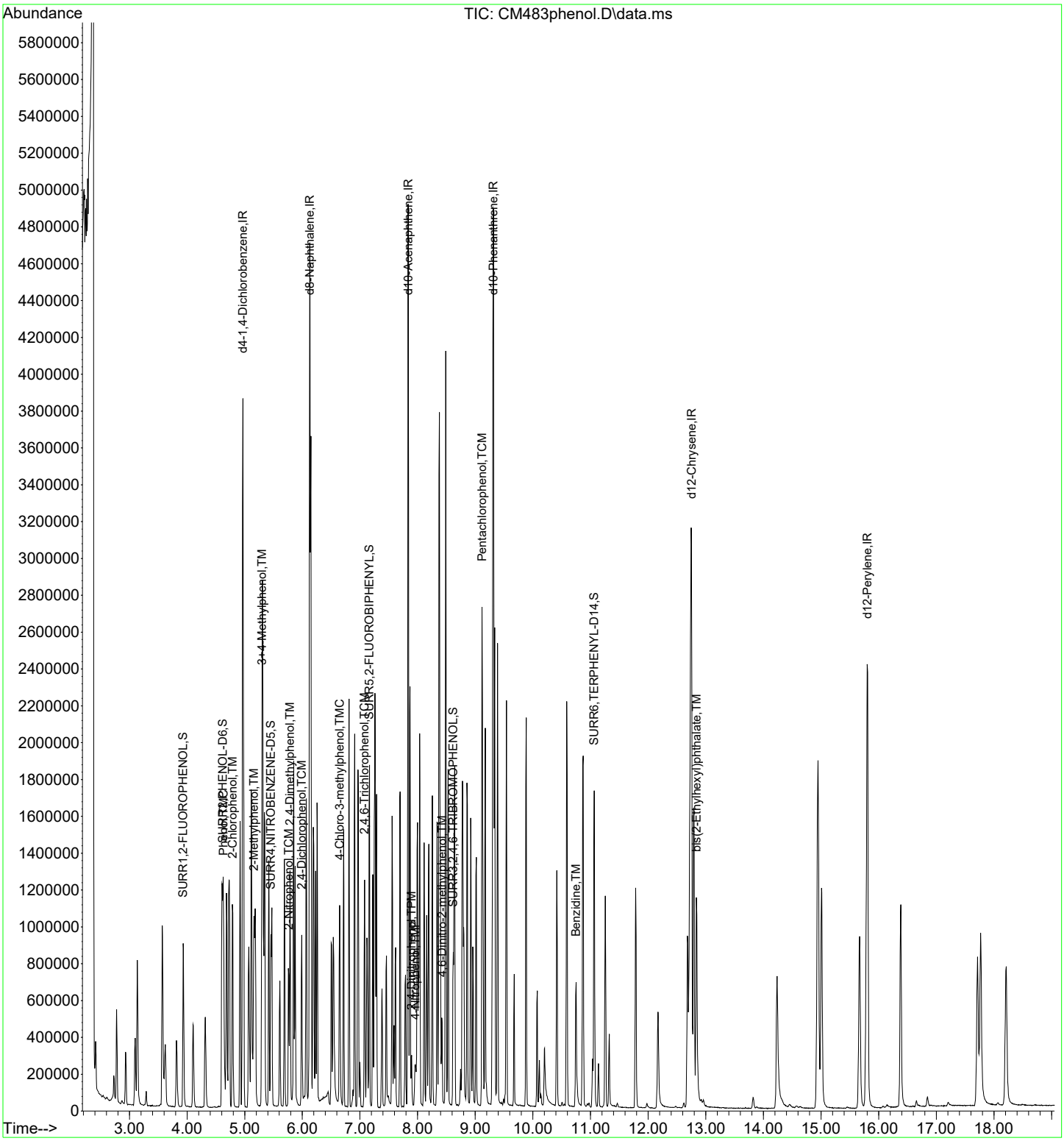
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.968	152	653352	20.00	ppm		0.00
8) d8-Naphthalene	6.128	136	2288331	20.00	ppm		0.00
14) d10-Acenaphthene	7.837	164	1128505	20.00	ppm		0.00
20) d10-Phenanthrene	9.317	188	1944621	20.00	ppm		0.00
23) d12-Chrysene	12.752	240	1730558	20.00	ppm		0.00
27) d12-Perylene	15.802	264	1753353	20.00	ppm		0.00
System Monitoring Compounds							
2) SURR1,2-FLUOROPHENOL	3.932	112	366526	8.35	ppm		0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 208.75%#				
3) SURR2,PHENOL-D6	4.621	99	451895	8.44	ppm		0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 211.00%#				
9) SURR4,NITROBENZENE-D5	5.455	82	326525	8.70	ppm		0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 435.00%#				
16) SURR5,2-FLUOROBIPHENYL	7.164	172	584644	6.89	ppm		0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 344.50%#				
19) SURR3,2,4,6-TRIBROMOPH...	8.617	330	101064	9.11	ppm		0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 227.75%#				
25) SURR6,TERPHENYL-D14	11.064	244	670177	7.76	ppm		0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 388.00%#				
Target Compounds							Qvalue
4) Phenol	4.632	94	473131	8.279	ppm		77
5) 2-Chlorophenol	4.787	128	399039	8.272	ppm		96
6) 2-Methylphenol	5.161	108	336908	7.935	ppm		98
7) 3+4-Methylphenol	5.300	108	276528	7.177	ppm	#	71
10) 2-Nitrophenol	5.764	139	182566	8.605	ppm		94
11) 2,4-Dimethylphenol	5.786	107	290819	6.775	ppm		97
12) 2,4-Dichlorophenol	5.989	162	229590	7.552	ppm		99
13) 4-Chloro-3-methylphenol	6.646	107	304761	8.696	ppm		98
15) 2,4,6-Trichlorophenol	7.079	196	188622	9.053	ppm		97
17) 2,4-Dinitrophenol	7.896	184	55846	10.045	ppm		80
18) 4-Nitrophenol	7.955	65	106513m	12.495	ppm		
21) 4,6-Dinitro-2-methylph...	8.425	198	78236	9.150	ppm		88
22) Pentachlorophenol	9.119	266	117014	9.057	ppm		97
24) Benzidine	10.749	184	409226	7.730	ppm		99
26) bis(2-Ethylhexyl)phtha...	12.837	149	620340	10.322	ppm		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM483phenol.D
Acq On : 12 Aug 2024 6:15 pm
Operator : B.Allgeier
Sample : 8 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 26 11:35:27 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM483.D
Acq On : 12 Aug 2024 6:15 pm
Operator : B.Allgeier
Sample : 8 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 22 10:33:41 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

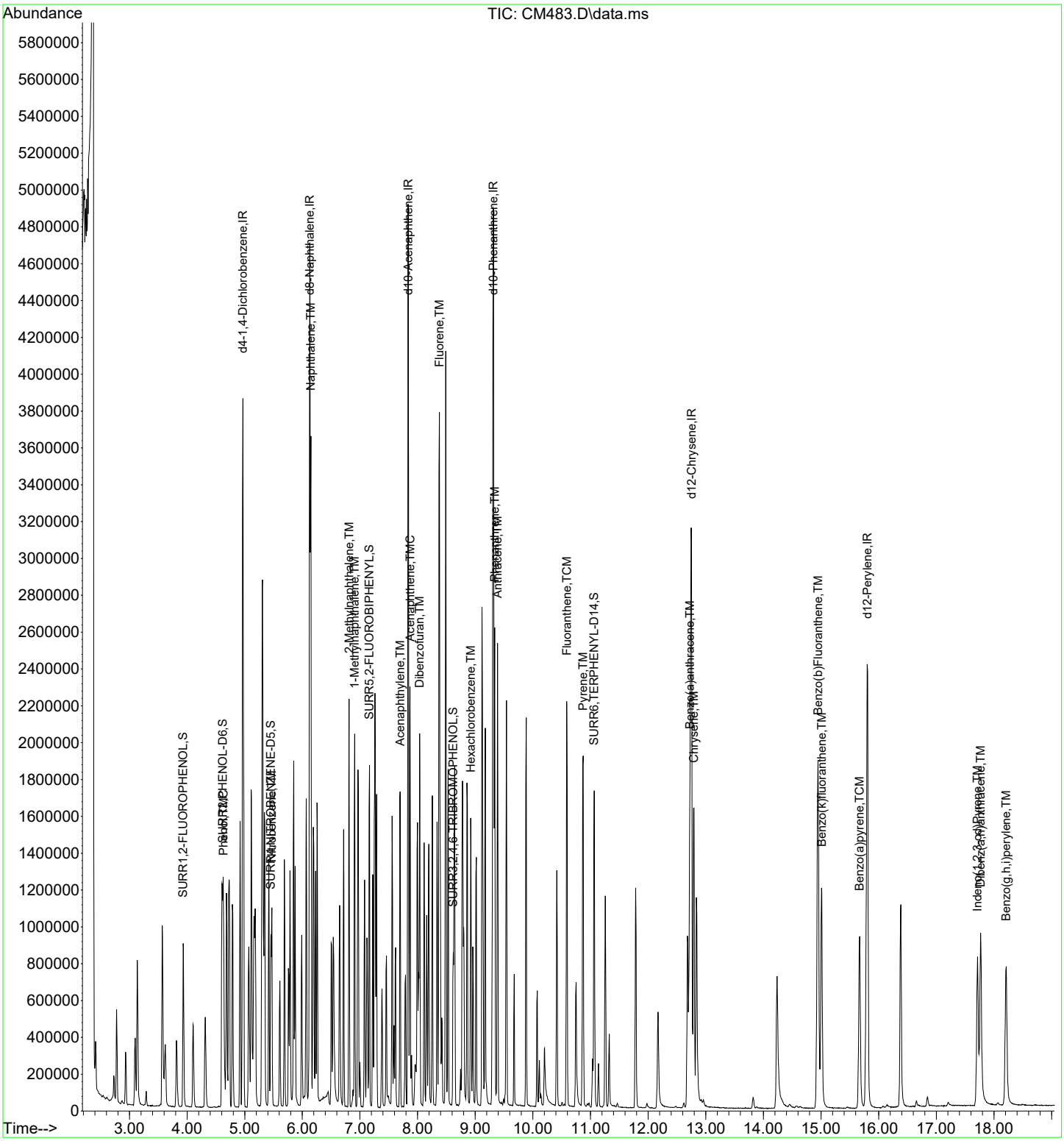
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.968	152	653352	20.00	ppm	0.00
5) d8-Naphthalene	6.128	136	2288331	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1128505	20.00	ppm	0.00
18) d10-Phenanthrene	9.317	188	1944621	20.00	ppm	0.00
23) d12-Chrysene	12.752	240	1730558	20.00	ppm	0.00
28) d12-Perylene	15.802	264	1753353	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.932	112	366526	8.68	ppm	0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 217.00%#			
3) SURR2,PHENOL-D6	4.621	99	451895	8.88	ppm	0.01
Spiked Amount 4.000	Range 10 - 107		Recovery = 222.00%#			
6) SURR4,NITROBENZENE-D5	5.455	82	326525	9.76	ppm	0.01
Spiked Amount 2.000	Range 37 - 117		Recovery = 488.00%#			
12) SURR5,2-FLUOROBIPHENYL	7.164	172	584644	6.21	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 310.50%#			
17) SURR3,2,4,6-TRIBROMOPH...	8.617	330	101064	10.73	ppm	0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 268.25%#			
25) SURR6,TERPHENYL-D14	11.064	244	670177	7.23	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 361.50%#			
Target Compounds						Qvalue
4) Phenol	4.632	94	473131	8.826	ppm	98
7) Nitrobenzene	5.471	77	338666	10.465	ppm	97
8) Naphthalene	6.149	128	1014902	6.838	ppm	96
9) 2-Methylnaphthalene	6.811	142	632490	6.270	ppm	98
10) 1-Methylnaphthalene	6.908	142	576738	6.185	ppm	98
13) Acenaphthylene	7.698	152	829360m	27.951	ppm	
14) Acenaphthene	7.869	153	590532	7.214	ppm	95
15) Dibenzofuran	8.035	168	862813	8.098	ppm	89
16) Fluorene	8.377	166	689779	8.110	ppm	97
19) Hexachlorobenzene	8.922	284	235229	7.616	ppm	92
20) Phenanthrene	9.338	178	982139	7.185	ppm	99
21) Anthracene	9.386	178	991012	7.462	ppm	97
22) Fluoranthene	10.588	202	1027825	6.853	ppm	98
24) Pyrene	10.872	202	996822	7.031	ppm	100
26) Benzo(a)anthracene	12.725	228	901969	7.598	ppm	99
27) Chrysene	12.795	228	872744	7.868	ppm	98
29) Benzo(b)Fluoranthene	14.948	252	852933	9.268	ppm	96
30) Benzo(k)fluoranthene	15.012	252	860065	9.147	ppm	98
31) Benzo(a)pyrene	15.669	252	720075	9.355	ppm	99
32) Indeno(1,2,3-cd)Pyrene	17.715	276	609181	10.629	ppm	85
33) Dibenz(a,h)anthracene	17.768	278	711049	9.890	ppm	94
34) Benzo(g,h,i)perylene	18.212	276	641116	7.988	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM483.D
Acq On : 12 Aug 2024 6:15 pm
Operator : B.Allgeier
Sample : 8 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

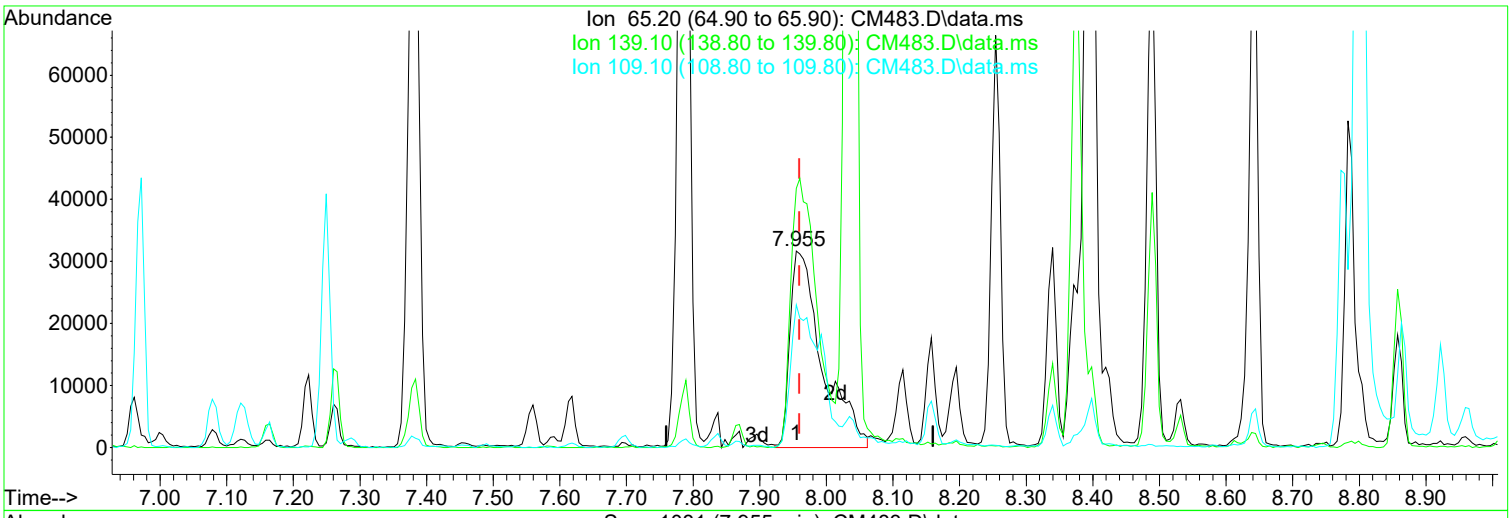
Quant Time: Aug 22 10:33:41 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

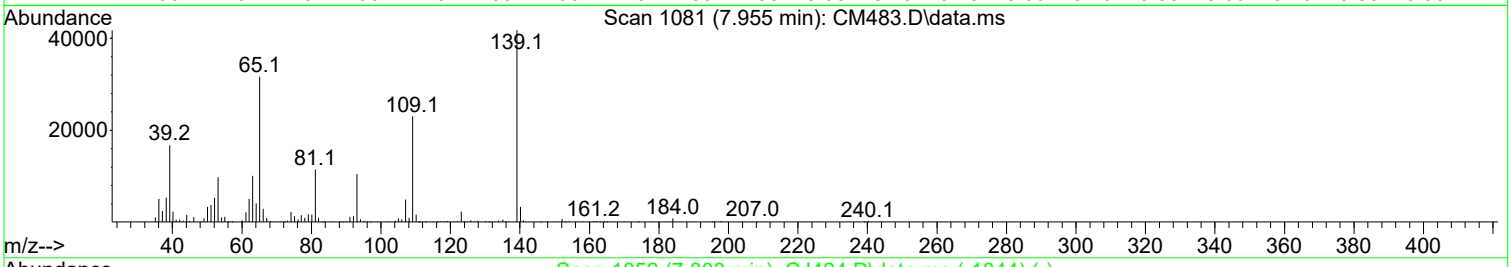


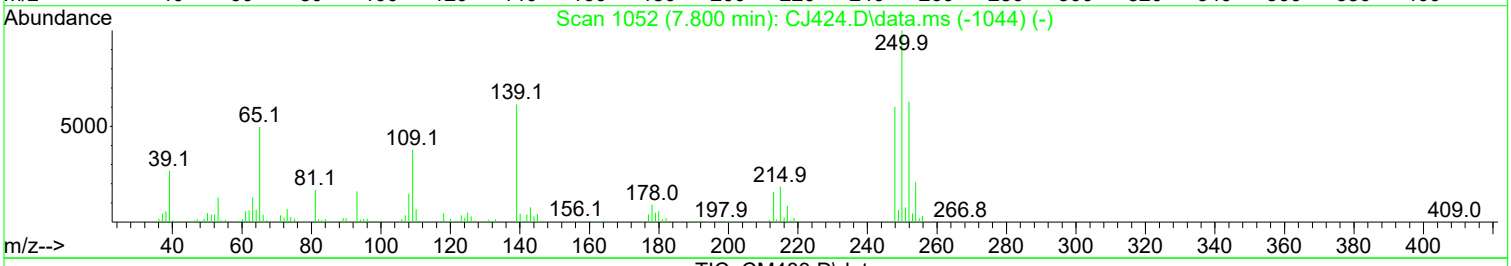
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM483.D
Acq On : 12 Aug 2024 6:15 pm
Operator : B.Allgeier
Sample : 8 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 26 11:35:27 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM483.D\data.ms

(18) 4-Nitrophenol (TMP)

7.955min (-0.005) 12.49 ppm m

response 106513

Ion	Exp%	Act%
65.20	100.00	100.00
139.10	250.30	131.82#
109.10	57.10	72.65
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

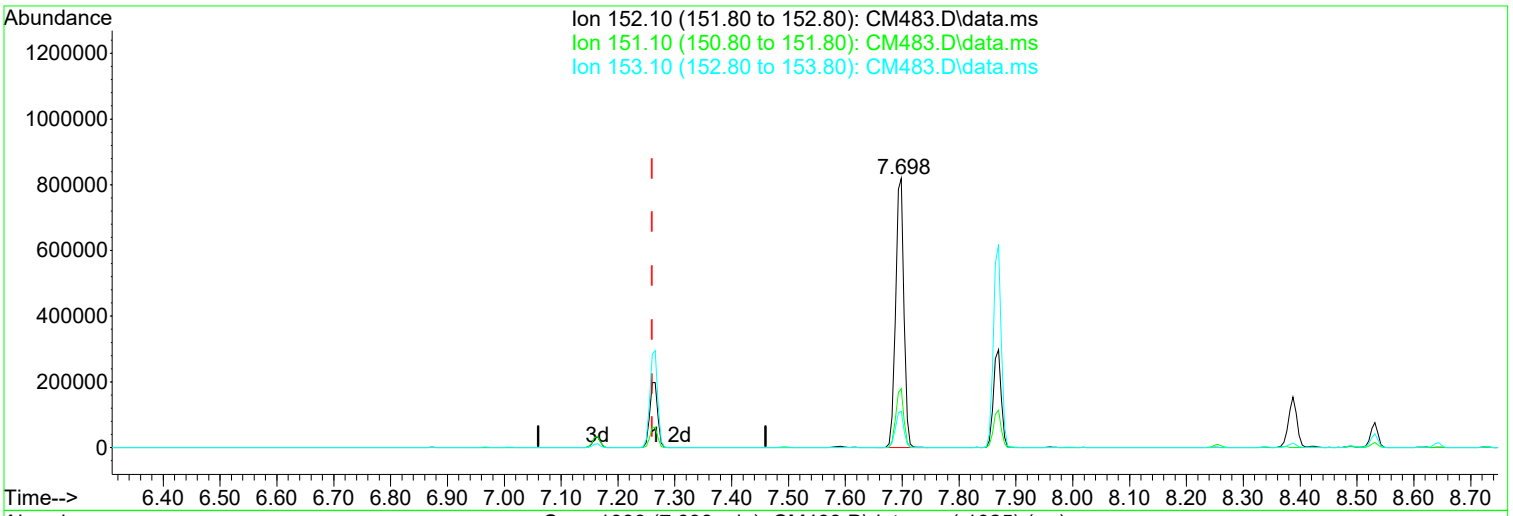
08/26/24

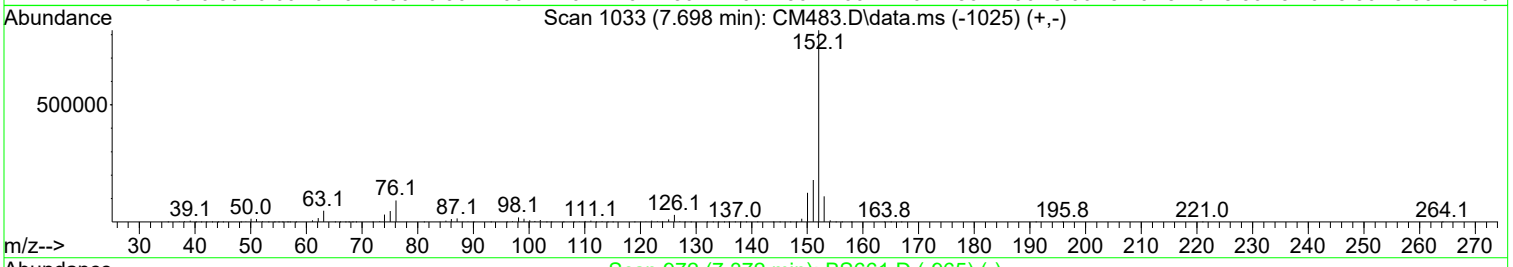
1st EDG 09/18/24
2nd AM 09/17/24

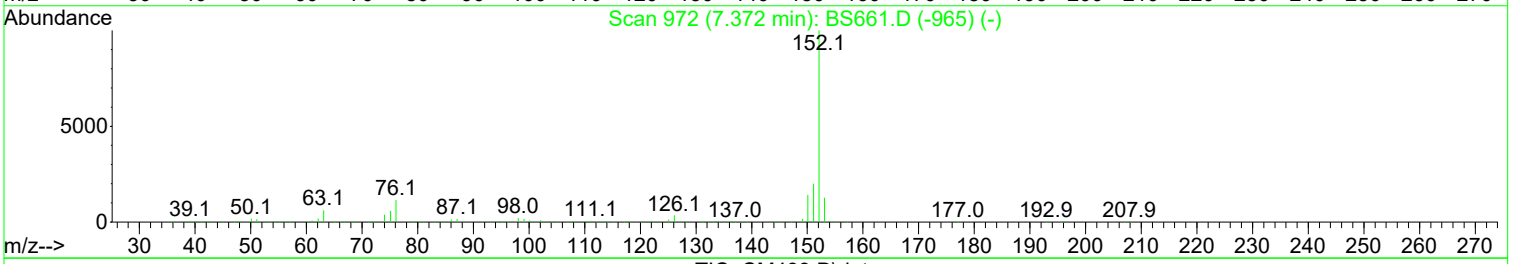
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM483.D
Acq On : 12 Aug 2024 6:15 pm
Operator : B.Allgeier
Sample : 8 STD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 22 10:33:41 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration







TIC: CM483.D\data.ms

(13) Acenaphthylene (TM)

7.698min (+ 0.438) 27.95 ppm m

response 829360

Ion	Exp%	Act%
152.10	100.00	100.00
151.10	27.20	21.94
153.10	150.80	13.43#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

09/04/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM482phenol.D
Acq On : 12 Aug 2024 5:46 pm
Operator : B.Allgeier
Sample : 5 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 11:35:25 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration

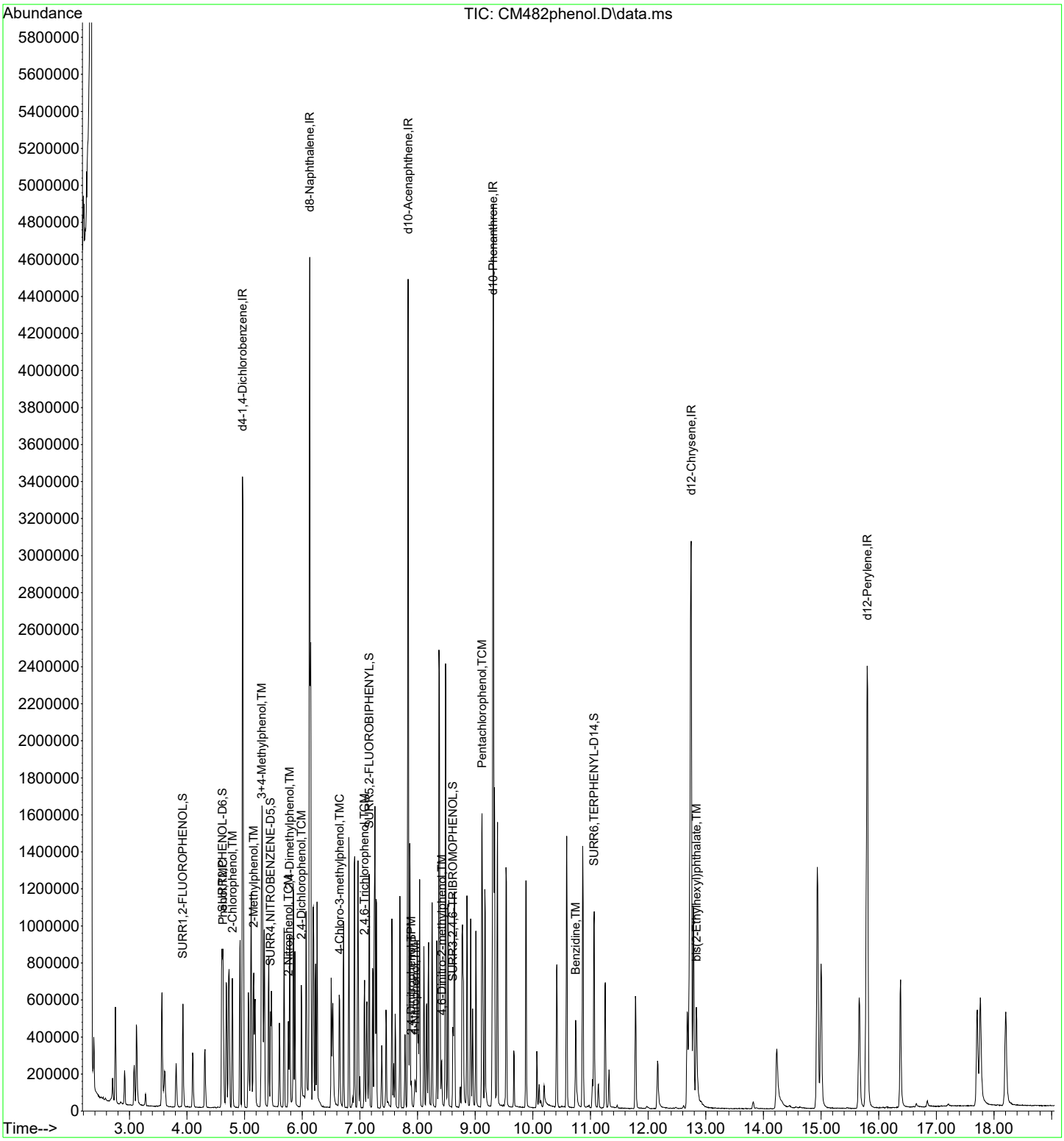
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.963	152	615753	20.00	ppm		0.00
8) d8-Naphthalene	6.128	136	2192063	20.00	ppm		0.00
14) d10-Acenaphthene	7.837	164	1061095	20.00	ppm		0.00
20) d10-Phenanthrene	9.312	188	1872240	20.00	ppm		0.00
23) d12-Chrysene	12.747	240	1686368	20.00	ppm		0.00
27) d12-Perylene	15.802	264	1732133	20.00	ppm		0.00
System Monitoring Compounds							
2) SURR1,2-FLUOROPHENOL	3.927	112	208752	5.04	ppm		0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 126.00%#				
3) SURR2,PHENOL-D6	4.616	99	261784	5.19	ppm		0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 129.75%#				
9) SURR4,NITROBENZENE-D5	5.449	82	177839	4.95	ppm		0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 247.50%#				
16) SURR5,2-FLUOROBIPHENYL	7.159	172	408502	5.12	ppm		0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 256.00%#				
19) SURR3,2,4,6-TRIBROMOPH...	8.612	330	56188	5.39	ppm		0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 134.75%				
25) SURR6,TERPHENYL-D14	11.064	244	424851	5.05	ppm		0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 252.50%#				
Target Compounds							Qvalue
4) Phenol	4.627	94	284860	5.289	ppm		78
5) 2-Chlorophenol	4.787	128	243342	5.352	ppm		95
6) 2-Methylphenol	5.155	108	214412	5.358	ppm		97
7) 3+4-Methylphenol	5.294	108	199595	5.497	ppm	#	68
10) 2-Nitrophenol	5.759	139	105778	5.205	ppm		95
11) 2,4-Dimethylphenol	5.780	107	215412	5.239	ppm		97
12) 2,4-Dichlorophenol	5.983	162	164240	5.639	ppm		99
13) 4-Chloro-3-methylphenol	6.646	107	168587	5.022	ppm		97
15) 2,4,6-Trichlorophenol	7.079	196	104513	5.335	ppm		94
17) 2,4-Dinitrophenol	7.891	184	28794	5.508	ppm		82
18) 4-Nitrophenol	7.955	65	59105m	7.374	ppm		
21) 4,6-Dinitro-2-methylph...	8.419	198	41245	5.010	ppm		87
22) Pentachlorophenol	9.119	266	70278	5.650	ppm		97
24) Benzidine	10.743	184	280262	5.433	ppm		98
26) bis(2-Ethylhexyl)phtha...	12.838	149	352899m	6.026	ppm		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM482phenol.D
Acq On : 12 Aug 2024 5:46 pm
Operator : B.Allgeier
Sample : 5 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 11:35:25 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM482.D
Acq On : 12 Aug 2024 5:46 pm
Operator : B.Allgeier
Sample : 5 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 22 10:33:38 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

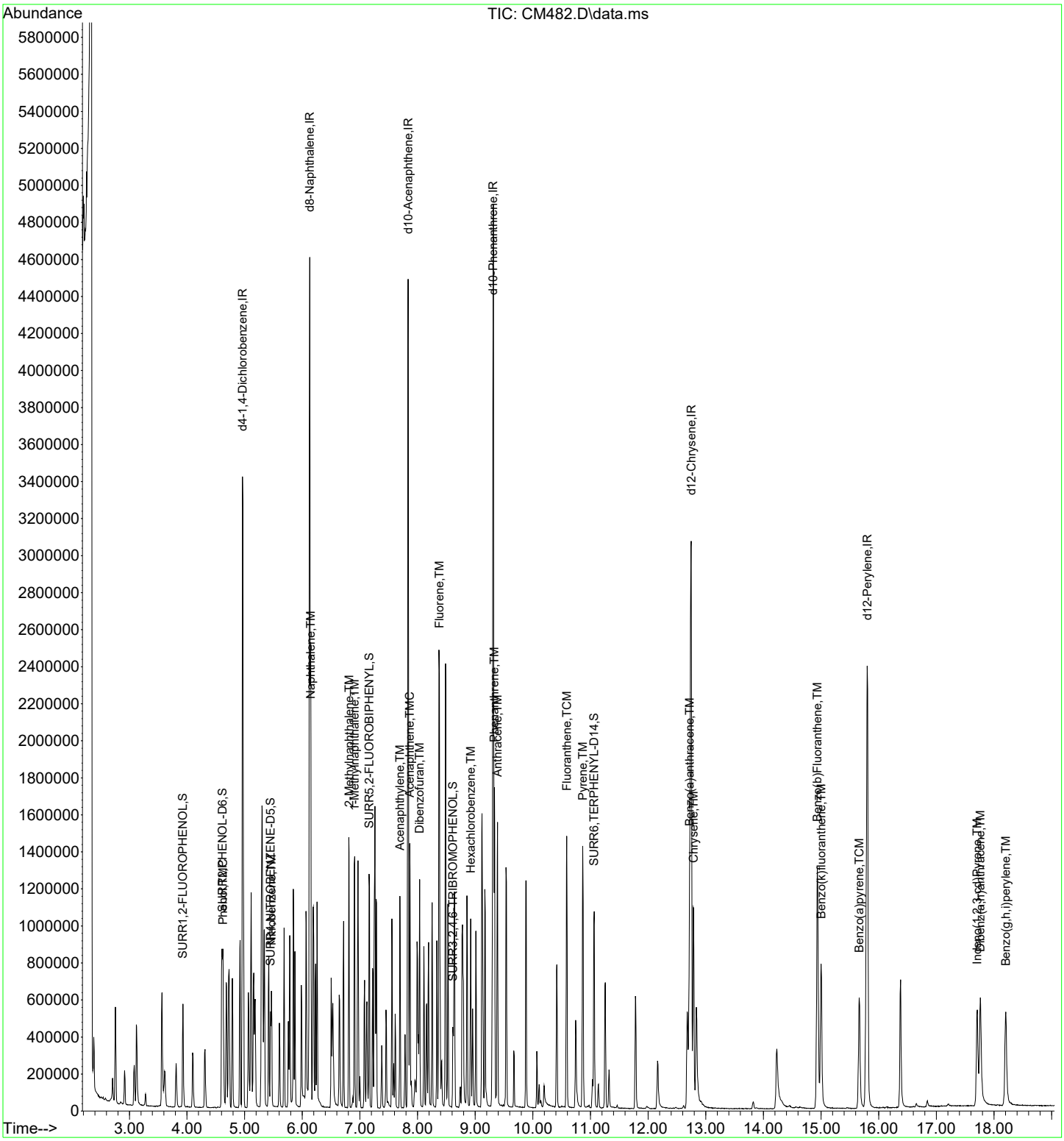
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	615753	20.00	ppm	0.00
5) d8-Naphthalene	6.128	136	2192063	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1061095	20.00	ppm	0.00
18) d10-Phenanthrene	9.312	188	1872240	20.00	ppm	0.00
23) d12-Chrysene	12.747	240	1686368	20.00	ppm	0.00
28) d12-Perylene	15.802	264	1732133	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.927	112	208752	5.24	ppm	0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 131.00%#			
3) SURR2,PHENOL-D6	4.616	99	261784	5.46	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 136.50%#			
6) SURR4,NITROBENZENE-D5	5.449	82	179151	5.59	ppm	0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 279.50%#			
12) SURR5,2-FLUOROBIPHENYL	7.159	172	408502	4.61	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 230.50%#			
17) SURR3,2,4,6-TRIBROMOPH...	8.612	330	56188	6.35	ppm	0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 158.75%#			
25) SURR6,TERPHENYL-D14	11.064	244	424851	4.70	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 235.00%#			
Target Compounds						Qvalue
4) Phenol	4.627	94	284860	5.639	ppm	99
7) Nitrobenzene	5.465	77	192519	6.210	ppm	99
8) Naphthalene	6.149	128	669230	4.707	ppm	100
9) 2-Methylnaphthalene	6.811	142	449765	4.654	ppm	99
10) 1-Methylnaphthalene	6.908	142	413574	4.630	ppm	98
13) Acenaphthylene	7.693	152	522436m	18.726	ppm	
14) Acenaphthene	7.864	153	364743	4.739	ppm	94
15) Dibenzofuran	8.035	168	518412	5.175	ppm	92
16) Fluorene	8.377	166	442091	5.528	ppm	99
19) Hexachlorobenzene	8.922	284	146415	4.924	ppm	95
20) Phenanthrene	9.333	178	631535	4.799	ppm	99
21) Anthracene	9.386	178	632846	4.949	ppm	99
22) Fluoranthene	10.588	202	682785	4.729	ppm	99
24) Pyrene	10.866	202	684983	4.958	ppm	100
26) Benzo(a)anthracene	12.720	228	576327	4.982	ppm	100
27) Chrysene	12.789	228	558373	5.166	ppm	99
29) Benzo(b)Fluoranthene	14.937	252	544233	5.986	ppm	100
30) Benzo(k)fluoranthene	15.001	252	577627	6.219	ppm	98
31) Benzo(a)pyrene	15.664	252	463765	6.099	ppm	99
32) Indeno(1,2,3-cd)Pyrene	17.710	276	392412	6.931	ppm	86
33) Dibenz(a,h)anthracene	17.763	278	458332	6.453	ppm	94
34) Benzo(g,h,i)perylene	18.206	276	438502	5.531	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM482.D
Acq On : 12 Aug 2024 5:46 pm
Operator : B.Allgeier
Sample : 5 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

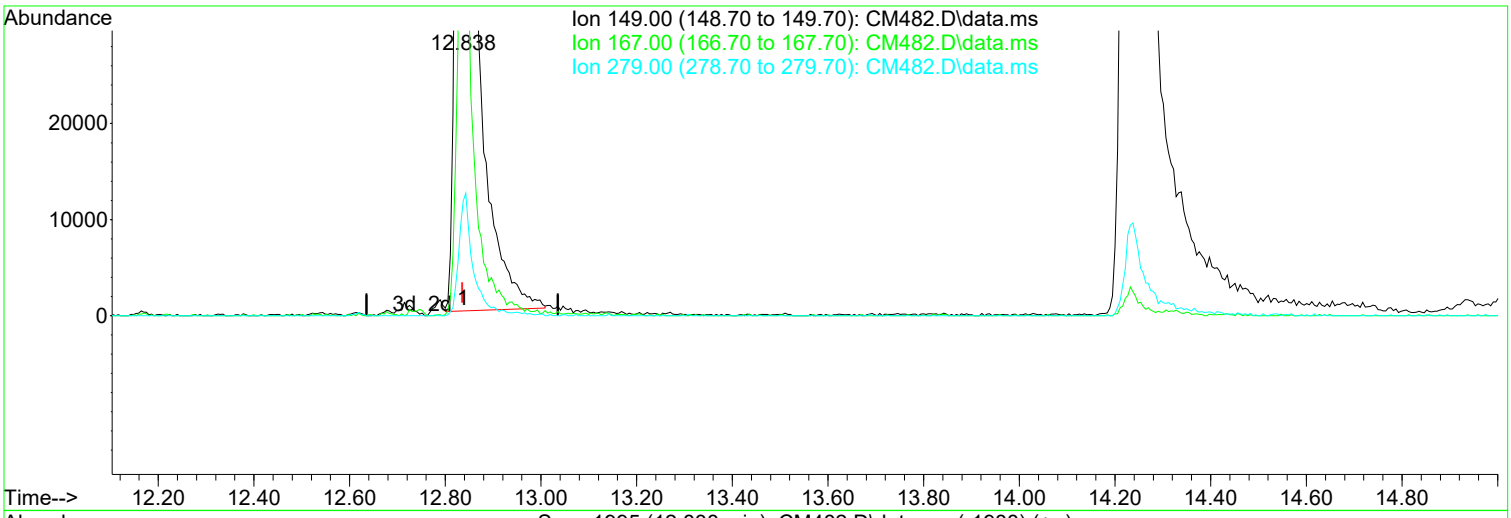
Quant Time: Aug 22 10:33:38 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

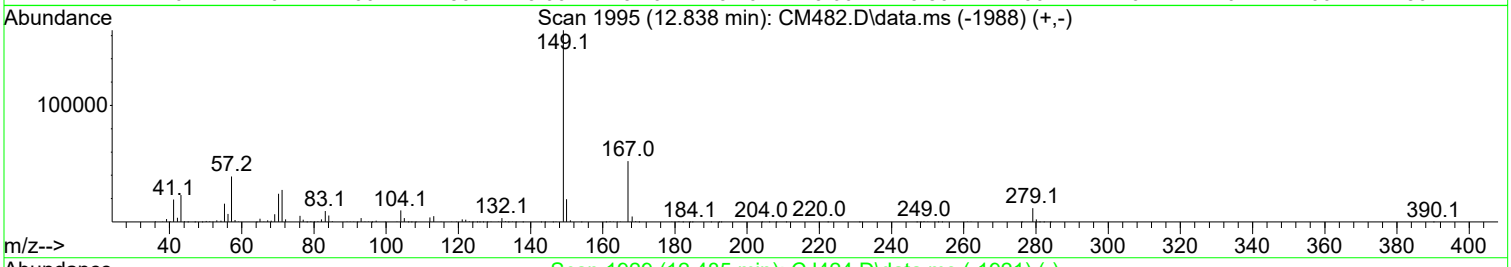


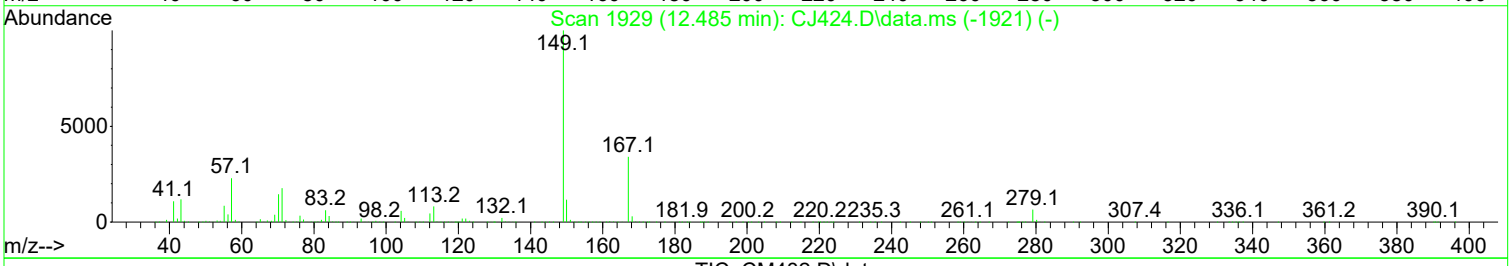
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM482.D
Acq On : 12 Aug 2024 5:46 pm
Operator : B.Allgeier
Sample : 5 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 11:35:25 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM482.D\data.ms

(26) bis(2-Ethylhexyl)phthalate (TM)

12.838min (+ 0.002) 5.87 ppm

response 343645

Ion	Exp%	Act%
149.00	100.00	100.00
167.00	32.00	31.73
279.00	6.00	7.25
0.00	0.00	0.00

Manual Integration:

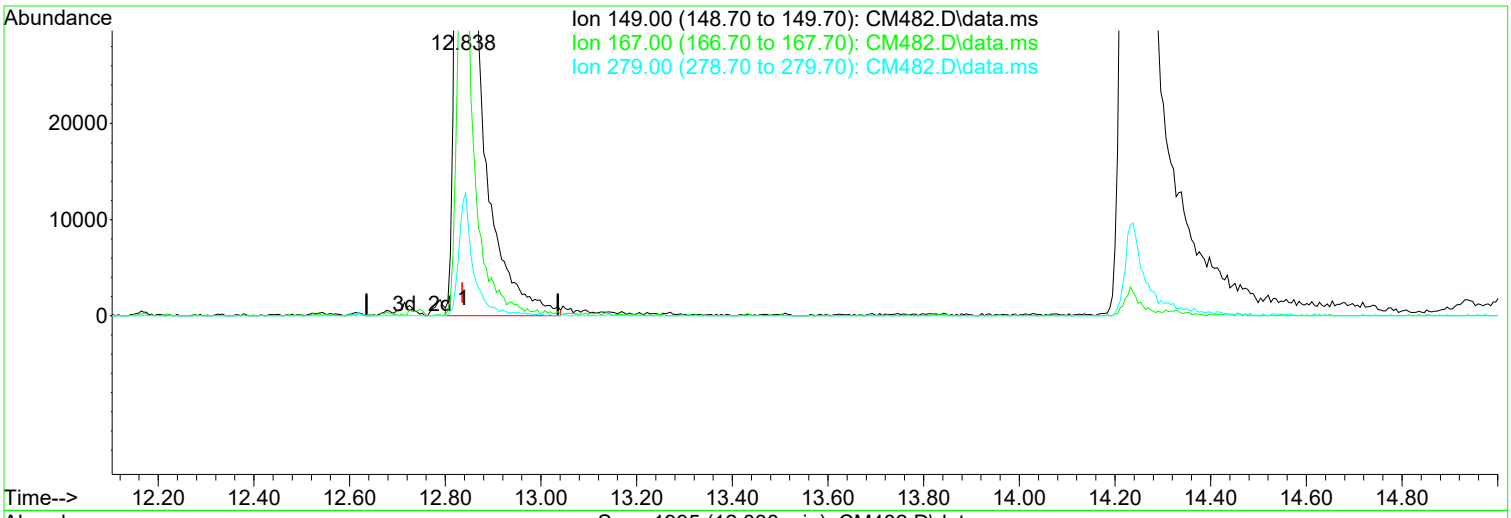
Before

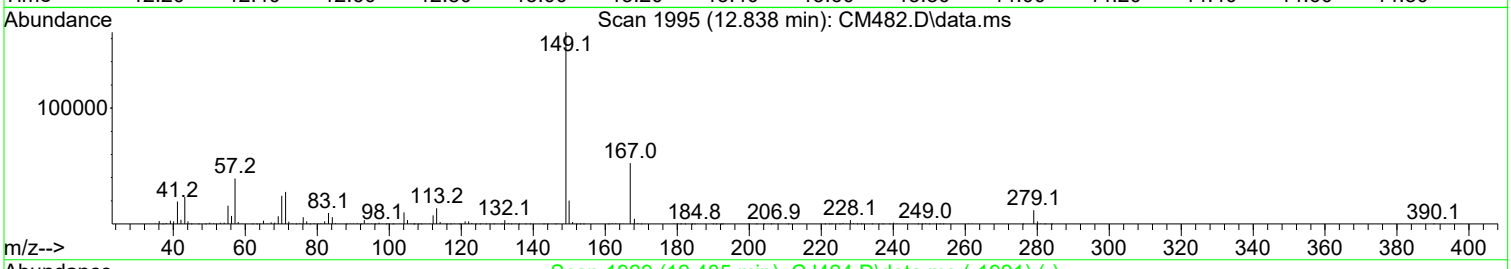
08/26/24

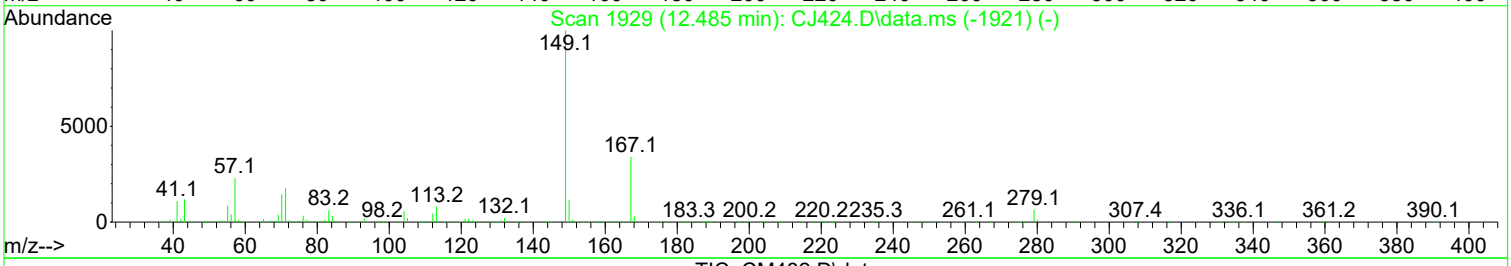
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM482.D
Acq On : 12 Aug 2024 5:46 pm
Operator : B.Allgeier
Sample : 5 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 11:35:25 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM482.D\data.ms

(26) bis(2-Ethylhexyl)phthalate (TM)

12.838min (+ 0.002) 6.03 ppm m

response 352899

Ion	Exp%	Act%
149.00	100.00	100.00
167.00	32.00	31.76
279.00	6.00	7.21
0.00	0.00	0.00

Manual Integration:

After

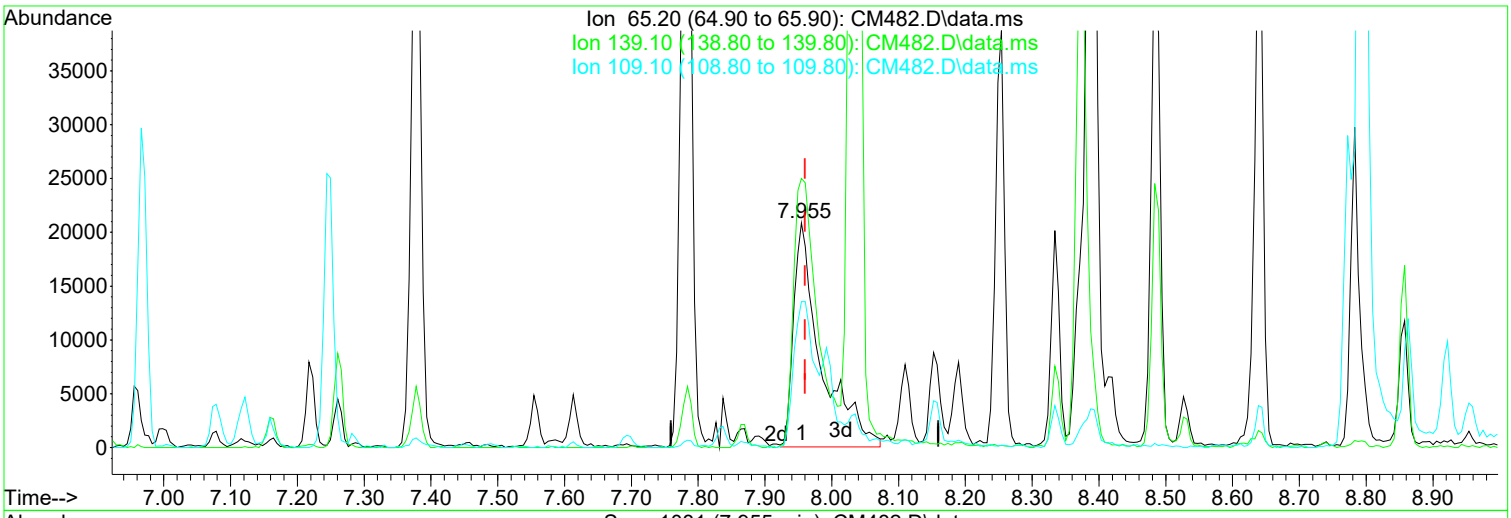
Poor integration.

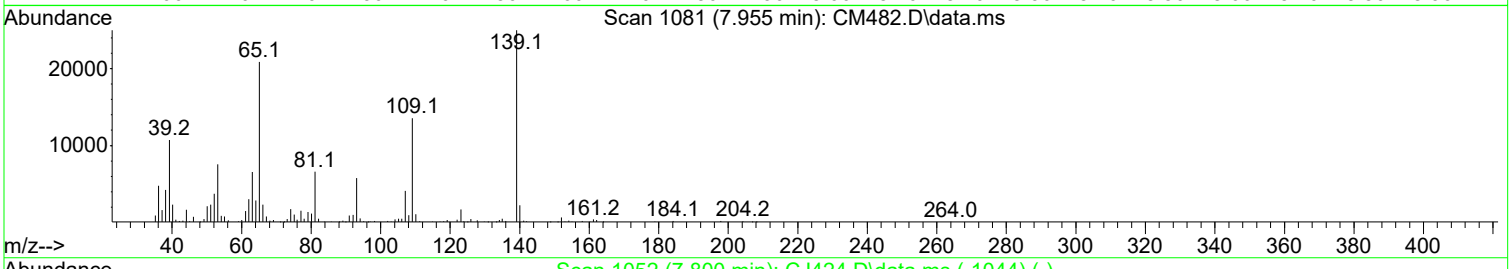
08/26/24

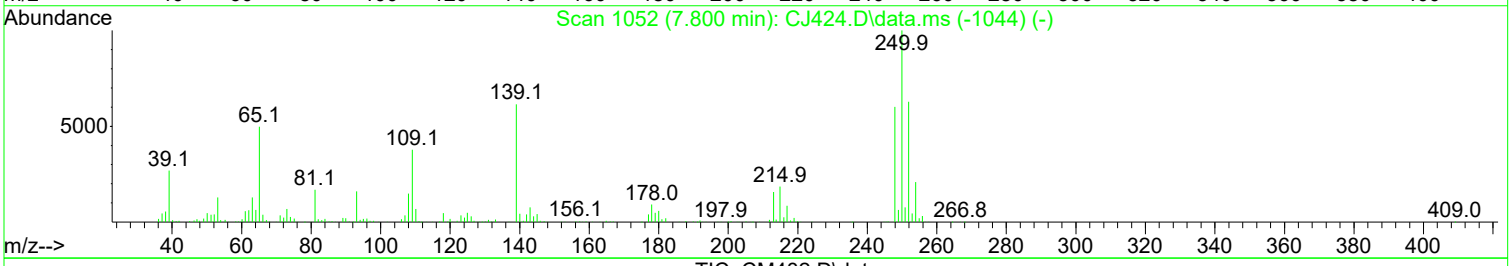
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM482.D
Acq On : 12 Aug 2024 5:46 pm
Operator : B.Allgeier
Sample : 5 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 11:35:25 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM482.D\data.ms

(18) 4-Nitrophenol (TMP)

7.955min (-0.005) 7.37 ppm m

response 59105

Ion	Exp%	Act%
65.20	100.00	100.00
139.10	250.30	119.73#
109.10	57.10	64.97
0.00	0.00	0.00

Manual Integration:

After

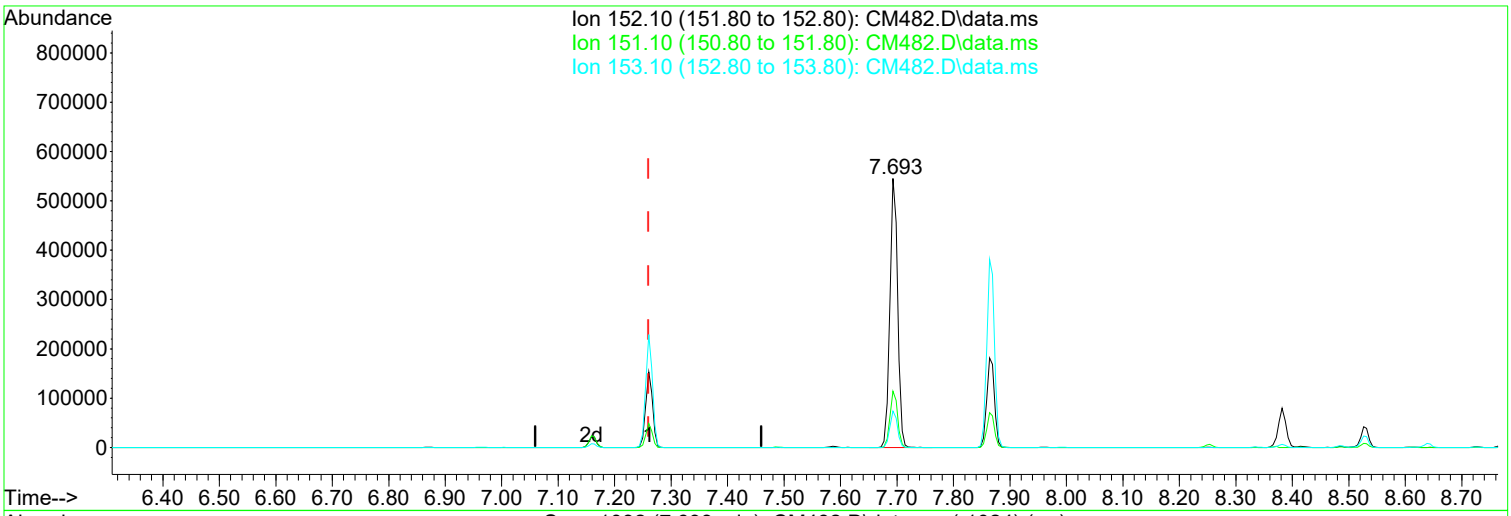
Poor integration.

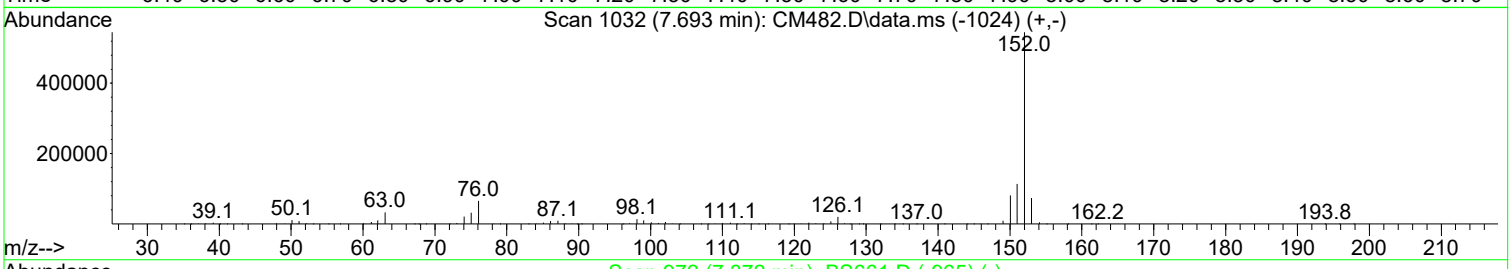
08/26/24

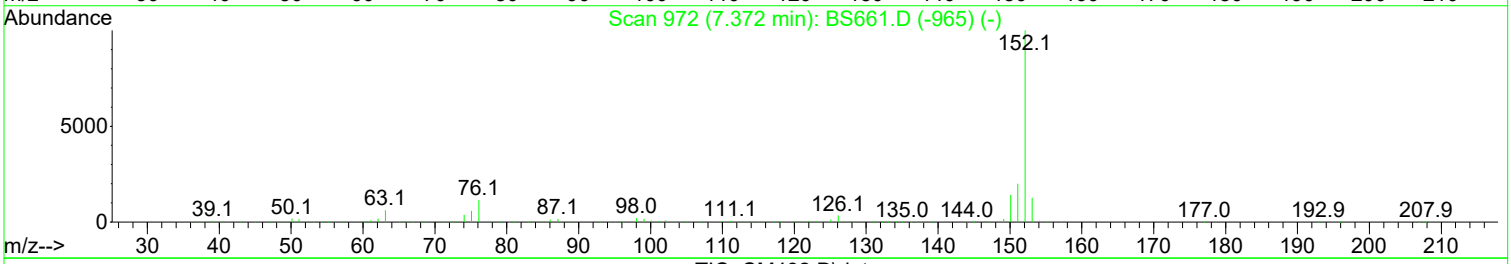
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM482.D
Acq On : 12 Aug 2024 5:46 pm
Operator : B.Allgeier
Sample : 5 STD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 22 10:33:38 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration







TIC: CM482.D\data.ms

(13) Acenaphthylene (TM)

7.693min (+ 0.433) 18.73 ppm m

response 522436

Ion	Exp%	Act%
152.10	100.00	100.00
151.10	27.20	20.91
153.10	150.80	13.52#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

09/04/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM481phenol.D
Acq On : 12 Aug 2024 5:17 pm
Operator : B.Allgeier
Sample : 2 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 11:35:22 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration

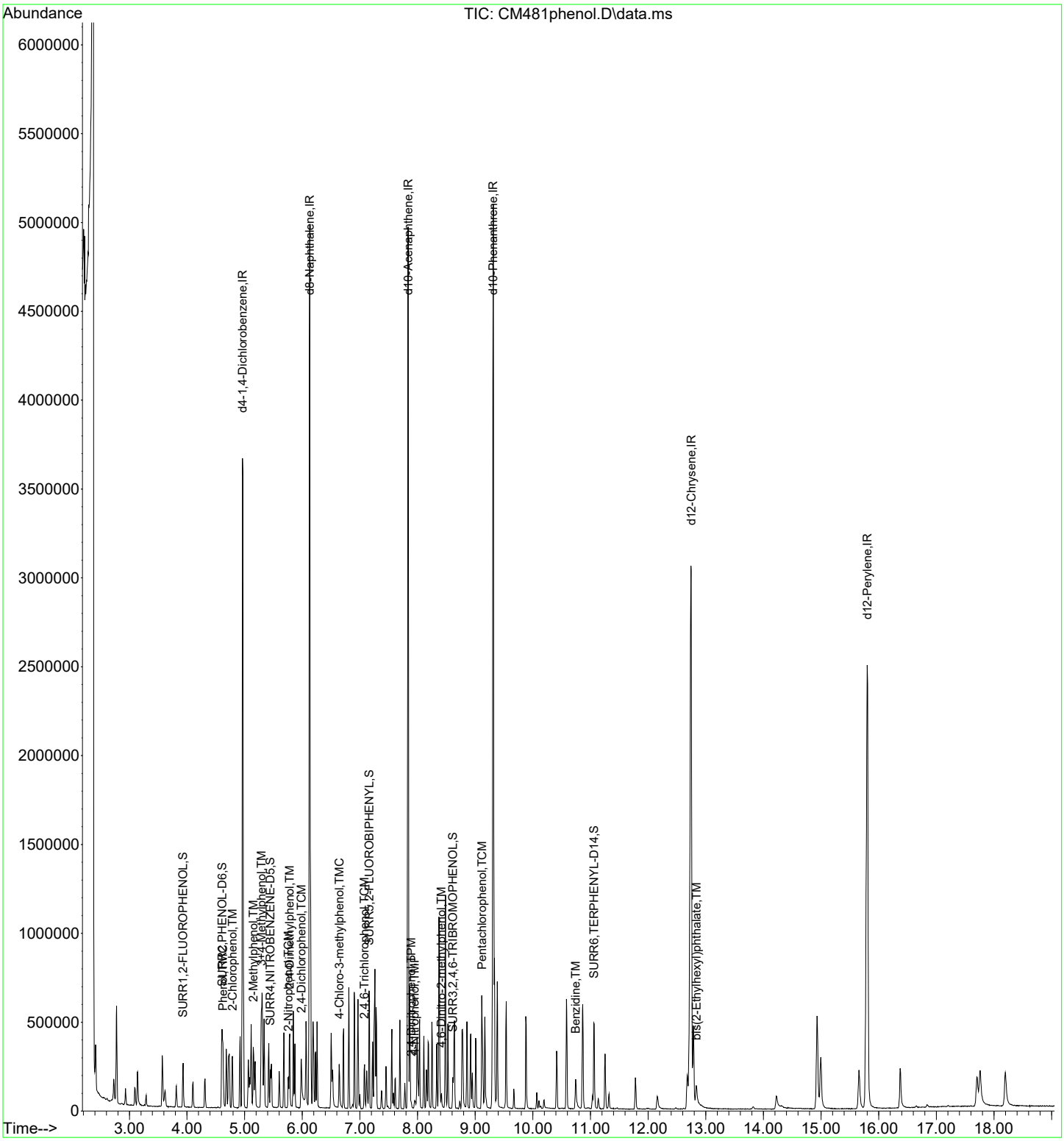
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.963	152	674937	20.00	ppm		0.00
8) d8-Naphthalene	6.128	136	2304269	20.00	ppm		0.00
14) d10-Acenaphthene	7.837	164	1164458	20.00	ppm		0.00
20) d10-Phenanthrene	9.312	188	2030200	20.00	ppm		0.00
23) d12-Chrysene	12.747	240	1848104	20.00	ppm		0.00
27) d12-Perylene	15.803	264	1889010	20.00	ppm		0.00
System Monitoring Compounds							
2) SURR1,2-FLUOROPHENOL	3.932	112	91180	2.01	ppm		0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 50.25%				
3) SURR2,PHENOL-D6	4.611	99	112873	2.04	ppm		0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 51.00%				
9) SURR4,NITROBENZENE-D5	5.444	82	72449	1.92	ppm		0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 96.00%				
16) SURR5,2-FLUOROBIPHENYL	7.159	172	199751	2.28	ppm		0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 114.00%				
19) SURR3,2,4,6-TRIBROMOPH...	8.612	330	23496	2.05	ppm		0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 51.25%				
25) SURR6,TERPHENYL-D14	11.064	244	196280	2.13	ppm		0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 106.50%				
Target Compounds							Qvalue
4) Phenol	4.627	94	117954	1.998	ppm		78
5) 2-Chlorophenol	4.787	128	100958	2.026	ppm		94
6) 2-Methylphenol	5.150	108	90939	2.073	ppm		96
7) 3+4-Methylphenol	5.289	108	85492	2.148	ppm	#	68
10) 2-Nitrophenol	5.759	139	41572	1.946	ppm		88
11) 2,4-Dimethylphenol	5.781	107	95927	2.219	ppm		93
12) 2,4-Dichlorophenol	5.984	162	68582	2.240	ppm		96
13) 4-Chloro-3-methylphenol	6.641	107	63765	1.807	ppm		95
15) 2,4,6-Trichlorophenol	7.079	196	39929	1.857	ppm		94
17) 2,4-Dinitrophenol	7.891	184	8188	1.427	ppm		75
18) 4-Nitrophenol	7.949	65	18711m	2.127	ppm		
21) 4,6-Dinitro-2-methylph...	8.414	198	13246	1.484	ppm		92
22) Pentachlorophenol	9.119	266	23626	1.751	ppm		95
24) Benzidine	10.743	184	110301	1.951	ppm		100
26) bis(2-Ethylhexyl)phtha...	12.838	149	109017m	1.699	ppm		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM481phenol.D
Acq On : 12 Aug 2024 5:17 pm
Operator : B.Allgeier
Sample : 2 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 11:35:22 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM481.D
Acq On : 12 Aug 2024 5:17 pm
Operator : B.Allgeier
Sample : 2 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 22 10:33:35 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

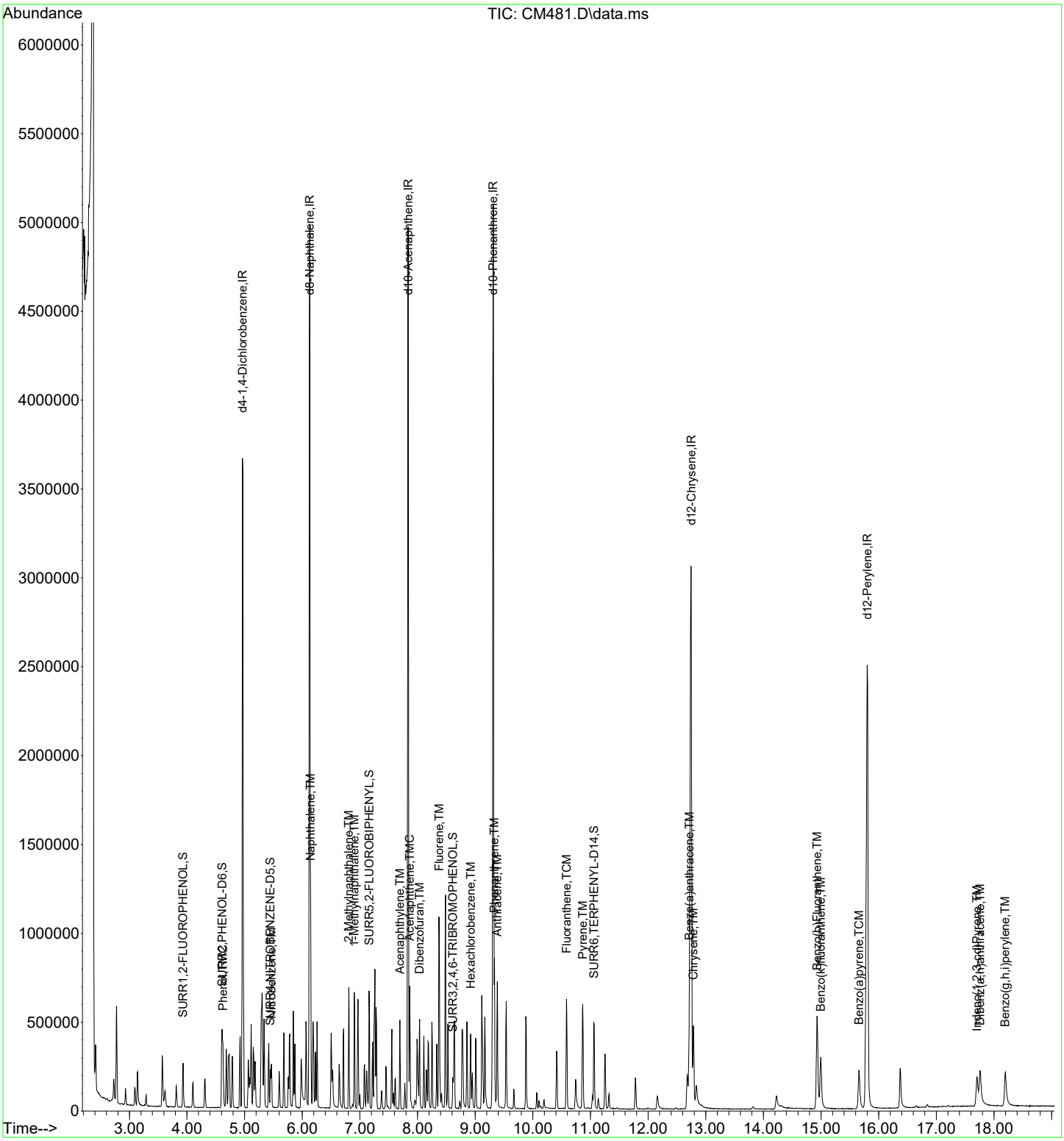
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	674937	20.00	ppm	0.00
5) d8-Naphthalene	6.128	136	2304269	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1164458	20.00	ppm	0.00
18) d10-Phenanthrene	9.312	188	2030200	20.00	ppm	0.00
23) d12-Chrysene	12.747	240	1848104	20.00	ppm	0.00
28) d12-Perylene	15.803	264	1889010	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.932	112	91180	2.09	ppm	0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 52.25%			
3) SURR2,PHENOL-D6	4.611	99	112873	2.15	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 53.75%			
6) SURR4,NITROBENZENE-D5	5.444	82	72126	2.14	ppm	0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 107.00%			
12) SURR5,2-FLUOROBIPHENYL	7.159	172	199751	2.06	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 103.00%			
17) SURR3,2,4,6-TRIBROMOPH...	8.612	330	23496	2.42	ppm	0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 60.50%			
25) SURR6,TERPHENYL-D14	11.064	244	196280	1.98	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 99.00%			
Target Compounds						Qvalue
4) Phenol	4.627	94	117954	2.130	ppm	99
7) Nitrobenzene	5.465	77	76110	2.336	ppm	99
8) Naphthalene	6.144	128	299405	2.003	ppm	98
9) 2-Methylnaphthalene	6.806	142	203252	2.001	ppm	97
10) 1-Methylnaphthalene	6.902	142	188817	2.011	ppm	97
13) Acenaphthylene	7.693	152	231639m	7.566	ppm	
14) Acenaphthene	7.864	153	163560	1.936	ppm	93
15) Dibenzofuran	8.035	168	212973	1.937	ppm	98
16) Fluorene	8.371	166	179098	2.041	ppm	95
19) Hexachlorobenzene	8.922	284	63310	1.963	ppm	99
20) Phenanthrene	9.333	178	279978	1.962	ppm	98
21) Anthracene	9.381	178	274998	1.983	ppm	99
22) Fluoranthene	10.583	202	296639	1.895	ppm	100
24) Pyrene	10.866	202	302416	1.997	ppm	98
26) Benzo(a)anthracene	12.715	228	242047	1.909	ppm	98
27) Chrysene	12.784	228	234003	1.975	ppm	98
29) Benzo(b)Fluoranthene	14.932	252	209622	2.114	ppm	99
30) Benzo(k)fluoranthene	14.996	252	229111	2.262	ppm	98
31) Benzo(a)pyrene	15.658	252	178628	2.154	ppm	99
32) Indeno(1,2,3-cd)Pyrene	17.704	276	136542	2.211	ppm	91
33) Dibenz(a,h)anthracene	17.758	278	173900	2.245	ppm	90
34) Benzo(g,h,i)perylene	18.196	276	183527	2.123	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM481.D
Acq On : 12 Aug 2024 5:17 pm
Operator : B.Allgeier
Sample : 2 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

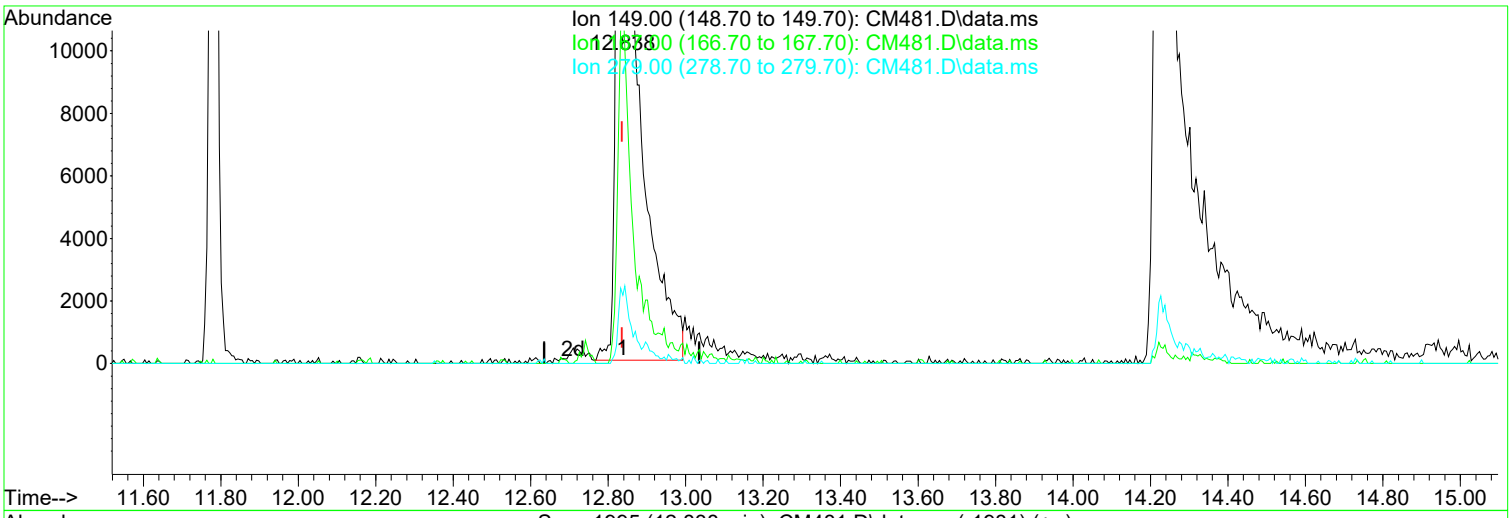
Quant Time: Aug 22 10:33:35 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

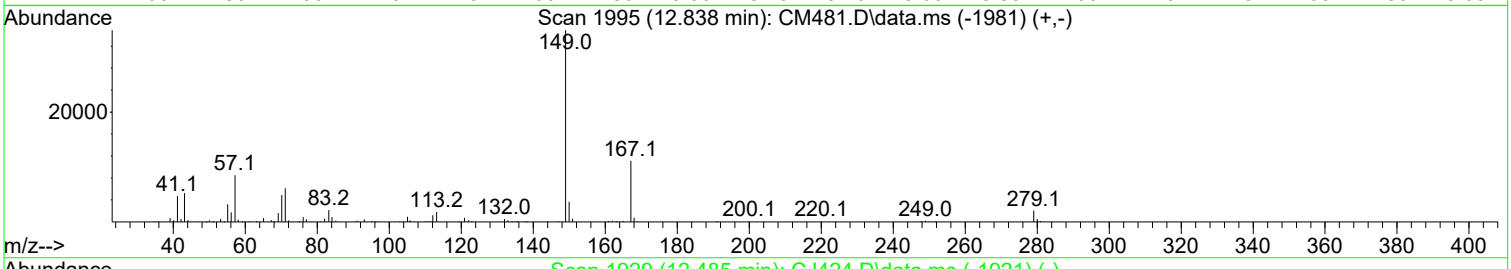


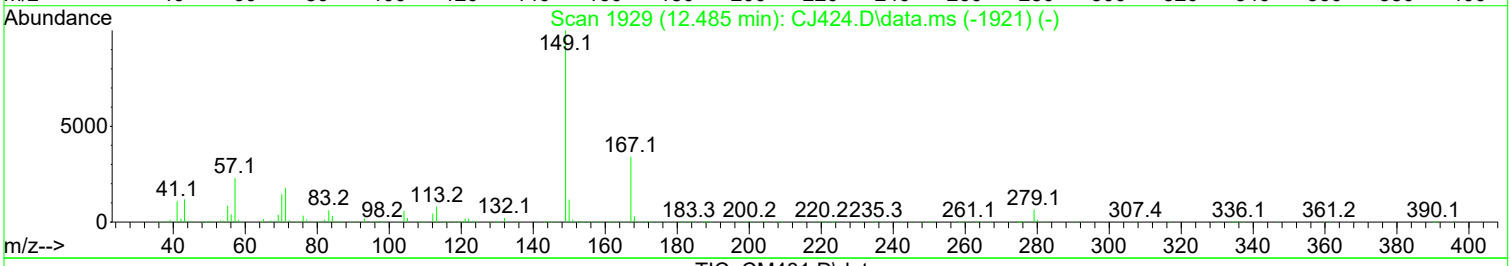
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM481.D
Acq On : 12 Aug 2024 5:17 pm
Operator : B.Allgeier
Sample : 2 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 11:35:22 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM481.D\data.ms

(26) bis(2-Ethylhexyl)phthalate (TM)

12.838min (+ 0.002) 1.59 ppm

response 101830

Ion	Exp%	Act%
149.00	100.00	100.00
167.00	32.00	31.84
279.00	6.00	6.00
0.00	0.00	0.00

Manual Integration:

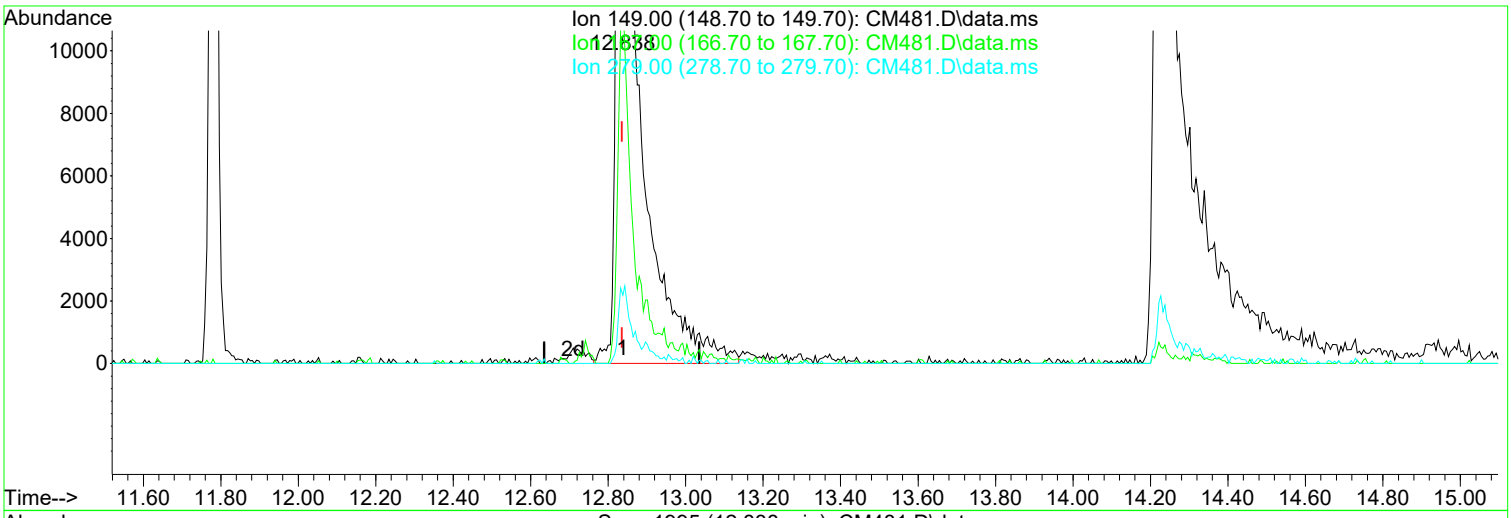
Before

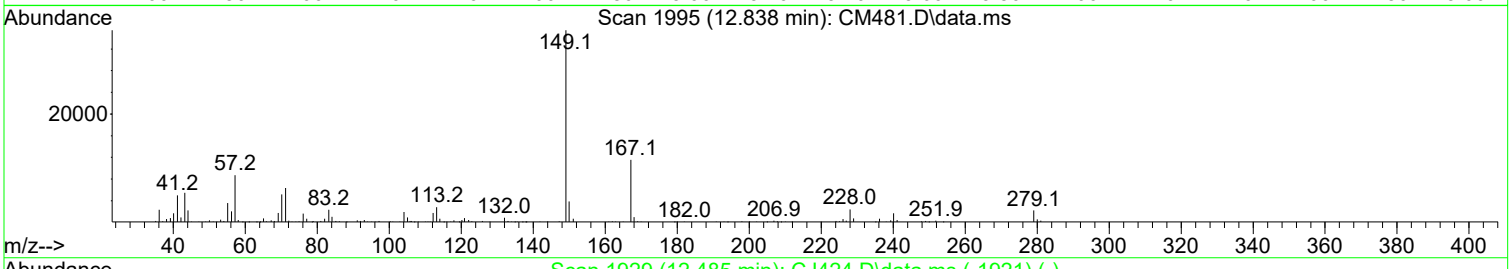
08/26/24

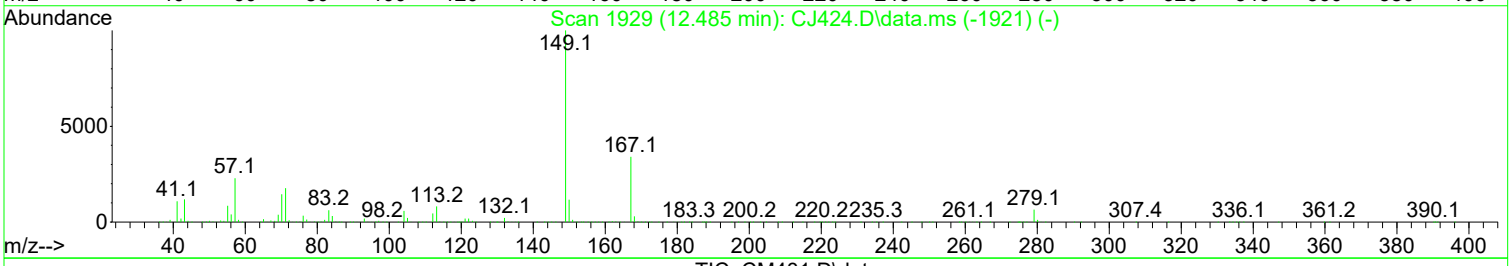
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM481.D
Acq On : 12 Aug 2024 5:17 pm
Operator : B.Allgeier
Sample : 2 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 11:35:22 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM481.D\data.ms

(26) bis(2-Ethylhexyl)phthalate (TM)

12.838min (+ 0.002) 1.70 ppm m

response 109017

Ion	Exp%	Act%
149.00	100.00	100.00
167.00	32.00	32.46
279.00	6.00	6.17
0.00	0.00	0.00

Manual Integration:

After

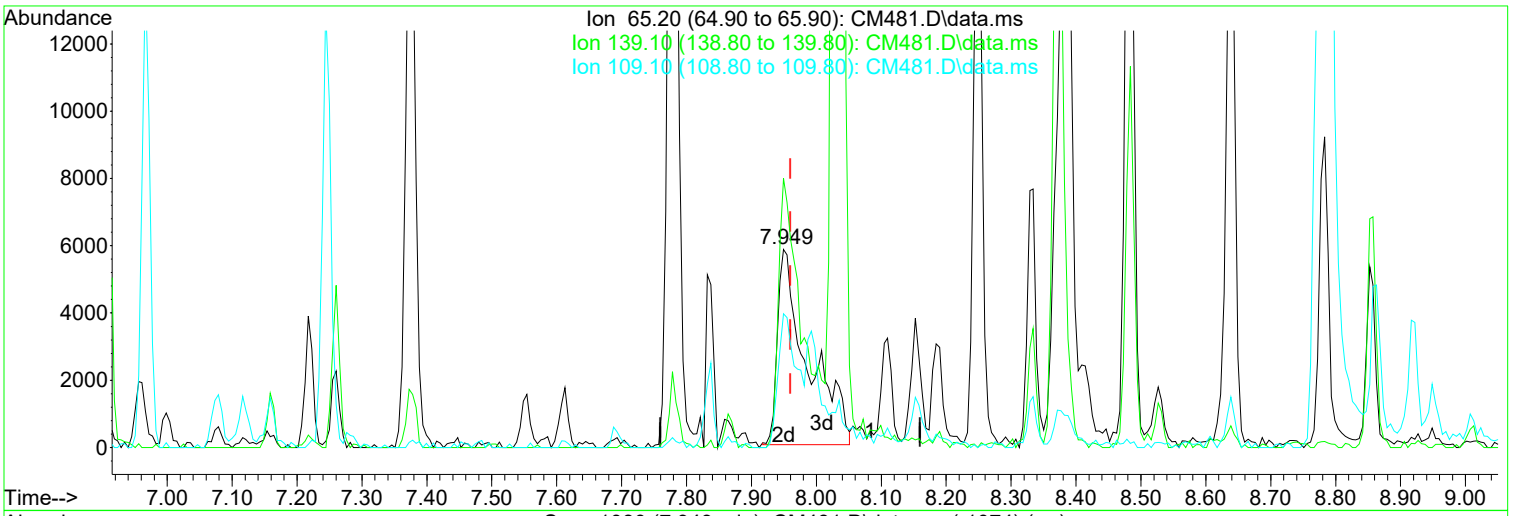
Poor integration.

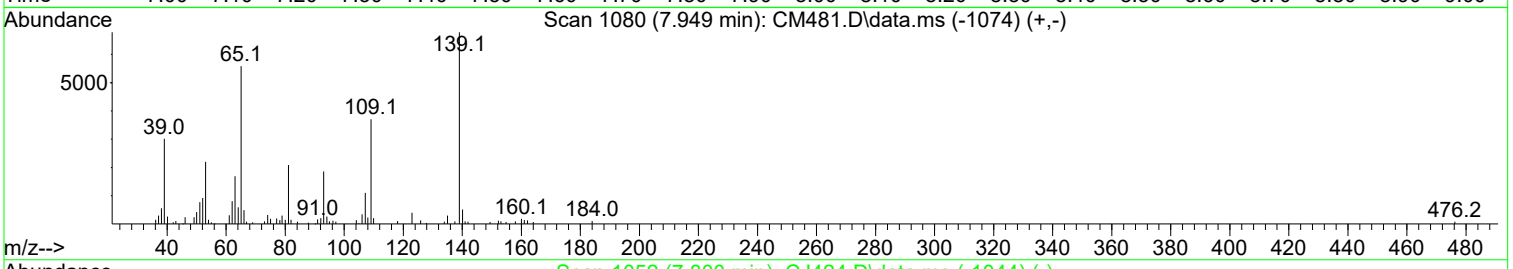
08/26/24

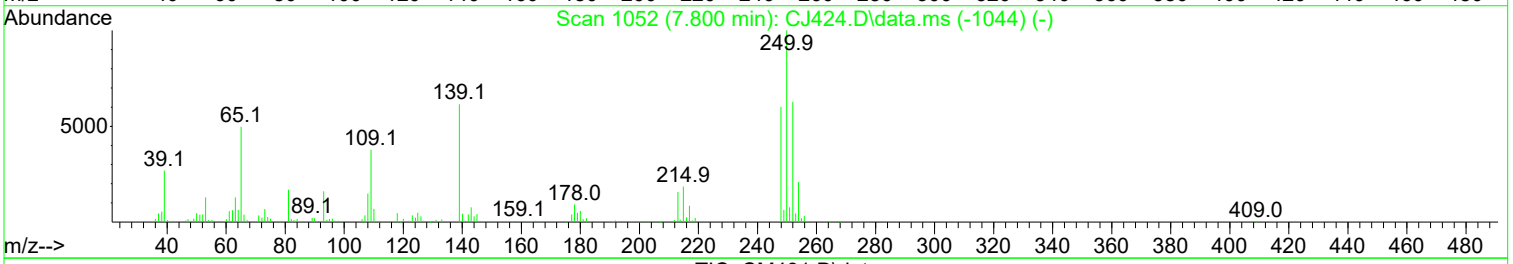
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM481.D
Acq On : 12 Aug 2024 5:17 pm
Operator : B.Allgeier
Sample : 2 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 11:35:22 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM481.D\data.ms

(18) 4-Nitrophenol (TMP)

7.949min (-0.011) 2.13 ppm m

response 18711

Ion	Exp%	Act%
65.20	100.00	100.00
139.10	250.30	135.75#
109.10	57.10	67.44
0.00	0.00	0.00

Manual Integration:

After

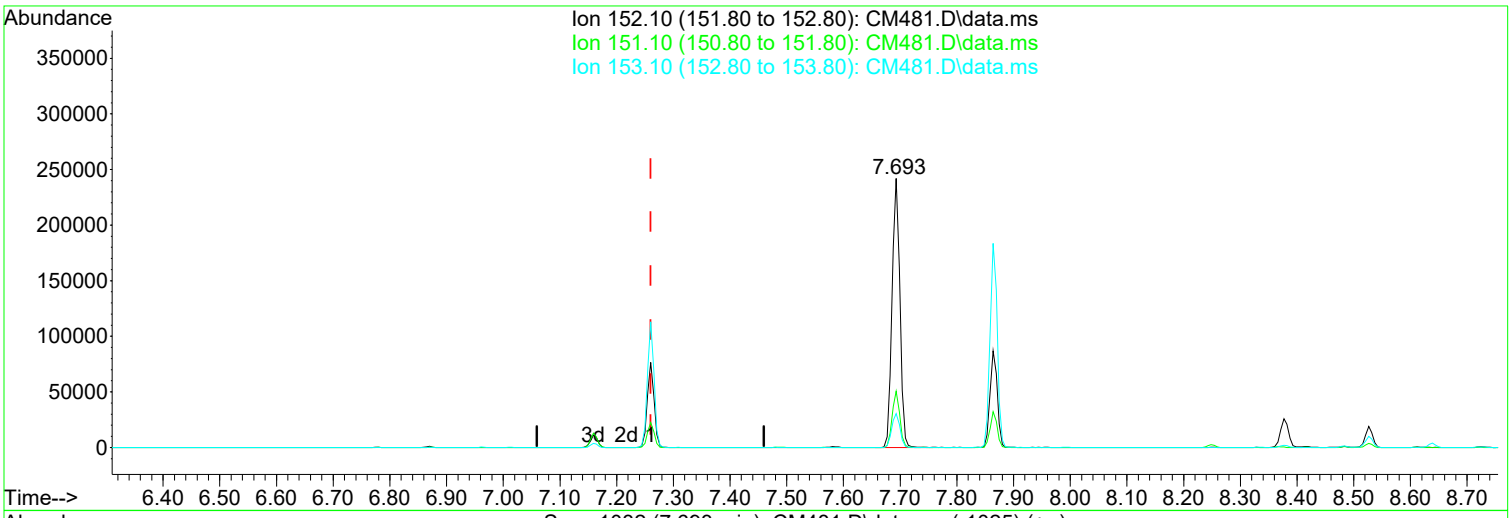
Poor integration.

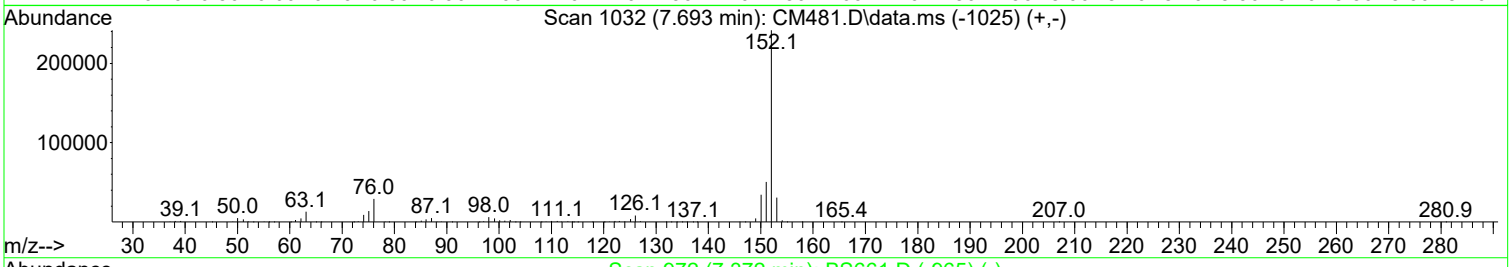
08/26/24

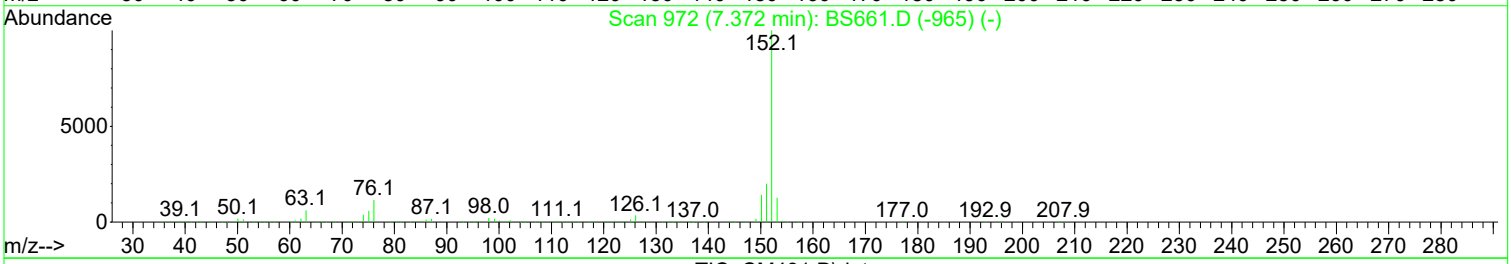
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM481.D
Acq On : 12 Aug 2024 5:17 pm
Operator : B.Allgeier
Sample : 2 STD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 22 10:33:35 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration







TIC: CM481.D\data.ms

(13) Acenaphthylene (TM)

7.693min (+ 0.433) 7.57 ppm m

response 231639

Ion	Exp%	Act%
152.10	100.00	100.00
151.10	27.20	20.89
153.10	150.80	12.63#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

09/04/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM480phenol.D
Acq On : 12 Aug 2024 4:49 pm
Operator : B.Allgeier
Sample : 1 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 11:35:19 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration

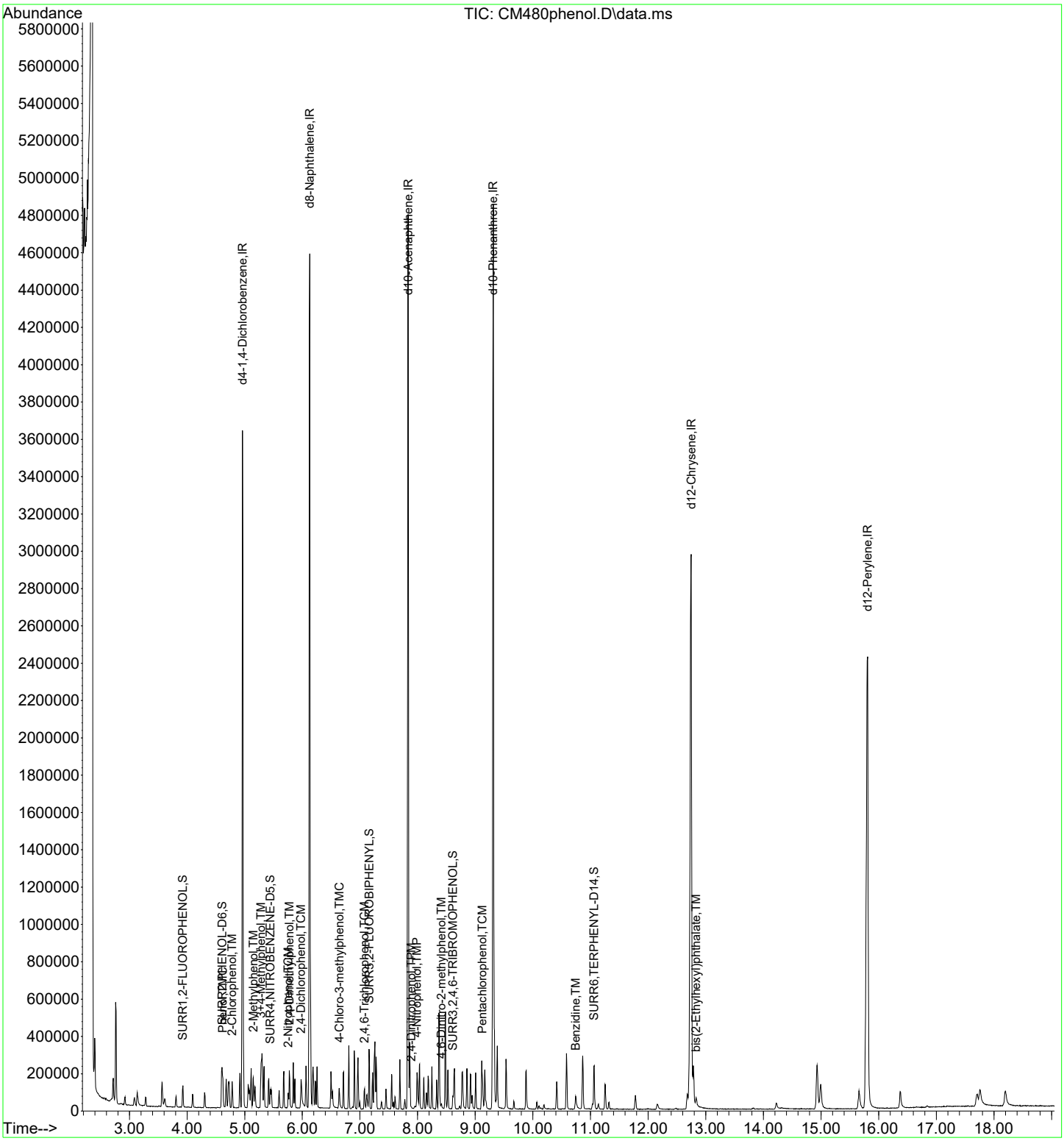
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	637808	20.00	ppm	0.00
8) d8-Naphthalene	6.128	136	2167030	20.00	ppm	0.00
14) d10-Acenaphthene	7.837	164	1154346	20.00	ppm	0.00
20) d10-Phenanthrene	9.312	188	1876248	20.00	ppm	0.00
23) d12-Chrysene	12.747	240	1785425	20.00	ppm	0.00
27) d12-Perylene	15.808	264	1888985	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.927	112	41237	0.96	ppm	0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 24.00%			
3) SURR2,PHENOL-D6	4.610	99	49668	0.95	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 23.75%			
9) SURR4,NITROBENZENE-D5	5.444	82	31677	0.89	ppm	0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 44.50%			
16) SURR5,2-FLUOROBIPHENYL	7.159	172	96310	1.11	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 55.50%			
19) SURR3,2,4,6-TRIBROMOPH...	8.612	330	9632	0.85	ppm	0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 21.25%#			
25) SURR6,TERPHENYL-D14	11.064	244	95623	1.07	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 53.50%			
Target Compounds						Qvalue
4) Phenol	4.621	94	52329	0.938	ppm	79
5) 2-Chlorophenol	4.781	128	43619	0.926	ppm	94
6) 2-Methylphenol	5.150	108	39738	0.959	ppm	97
7) 3+4-Methylphenol	5.283	108	40220m	1.069	ppm	
10) 2-Nitrophenol	5.754	139	18310	0.911	ppm	91
11) 2,4-Dimethylphenol	5.775	107	43219	1.063	ppm	94
12) 2,4-Dichlorophenol	5.978	162	30330	1.053	ppm	95
13) 4-Chloro-3-methylphenol	6.640	107	28851	0.869	ppm	97
15) 2,4,6-Trichlorophenol	7.078	196	17918	0.841	ppm	94
17) 2,4-Dinitrophenol	7.891	184	1985	0.349	ppm	91
18) 4-Nitrophenol	7.987	65	8077m	0.926	ppm	
21) 4,6-Dinitro-2-methylph...	8.414	198	4042	0.490	ppm	96
22) Pentachlorophenol	9.125	266	8156	0.654	ppm	89
24) Benzidine	10.743	184	53478	0.979	ppm	99
26) bis(2-Ethylhexyl)phtha...	12.832	149	41132m	0.663	ppm	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st EDG 08/26/24
2nd AM 08/26/24

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM480phenol.D
Acq On : 12 Aug 2024 4:49 pm
Operator : B.Allgeier
Sample : 1 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 11:35:19 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM480.D
Acq On : 12 Aug 2024 4:49 pm
Operator : B.Allgeier
Sample : 1 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 22 10:32:44 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:33 2024
Response via : Initial Calibration

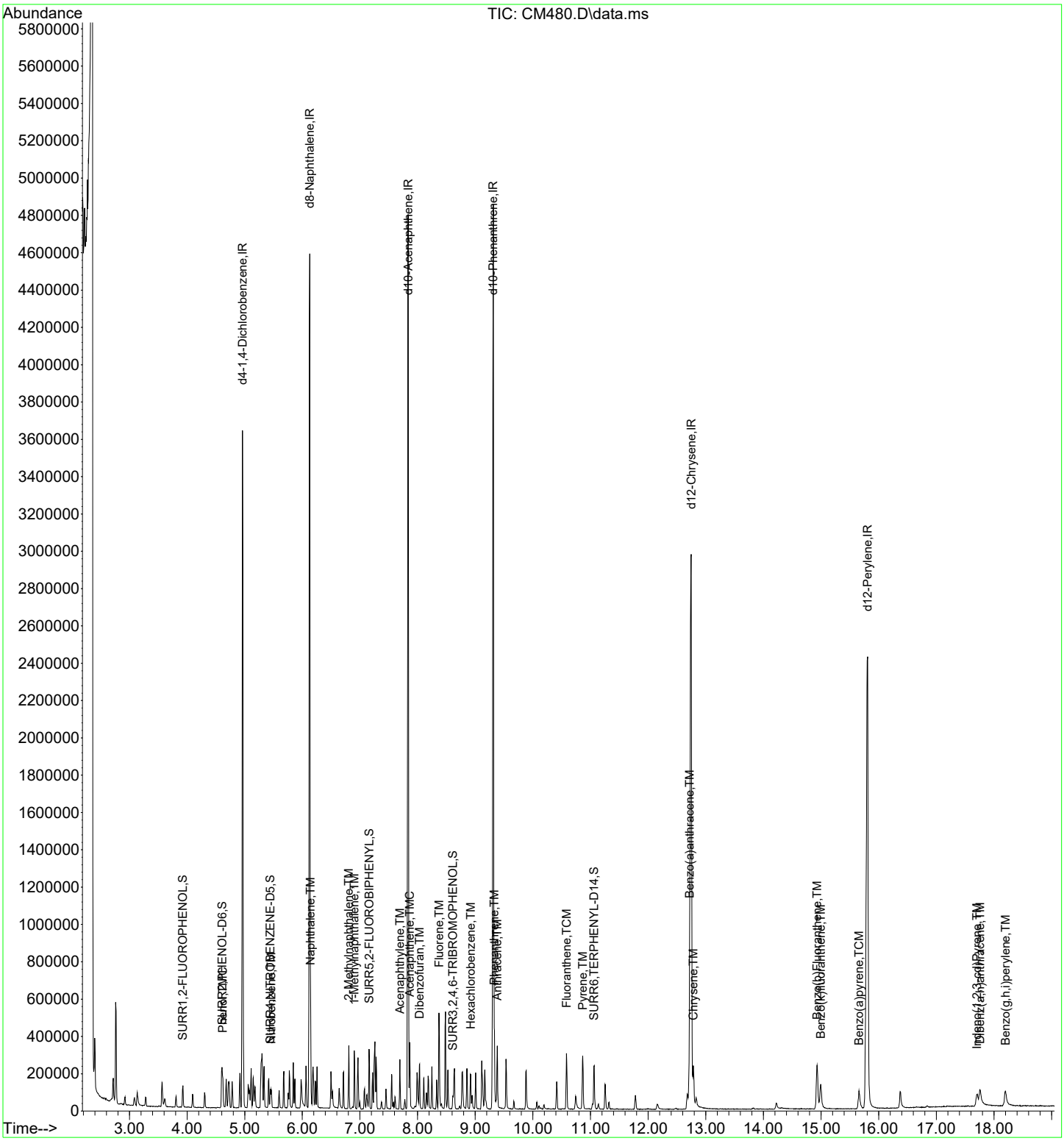
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	637808	20.00	ppm	0.00
5) d8-Naphthalene	6.128	136	2167030	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1154346	20.00	ppm	0.00
18) d10-Phenanthrene	9.312	188	1876248	20.00	ppm	0.00
23) d12-Chrysene	12.747	240	1785425	20.00	ppm	0.00
28) d12-Perylene	15.808	264	1888985	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.927	112	41237	1.01	ppm	0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 25.25%			
3) SURR2,PHENOL-D6	4.610	99	49668	0.99	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 24.75%			
6) SURR4,NITROBENZENE-D5	5.444	82	31677	1.03	ppm	0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 51.50%			
12) SURR5,2-FLUOROBIPHENYL	7.159	172	96310	1.01	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 50.50%			
17) SURR3,2,4,6-TRIBROMOPH...	8.612	330	9632	1.01	ppm	0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 25.25%#			
25) SURR6,TERPHENYL-D14	11.064	244	95623	1.00	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 50.00%			
Target Compounds						Qvalue
4) Phenol	4.621	94	52329	0.992	ppm	100
7) Nitrobenzene	5.460	77	30647	1.014	ppm	100
8) Naphthalene	6.144	128	140554	0.913	ppm	100
9) 2-Methylnaphthalene	6.806	142	95531	0.943	ppm	100
10) 1-Methylnaphthalene	6.902	142	88302	0.918	ppm	100
13) Acenaphthylene	7.693	152	118151m	3.806	ppm	
14) Acenaphthene	7.864	153	83734	0.859	ppm	100
15) Dibenzofuran	8.035	168	108983	0.892	ppm	100
16) Fluorene	8.371	166	87001	0.834	ppm	100
19) Hexachlorobenzene	8.922	284	29799	0.973	ppm	100
20) Phenanthrene	9.333	178	131880	0.768	ppm	100
21) Anthracene	9.381	178	128146	0.800	ppm	100
22) Fluoranthene	10.583	202	144703	0.769	ppm	100
24) Pyrene	10.866	202	146263	0.849	ppm	100
26) Benzo(a)anthracene	12.720	228	122479	0.651	ppm	100
27) Chrysene	12.784	228	114446	0.797	ppm	100
29) Benzo(b)Fluoranthene	14.932	252	99144	0.921	ppm	100
30) Benzo(k)fluoranthene	14.996	252	101297	0.902	ppm	100
31) Benzo(a)pyrene	15.658	252	82925	0.899	ppm	100
32) Indeno(1,2,3-cd)Pyrene	17.704	276	61744	1.012	ppm	100
33) Dibenz(a,h)anthracene	17.758	278	77455	1.018	ppm	100
34) Benzo(g,h,i)perylene	18.201	276	86465	0.848	ppm	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM480.D
Acq On : 12 Aug 2024 4:49 pm
Operator : B.Allgeier
Sample : 1 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

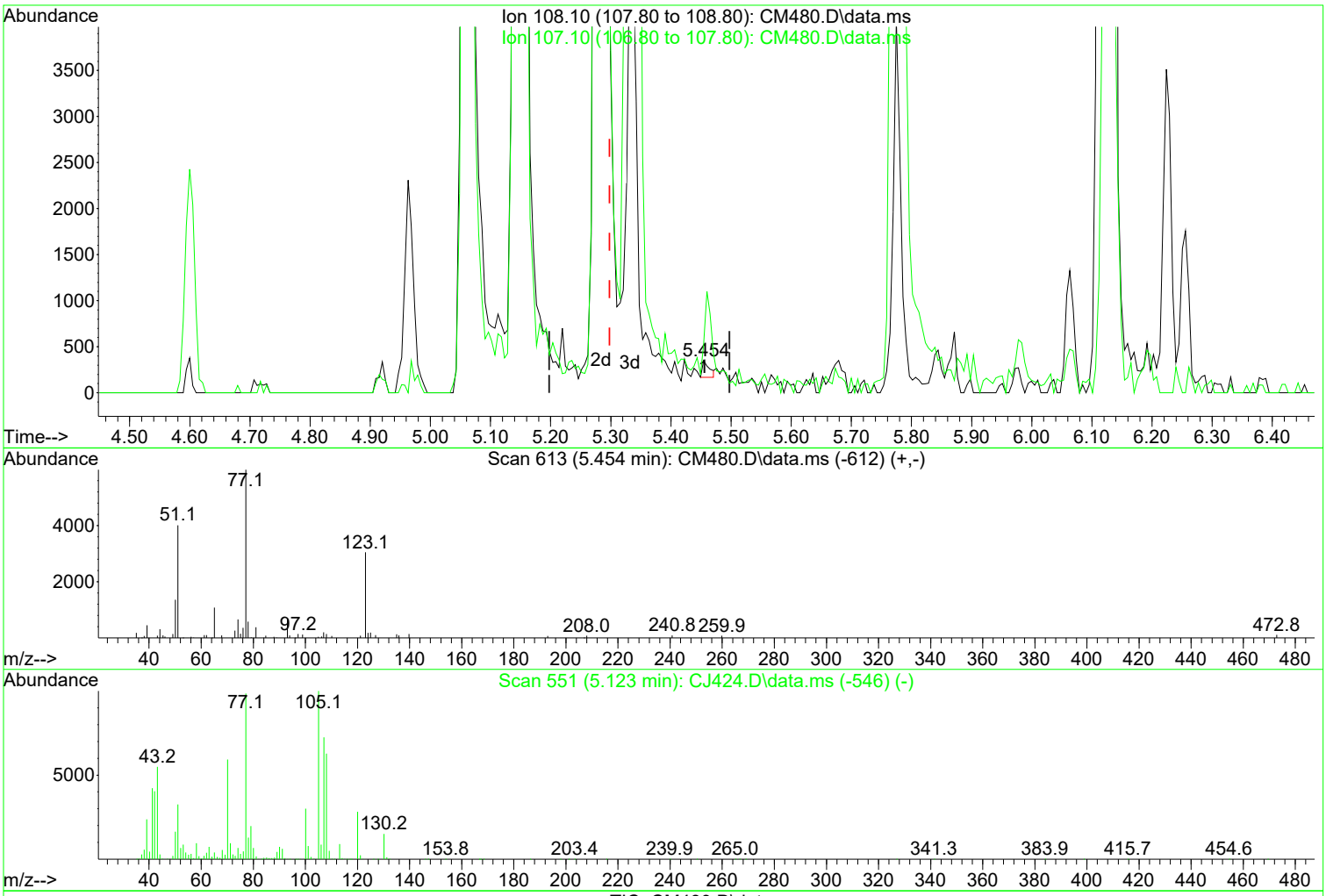
Quant Time: Aug 22 10:32:44 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:33 2024
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM480.D
Acq On : 12 Aug 2024 4:49 pm
Operator : B.Allgeier
Sample : 1 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 11:35:19 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration



TIC: CM480.D\data.ms

(7) 3+4-Methylphenol (TM)

5.454min (+ 0.156) 0.00 ppm

response 148

Ion	Exp%	Act%
108.10	100.00	100.00
107.10	144.70	138.01
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

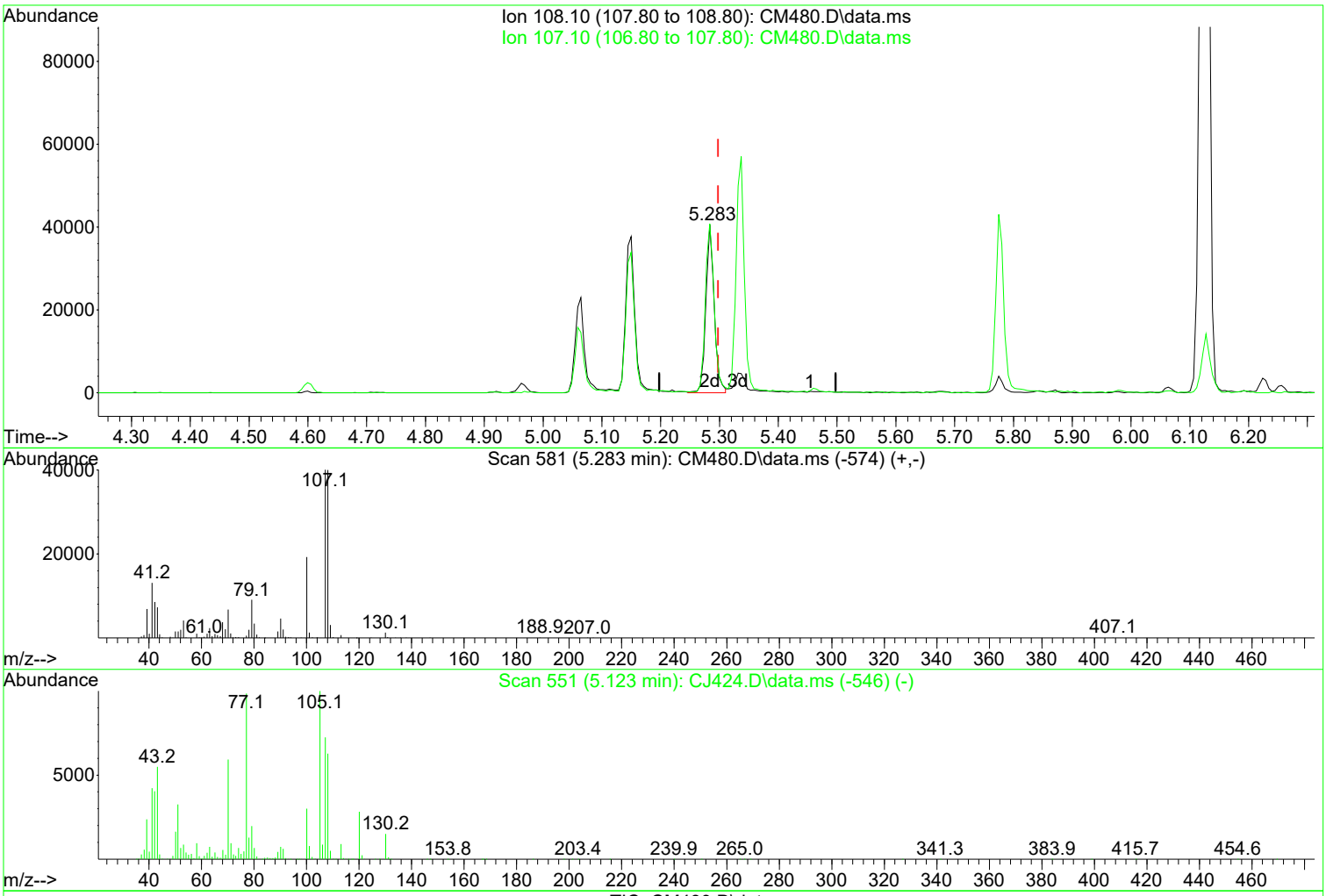
Before

08/26/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM480.D
Acq On : 12 Aug 2024 4:49 pm
Operator : B.Allgeier
Sample : 1 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 11:35:19 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration



TIC: CM480.D\data.ms

(7) 3+4-Methylphenol (TM)

5.283min (-0.015) 1.07 ppm m

response 40220

Ion	Exp%	Act%
108.10	100.00	100.00
107.10	144.70	100.67#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

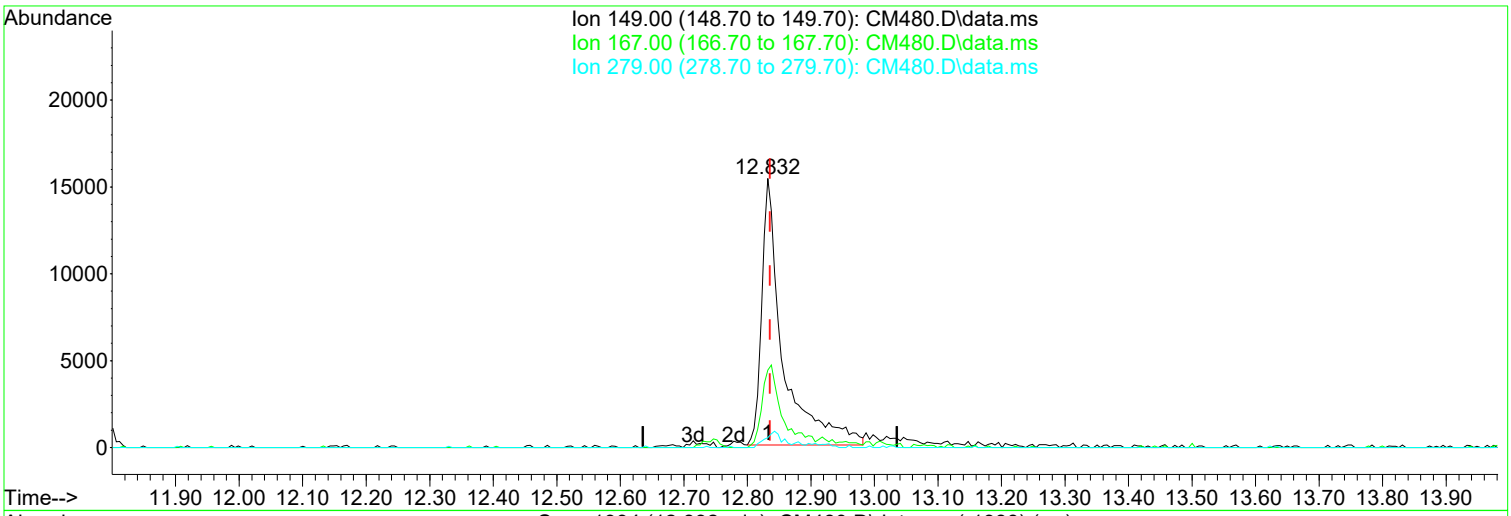
Peak not found.

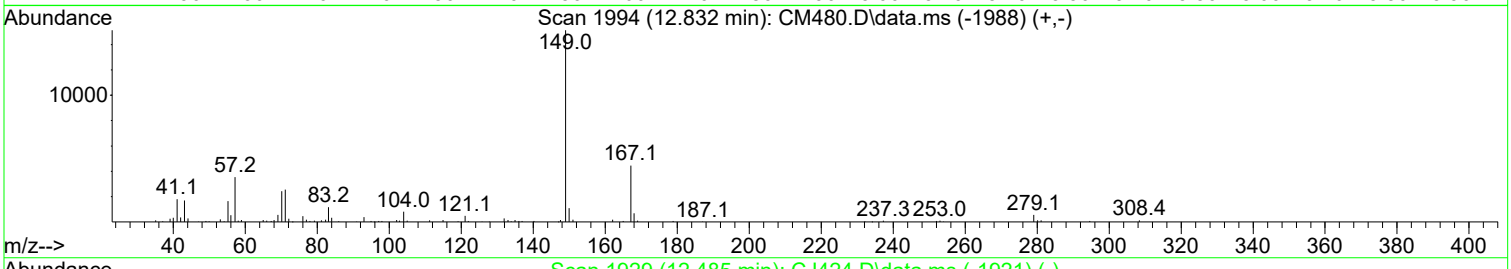
08/26/24

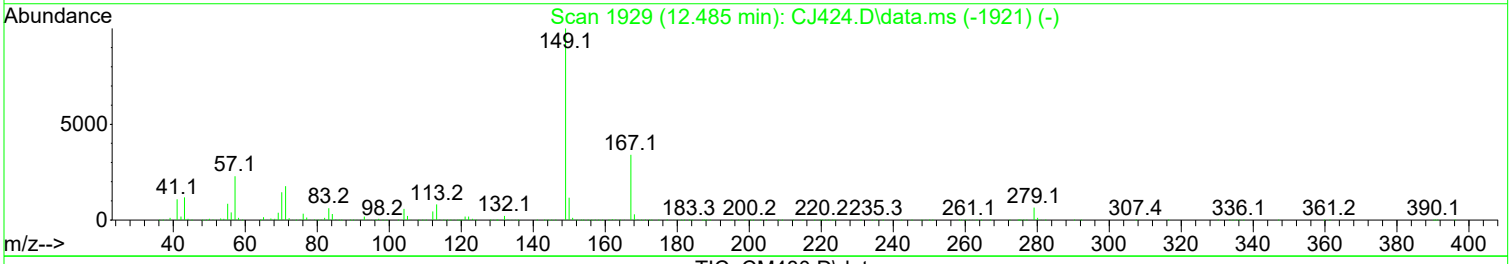
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM480.D
Acq On : 12 Aug 2024 4:49 pm
Operator : B.Allgeier
Sample : 1 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 11:35:19 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM480.D\data.ms

(26) bis(2-Ethylhexyl)phthalate (TM)

12.832min (-0.004) 0.57 ppm

response 35587

Ion	Exp%	Act%
149.00	100.00	100.00
167.00	32.00	28.91
279.00	6.00	3.79
0.00	0.00	0.00

Manual Integration:

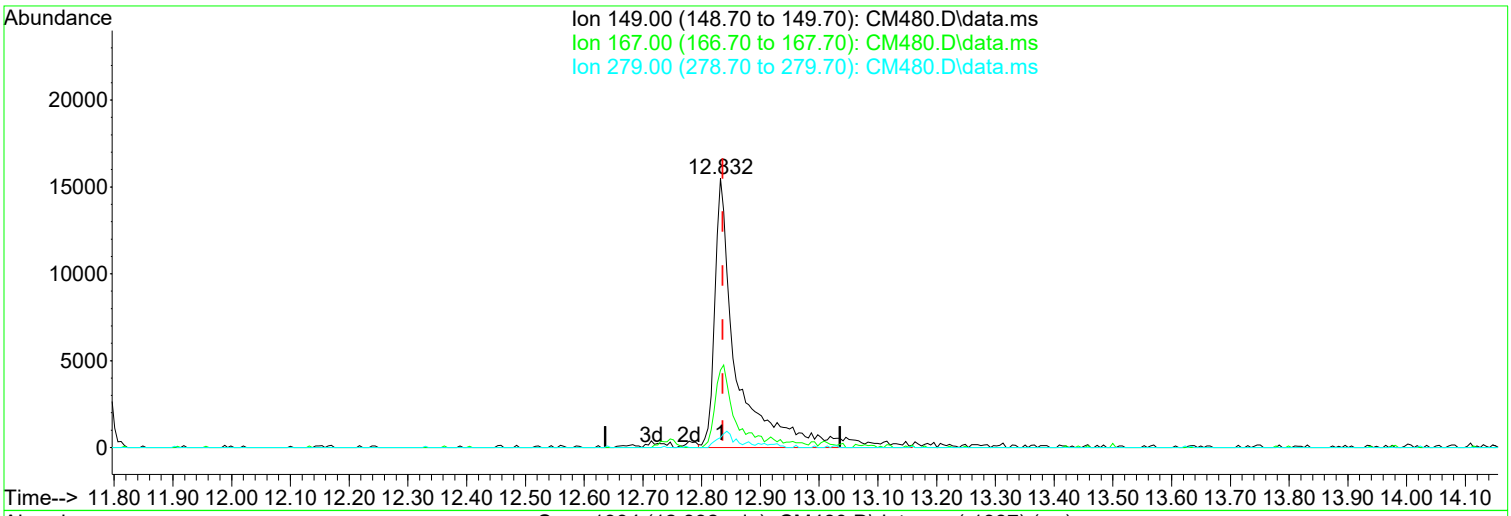
Before

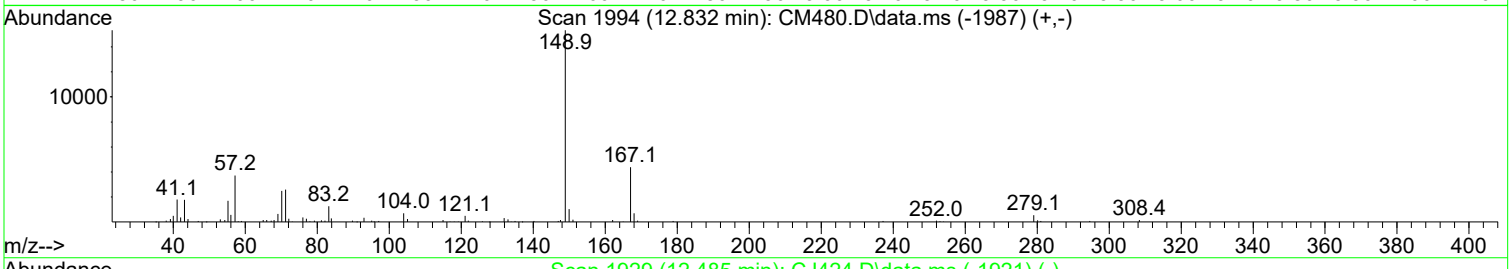
08/26/24

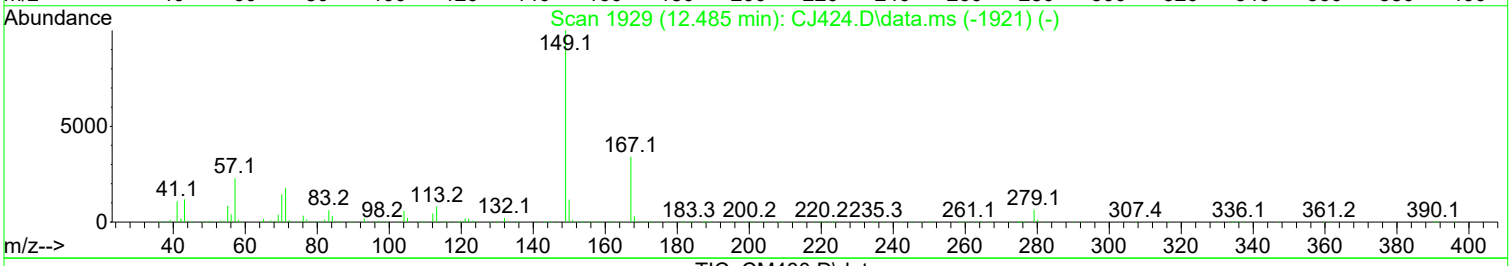
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM480.D
Acq On : 12 Aug 2024 4:49 pm
Operator : B.Allgeier
Sample : 1 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 11:35:19 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM480.D\data.ms

(26) bis(2-Ethylhexyl)phthalate (TM)

12.832min (-0.004) 0.66 ppm m

response 41132

Ion	Exp%	Act%
149.00	100.00	100.00
167.00	32.00	28.75
279.00	6.00	3.70
0.00	0.00	0.00

Manual Integration:

After

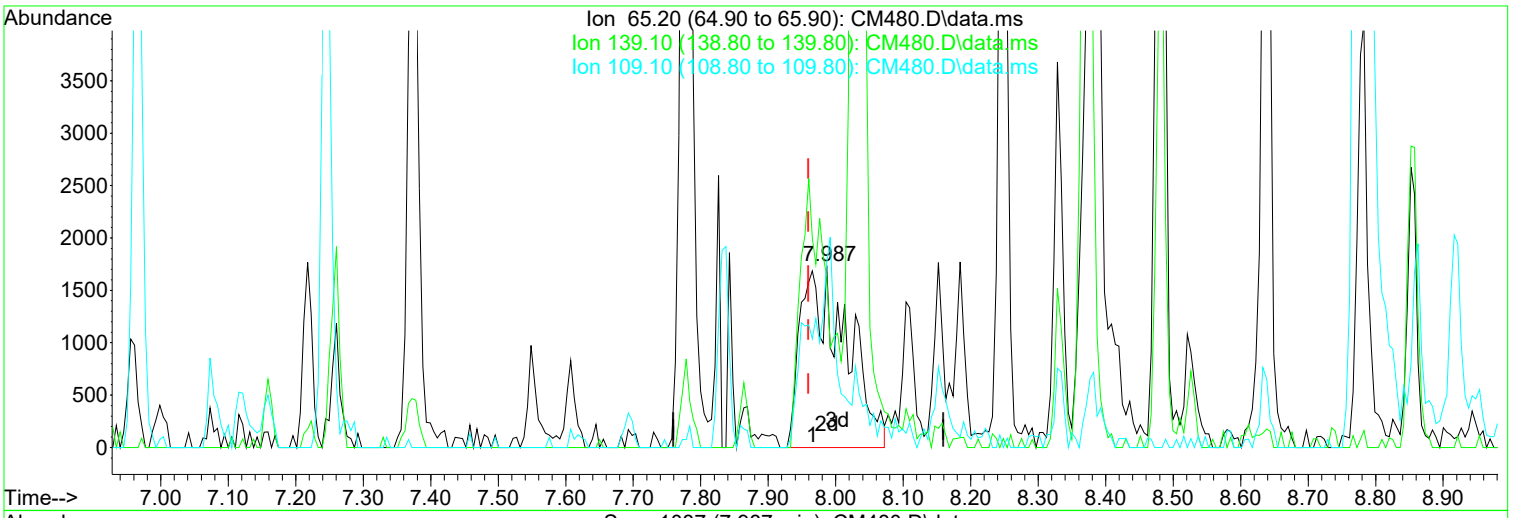
Poor integration.

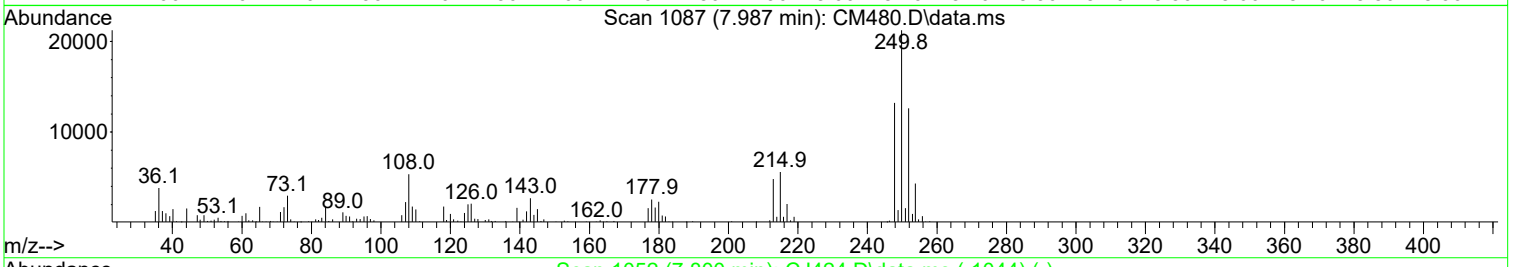
08/26/24

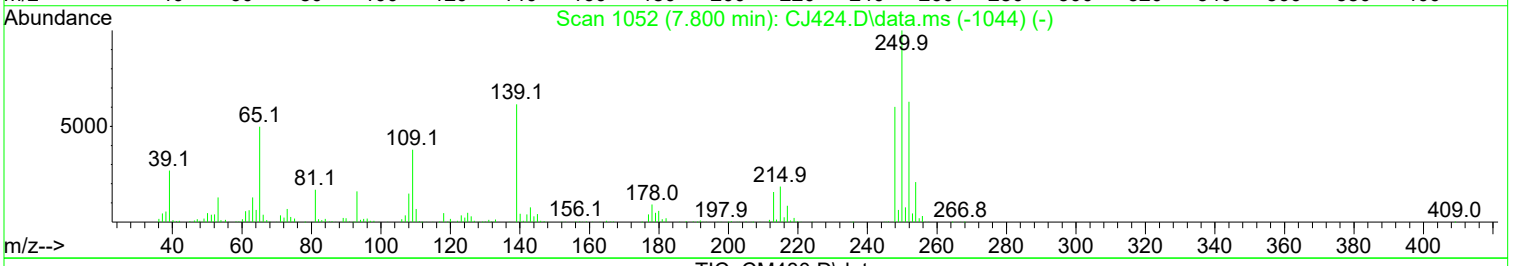
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM480.D
Acq On : 12 Aug 2024 4:49 pm
Operator : B.Allgeier
Sample : 1 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 26 11:35:19 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM480.D\data.ms

(18) 4-Nitrophenol (TMP)

7.987min (+ 0.027) 0.93 ppm m

response 8077

Ion	Exp%	Act%
65.20	100.00	100.00
139.10	250.30	94.12#
109.10	57.10	101.61#
0.00	0.00	0.00

Manual Integration:

After

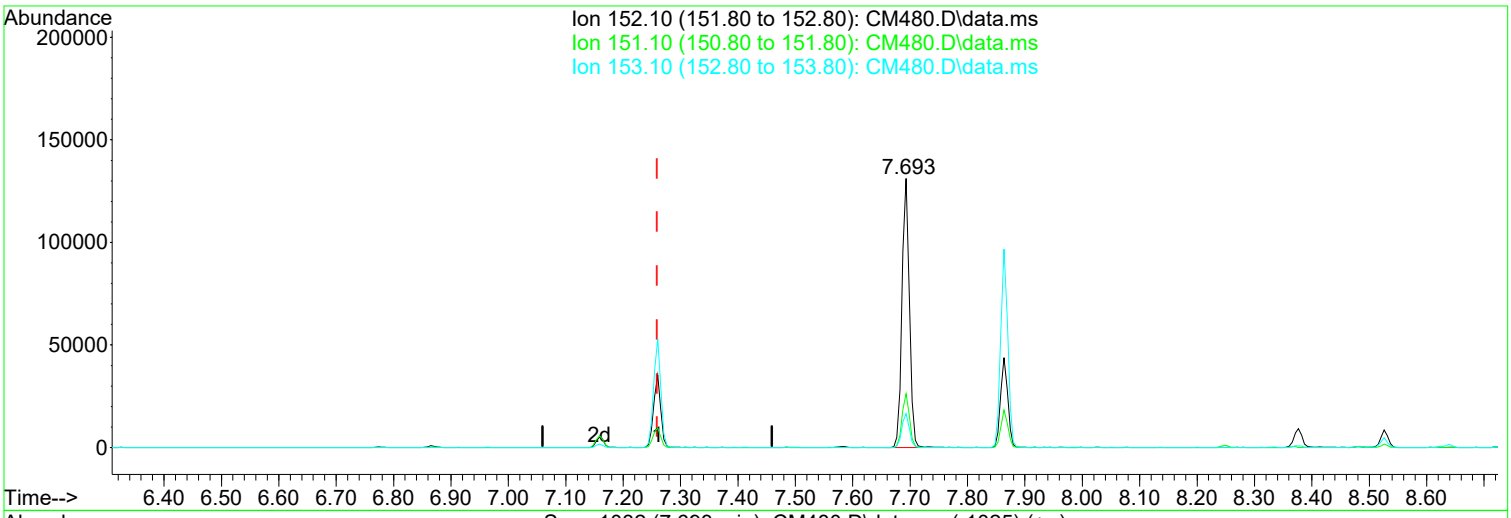
Poor integration.

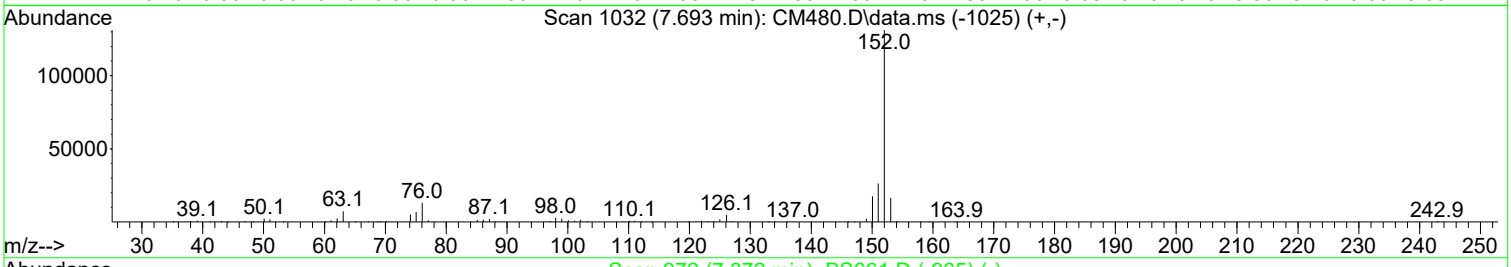
08/26/24

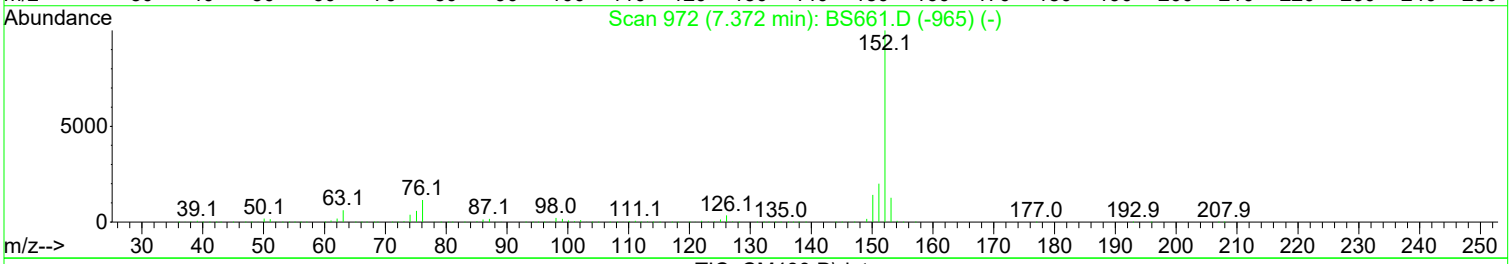
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM480.D
Acq On : 12 Aug 2024 4:49 pm
Operator : B.Allgeier
Sample : 1 STD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 22 10:32:44 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:33 2024
Response via : Initial Calibration







TIC: CM480.D\data.ms

(13) Acenaphthylene (TM)

7.693min (+ 0.433) 3.81 ppm m

response 118151

Ion	Exp%	Act%
152.10	100.00	100.00
151.10	27.20	20.02
153.10	150.80	12.55#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

09/04/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM479phenol.D
Acq On : 12 Aug 2024 4:19 pm
Operator : B.Allgeier
Sample : 0.5 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 11:35:17 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration

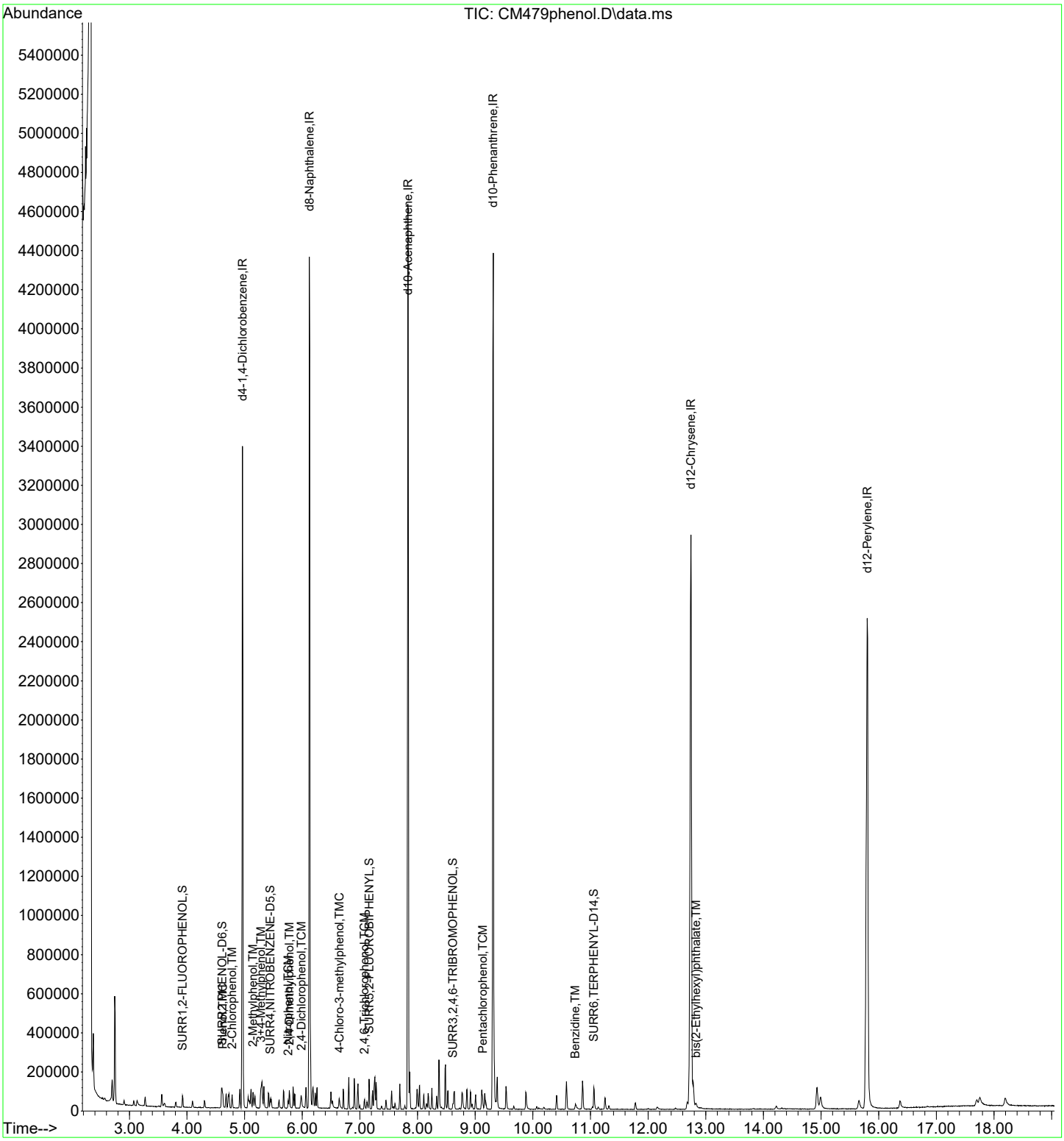
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.963	152	590765	20.00	ppm		0.00
8) d8-Naphthalene	6.122	136	2039164	20.00	ppm		0.00
14) d10-Acenaphthene	7.832	164	1121504	20.00	ppm		0.00
20) d10-Phenanthrene	9.312	188	1708223	20.00	ppm		0.00
23) d12-Chrysene	12.741	240	1730320	20.00	ppm		0.00
27) d12-Perylene	15.803	264	1853893	20.00	ppm		0.00
System Monitoring Compounds							
2) SURR1,2-FLUOROPHENOL	3.921	112	18557	0.47	ppm		-0.01
Spiked Amount 4.000	Range 10 - 105		Recovery = 11.75%				
3) SURR2,PHENOL-D6	4.611	99	23420	0.48	ppm		0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 12.00%				
9) SURR4,NITROBENZENE-D5	5.444	82	13963	0.42	ppm		0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 21.00%#				
16) SURR5,2-FLUOROBIPHENYL	7.159	172	45569	0.54	ppm		0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 27.00%#				
19) SURR3,2,4,6-TRIBROMOPH...	8.612	330	4572	0.41	ppm		0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 10.25%#				
25) SURR6,TERPHENYL-D14	11.059	244	45196	0.52	ppm		0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 26.00%#				
Target Compounds							Qvalue
4) Phenol	4.621	94	24603	0.476	ppm		80
5) 2-Chlorophenol	4.781	128	20758	0.476	ppm		97
6) 2-Methylphenol	5.145	108	19083	0.497	ppm		98
7) 3+4-Methylphenol	5.284	108	17960	0.516	ppm	#	70
10) 2-Nitrophenol	5.754	139	7812	0.413	ppm		92
11) 2,4-Dimethylphenol	5.775	107	21506	0.562	ppm		95
12) 2,4-Dichlorophenol	5.983	162	13351	0.493	ppm		94
13) 4-Chloro-3-methylphenol	6.641	107	14890	0.477	ppm		97
15) 2,4,6-Trichlorophenol	7.079	196	8623	0.416	ppm		98
22) Pentachlorophenol	9.130	266	2618	0.231	ppm		88
24) Benzidine	10.738	184	22772	0.430	ppm		94
26) bis(2-Ethylhexyl)phtha...	12.832	149	14797m	0.246	ppm		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM479phenol.D
Acq On : 12 Aug 2024 4:19 pm
Operator : B.Allgeier
Sample : 0.5 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 11:35:17 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM479.D
Acq On : 12 Aug 2024 4:19 pm
Operator : B.Allgeier
Sample : 0.5 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 22 10:33:32 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

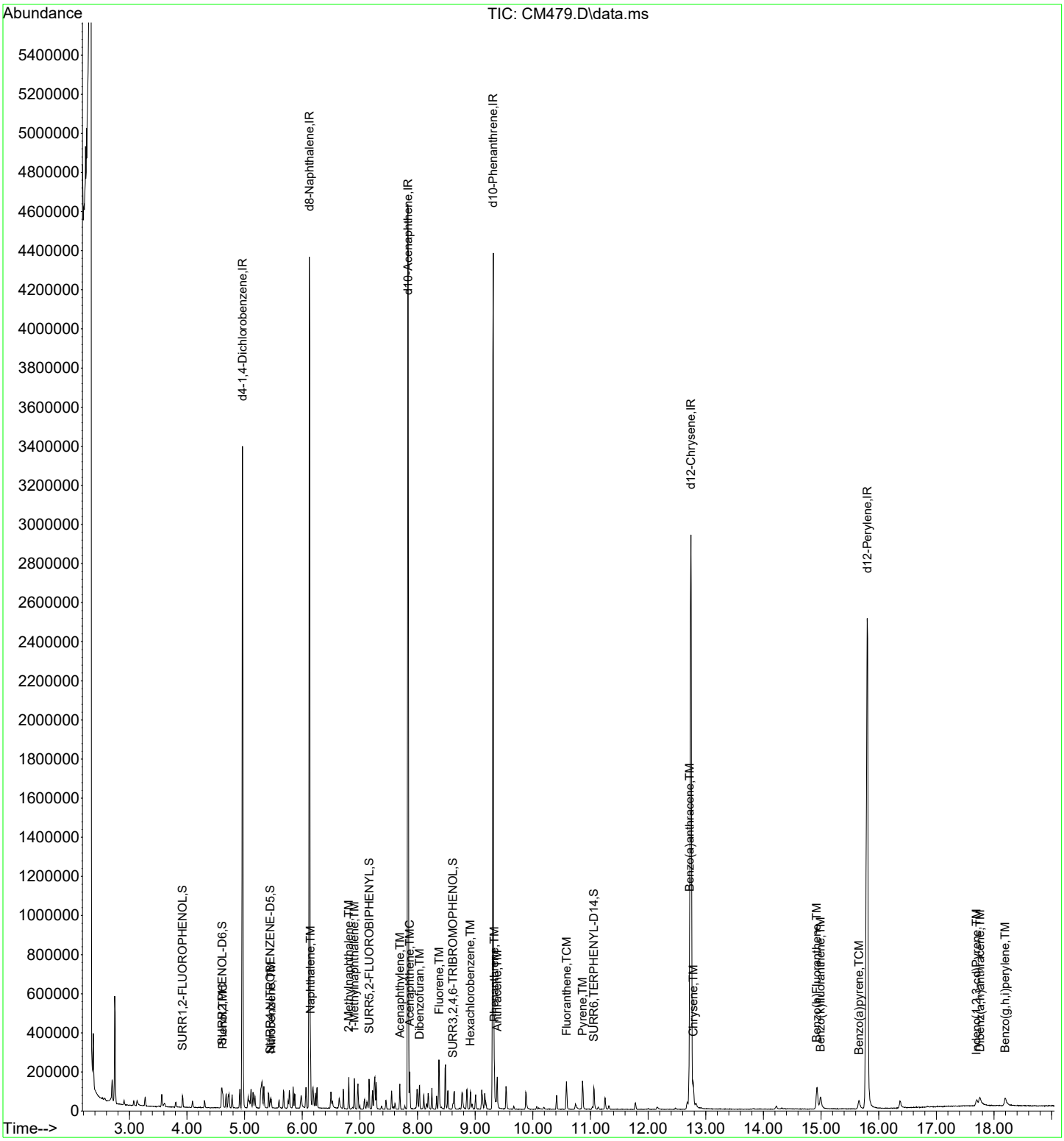
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	590765	20.00	ppm	0.00
5) d8-Naphthalene	6.122	136	2039164	20.00	ppm	0.00
11) d10-Acenaphthene	7.832	164	1121504	20.00	ppm	0.00
18) d10-Phenanthrene	9.312	188	1708223	20.00	ppm	0.00
23) d12-Chrysene	12.741	240	1730320	20.00	ppm	0.00
28) d12-Perylene	15.803	264	1853893	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.921	112	18557	0.49	ppm	0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 12.25%			
3) SURR2,PHENOL-D6	4.611	99	23420	0.51	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 12.75%			
6) SURR4,NITROBENZENE-D5	5.444	82	13963	0.47	ppm	0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 23.50%#			
12) SURR5,2-FLUOROBIPHENYL	7.159	172	45569	0.49	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 24.50%#			
17) SURR3,2,4,6-TRIBROMOPH...	8.612	330	4572	0.49	ppm	0.00
Spiked Amount 4.000	Range 28 - 157		Recovery = 12.25%#			
25) SURR6,TERPHENYL-D14	11.059	244	45196	0.49	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 24.50%#			
Target Compounds						Qvalue
4) Phenol	4.621	94	24603	0.508	ppm	97
7) Nitrobenzene	5.460	77	14456	0.501	ppm	99
8) Naphthalene	6.144	128	69180	0.523	ppm	98
9) 2-Methylnaphthalene	6.806	142	46815	0.521	ppm	100
10) 1-Methylnaphthalene	6.902	142	43381	0.522	ppm	99
13) Acenaphthylene	7.693	152	60187m	2.041	ppm	
14) Acenaphthene	7.864	153	42324	0.520	ppm	97
15) Dibenzofuran	8.035	168	55277	0.522	ppm	95
16) Fluorene	8.371	166	44136	0.522	ppm	97
19) Hexachlorobenzene	8.916	284	13553	0.500	ppm	93
20) Phenanthrene	9.333	178	65412	0.545	ppm	97
21) Anthracene	9.381	178	61215	0.525	ppm	98
22) Fluoranthene	10.583	202	72021	0.547	ppm	97
24) Pyrene	10.861	202	74298	0.524	ppm	98
26) Benzo(a)anthracene	12.720	228	65469	0.552	ppm	95
27) Chrysene	12.784	228	59803	0.539	ppm	97
29) Benzo(b)Fluoranthene	14.926	252	48980	0.503	ppm	92
30) Benzo(k)fluoranthene	14.991	252	52221	0.525	ppm	95
31) Benzo(a)pyrene	15.658	252	40967	0.503	ppm	96
32) Indeno(1,2,3-cd)Pyrene	17.699	276	27469	0.453	ppm	85
33) Dibenz(a,h)anthracene	17.758	278	37462	0.493	ppm	93
34) Benzo(g,h,i)perylene	18.196	276	45490	0.536	ppm	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM479.D
Acq On : 12 Aug 2024 4:19 pm
Operator : B.Allgeier
Sample : 0.5 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

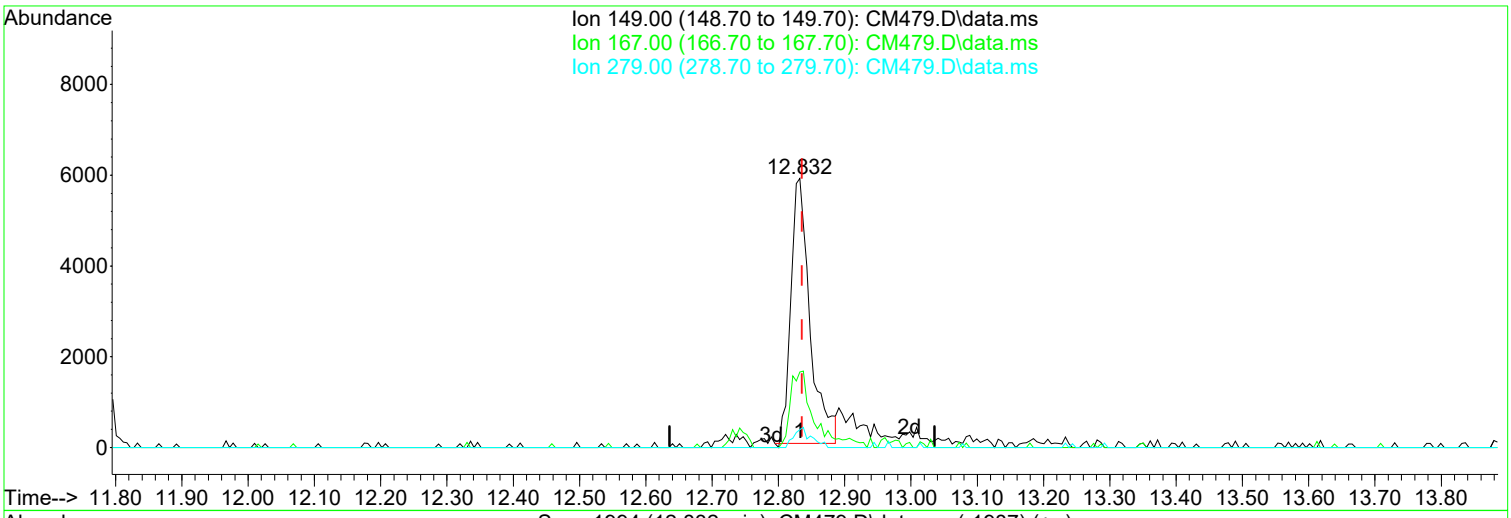
Quant Time: Aug 22 10:33:32 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

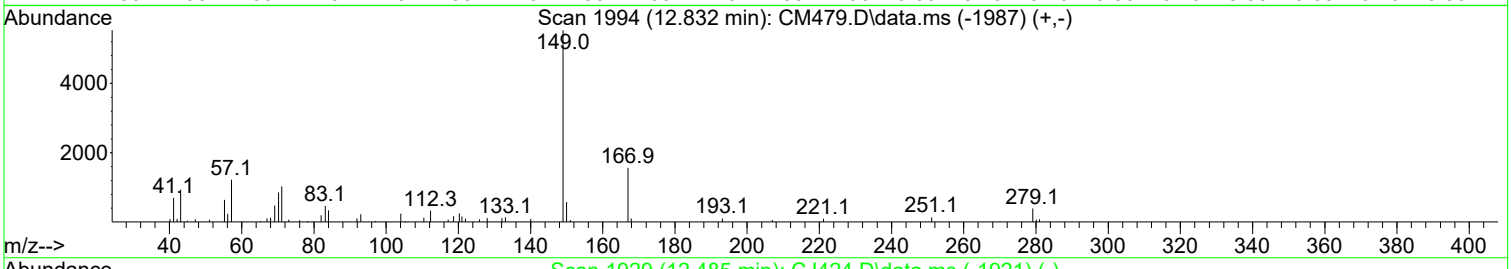


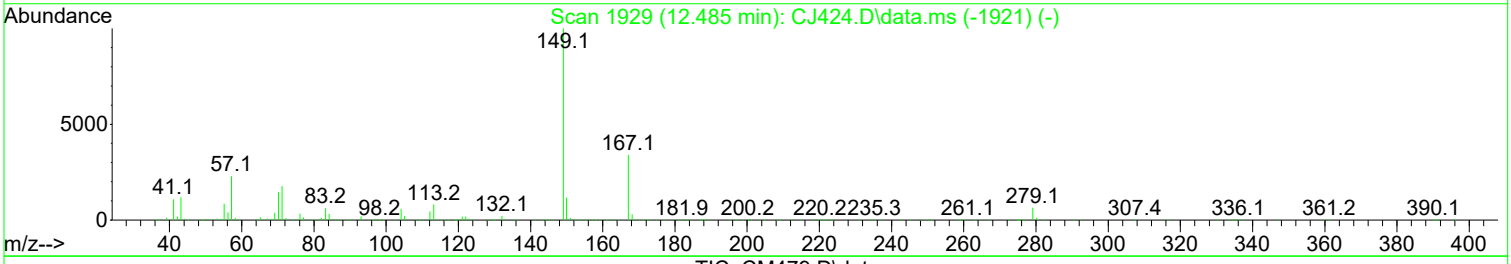
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM479.D
Acq On : 12 Aug 2024 4:19 pm
Operator : B.Allgeier
Sample : 0.5 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 11:35:17 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM479.D\data.ms

(26) bis(2-Ethylhexyl)phthalate (TM)

12.832min (-0.004) 0.20 ppm

response 11761

Ion	Exp%	Act%
149.00	100.00	100.00
167.00	32.00	28.38
279.00	6.00	7.10
0.00	0.00	0.00

Manual Integration:

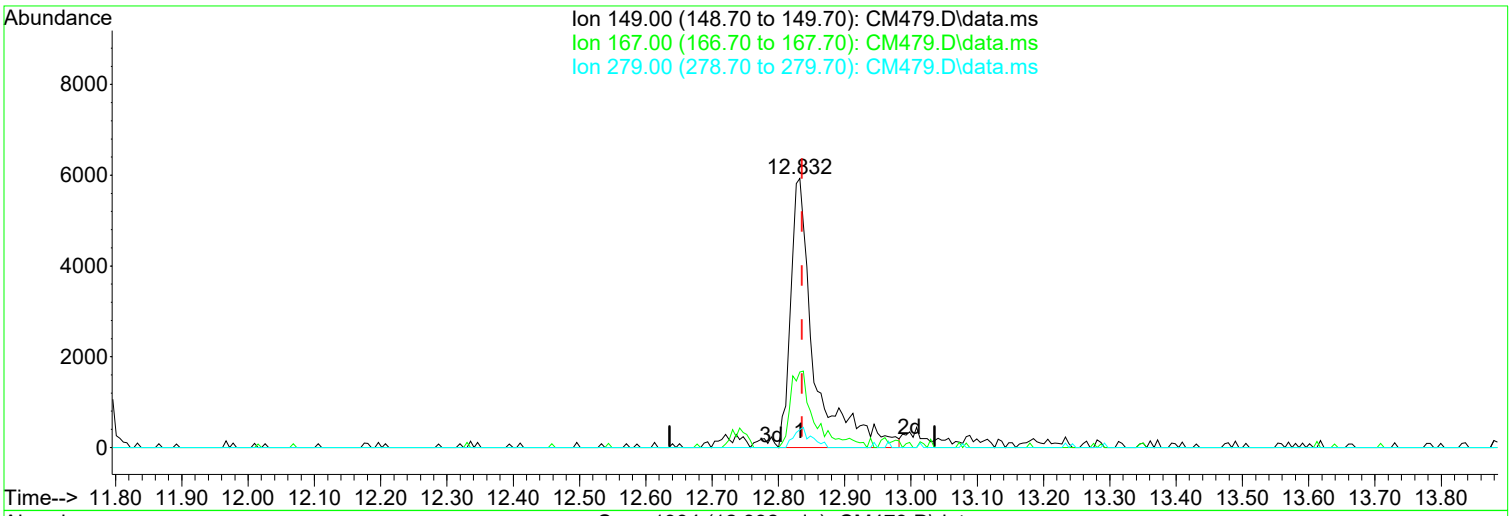
Before

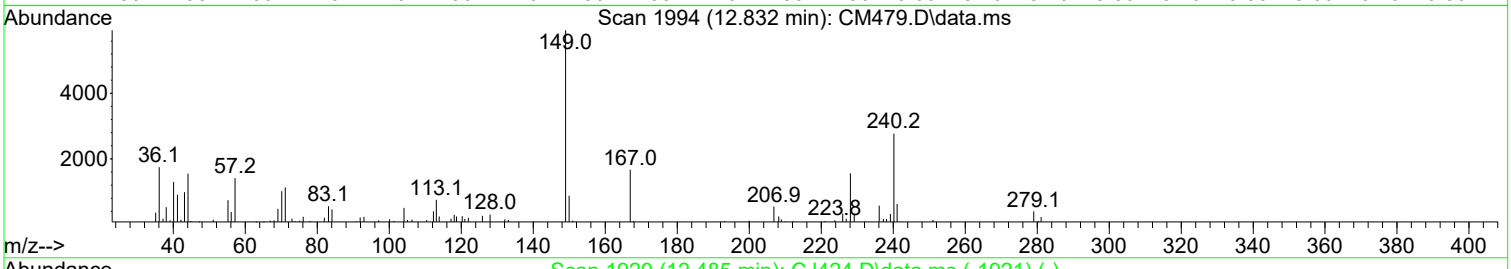
08/26/24

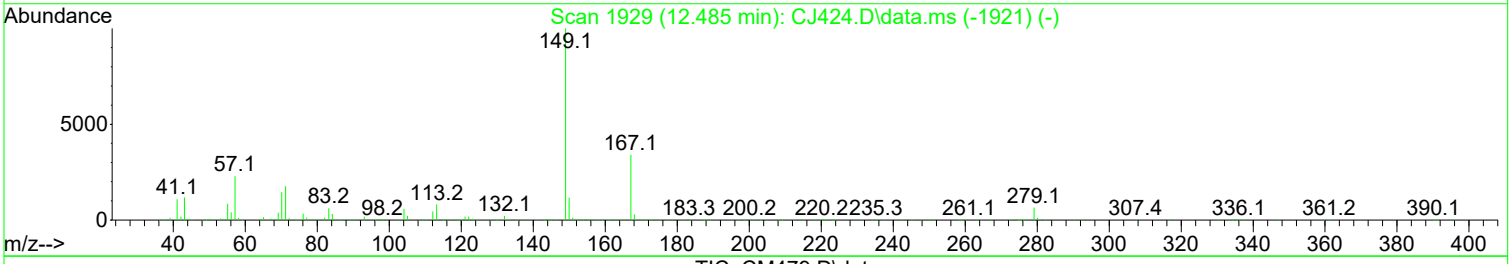
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM479.D
Acq On : 12 Aug 2024 4:19 pm
Operator : B.Allgeier
Sample : 0.5 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 26 11:35:17 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\Phenol-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Mon Aug 26 11:34:42 2024
Response via : Initial Calibration







TIC: CM479.D\data.ms

(26) bis(2-Ethylhexyl)phthalate (TM)

12.832min (-0.004) 0.25 ppm m

response 14797

Ion	Exp%	Act%
149.00	100.00	100.00
167.00	32.00	28.06
279.00	6.00	6.63
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

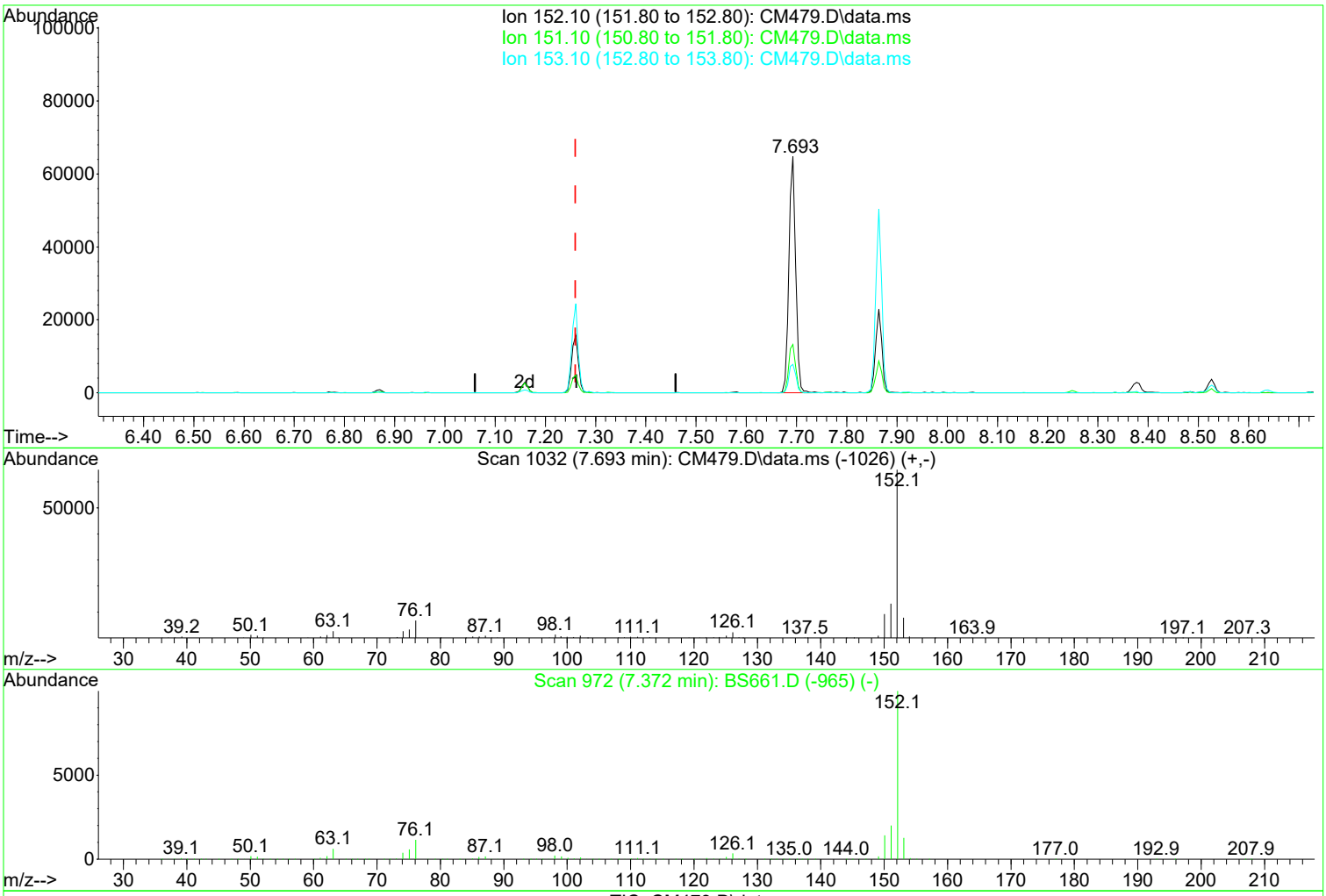
08/26/24

1st EDG 09/18/24
2nd AM 09/17/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM479.D
Acq On : 12 Aug 2024 4:19 pm
Operator : B.Allgeier
Sample : 0.5 STD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 22 10:33:32 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration



TIC: CM479.D\data.ms

(13) Acenaphthylene (TM)

7.693min (+ 0.433) 2.04 ppm m

response 60187

Ion	Exp%	Act%
152.10	100.00	100.00
151.10	27.20	20.46
153.10	150.80	12.03#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

09/04/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM478.D
Acq On : 12 Aug 2024 3:50 pm
Operator : B.Allgeier
Sample : 0.2 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 22 10:33:29 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

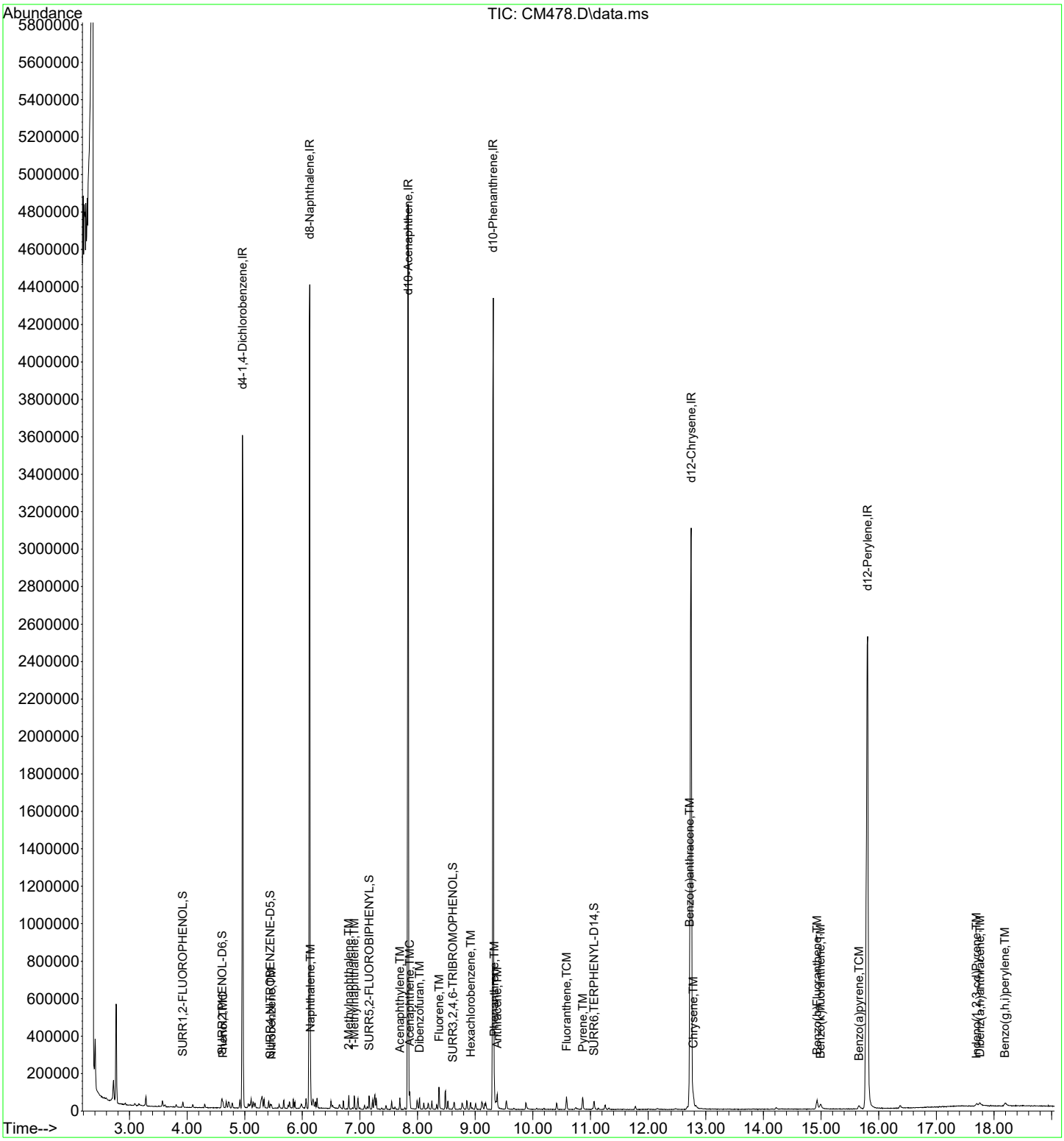
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	641066	20.00	ppm	0.00
5) d8-Naphthalene	6.128	136	2179259	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1172962	20.00	ppm	0.00
18) d10-Phenanthrene	9.312	188	1716911	20.00	ppm	0.00
23) d12-Chrysene	12.747	240	1834786	20.00	ppm	0.00
28) d12-Perylene	15.808	264	1915447	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.927	112	8934	0.22	ppm	0.00
Spiked Amount 4.000	Range 10 - 105		Recovery =	5.50%#		
3) SURR2,PHENOL-D6	4.610	99	10417	0.21	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery =	5.25%#		
6) SURR4,NITROBENZENE-D5	5.444	82	6457	0.20	ppm	0.00
Spiked Amount 2.000	Range 37 - 117		Recovery =	10.00%#		
12) SURR5,2-FLUOROBIPHENYL	7.159	172	20570	0.21	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery =	10.50%#		
17) SURR3,2,4,6-TRIBROMOPH...	8.612	330	1755	0.18	ppm	0.00
Spiked Amount 4.000	Range 28 - 157		Recovery =	4.50%#		
25) SURR6,TERPHENYL-D14	11.064	244	20170	0.21	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery =	10.50%#		
Target Compounds						Qvalue
4) Phenol	4.626	94	10632	0.202	ppm	93
7) Nitrobenzene	5.465	77	6483	0.210	ppm	96
8) Naphthalene	6.144	128	31812	0.225	ppm	97
9) 2-Methylnaphthalene	6.806	142	21003	0.219	ppm	97
10) 1-Methylnaphthalene	6.902	142	20369	0.229	ppm	94
13) Acenaphthylene	7.693	152	27239m	0.883	ppm	
14) Acenaphthene	7.864	153	19009	0.223	ppm	95
15) Dibenzofuran	8.035	168	25852	0.233	ppm	93
16) Fluorene	8.371	166	20785	0.235	ppm	95
19) Hexachlorobenzene	8.922	284	6001	0.220	ppm	94
20) Phenanthrene	9.333	178	29739	0.246	ppm	98
21) Anthracene	9.381	178	27703	0.236	ppm	97
22) Fluoranthene	10.583	202	33669	0.254	ppm	98
24) Pyrene	10.866	202	34787	0.231	ppm	96
26) Benzo(a)anthracene	12.720	228	34083	0.271	ppm	95
27) Chrysene	12.784	228	32009m	0.272	ppm	
29) Benzo(b)Fluoranthene	14.932	252	20388	0.203	ppm	95
30) Benzo(k)fluoranthene	14.990	252	28656m	0.279	ppm	
31) Benzo(a)pyrene	15.658	252	17195	0.204	ppm	96
32) Indeno(1,2,3-cd)Pyrene	17.699	276	10969	0.175	ppm	92
33) Dibenz(a,h)anthracene	17.758	278	10800	0.138	ppm	84
34) Benzo(g,h,i)perylene	18.190	276	20951	0.239	ppm	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM478.D
Acq On : 12 Aug 2024 3:50 pm
Operator : B.Allgeier
Sample : 0.2 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

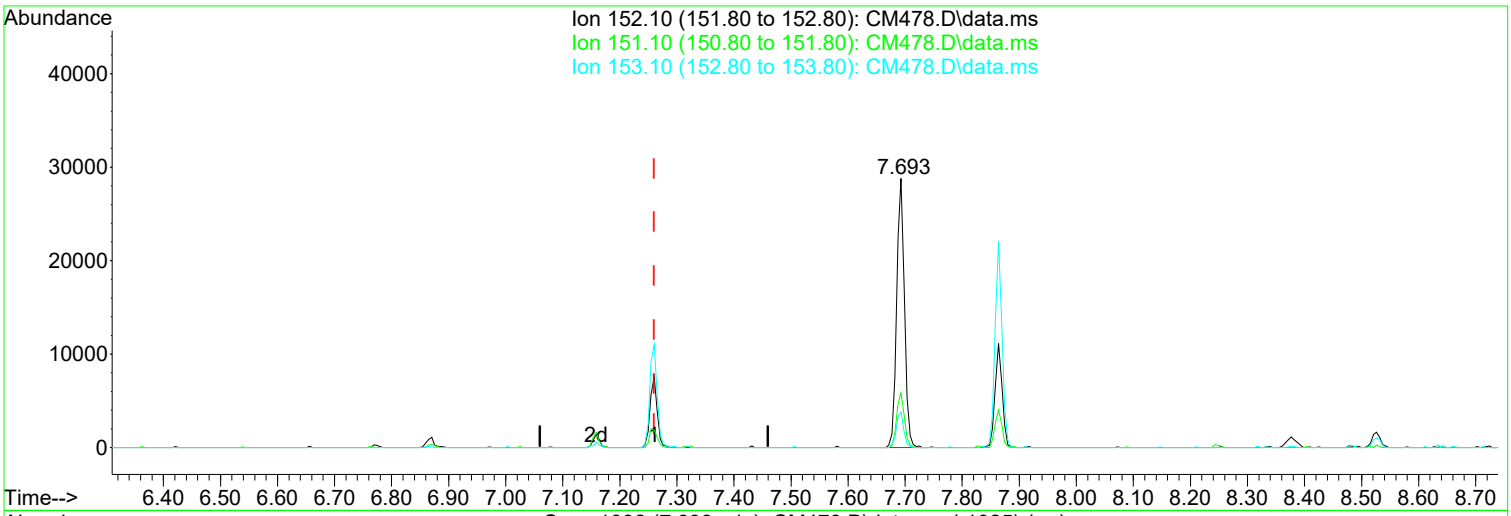
Quant Time: Aug 22 10:33:29 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

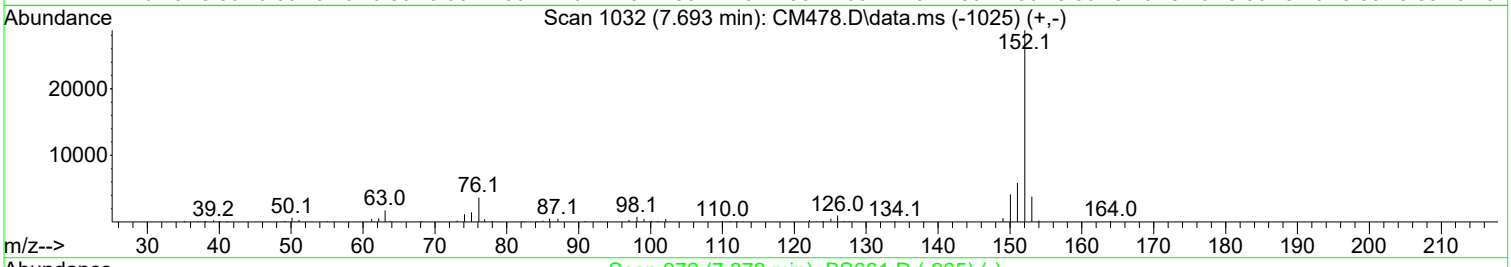


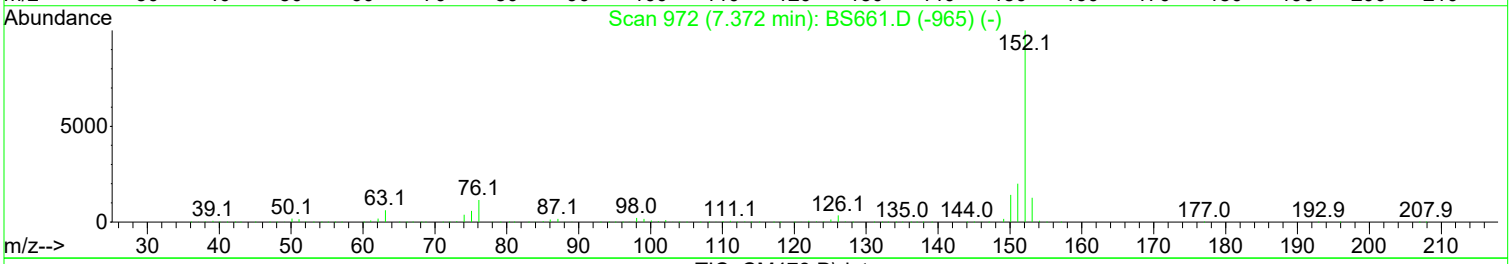
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM478.D
Acq On : 12 Aug 2024 3:50 pm
Operator : B.Allgeier
Sample : 0.2 STD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 22 10:33:29 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration







TIC: CM478.D\data.ms

(13) Acenaphthylene (TM)

7.693min (+ 0.433) 0.88 ppm m

response 27239

Ion	Exp%	Act%
152.10	100.00	100.00
151.10	27.20	20.40
153.10	150.80	13.19#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

09/04/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM477.D
Acq On : 12 Aug 2024 3:22 pm
Operator : B.Allgeier
Sample : 0.1 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 22 10:33:26 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

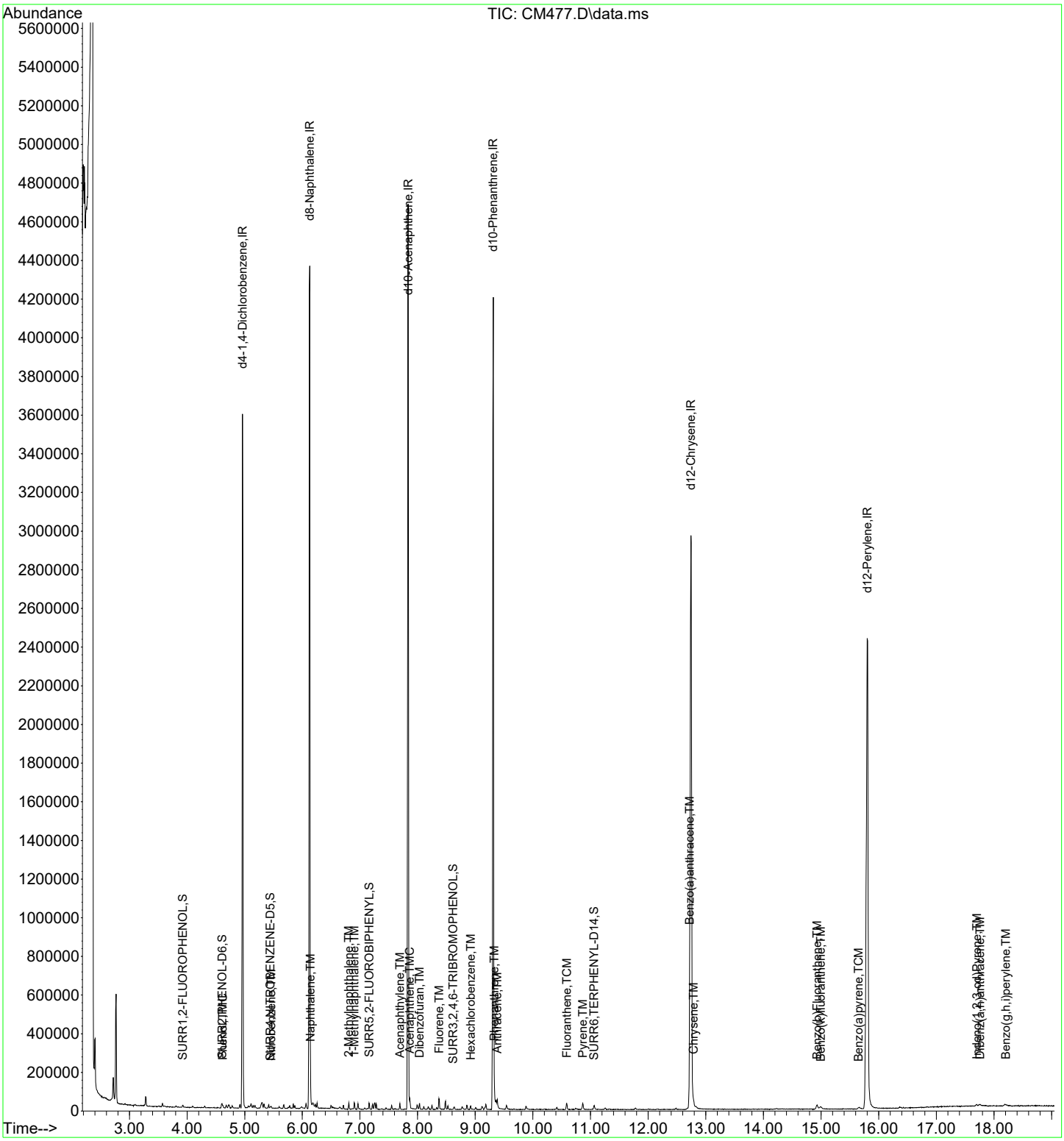
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	628086	20.00	ppm	0.00
5) d8-Naphthalene	6.128	136	2158542	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1138821	20.00	ppm	0.00
18) d10-Phenanthrene	9.312	188	1642979	20.00	ppm	0.00
23) d12-Chrysene	12.741	240	1789480	20.00	ppm	0.00
28) d12-Perylene	15.802	264	1860458	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.927	112	3911	0.10	ppm	0.00
Spiked Amount 4.000	Range 10 - 105		Recovery =	2.50%#		
3) SURR2,PHENOL-D6	4.610	99	4094	0.08	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery =	2.00%#		
6) SURR4,NITROBENZENE-D5	5.444	82	2908	0.09	ppm	0.00
Spiked Amount 2.000	Range 37 - 117		Recovery =	4.50%#		
12) SURR5,2-FLUOROBIPHENYL	7.159	172	10051	0.11	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery =	5.50%#		
17) SURR3,2,4,6-TRIBROMOPH...	8.617	330	570	0.06	ppm	0.00
Spiked Amount 4.000	Range 28 - 157		Recovery =	1.50%#		
25) SURR6,TERPHENYL-D14	11.064	244	9324	0.10	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery =	5.00%#		
Target Compounds						Qvalue
4) Phenol	4.621	94	4601	0.089	ppm	95
7) Nitrobenzene	5.460	77	2840	0.093	ppm	78
8) Naphthalene	6.144	128	15610	0.111	ppm	97
9) 2-Methylnaphthalene	6.806	142	10087	0.106	ppm	95
10) 1-Methylnaphthalene	6.902	142	9869	0.112	ppm	100
13) Acenaphthylene	7.693	152	13570m	0.453	ppm	
14) Acenaphthene	7.864	153	9992	0.121	ppm	95
15) Dibenzofuran	8.035	168	13677	0.127	ppm	95
16) Fluorene	8.371	166	10654	0.124	ppm	99
19) Hexachlorobenzene	8.922	284	2643	0.101	ppm	94
20) Phenanthrene	9.333	178	16148	0.140	ppm	97
21) Anthracene	9.381	178	14864	0.132	ppm	99
22) Fluoranthene	10.588	202	17674	0.139	ppm	98
24) Pyrene	10.866	202	17418	0.119	ppm	98
26) Benzo(a)anthracene	12.720	228	20808	0.170	ppm	99
27) Chrysene	12.789	228	16222m	0.141	ppm	
29) Benzo(b)Fluoranthene	14.932	252	9761	0.100	ppm	93
30) Benzo(k)fluoranthene	14.996	252	14946m	0.150	ppm	
31) Benzo(a)pyrene	15.653	252	8662	0.106	ppm	96
32) Indeno(1,2,3-cd)Pyrene	17.704	276	6270	0.103	ppm	83
33) Dibenz(a,h)anthracene	17.758	278	7205	0.094	ppm	77
34) Benzo(g,h,i)perylene	18.206	276	10226	0.120	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM477.D
Acq On : 12 Aug 2024 3:22 pm
Operator : B.Allgeier
Sample : 0.1 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 22 10:33:26 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

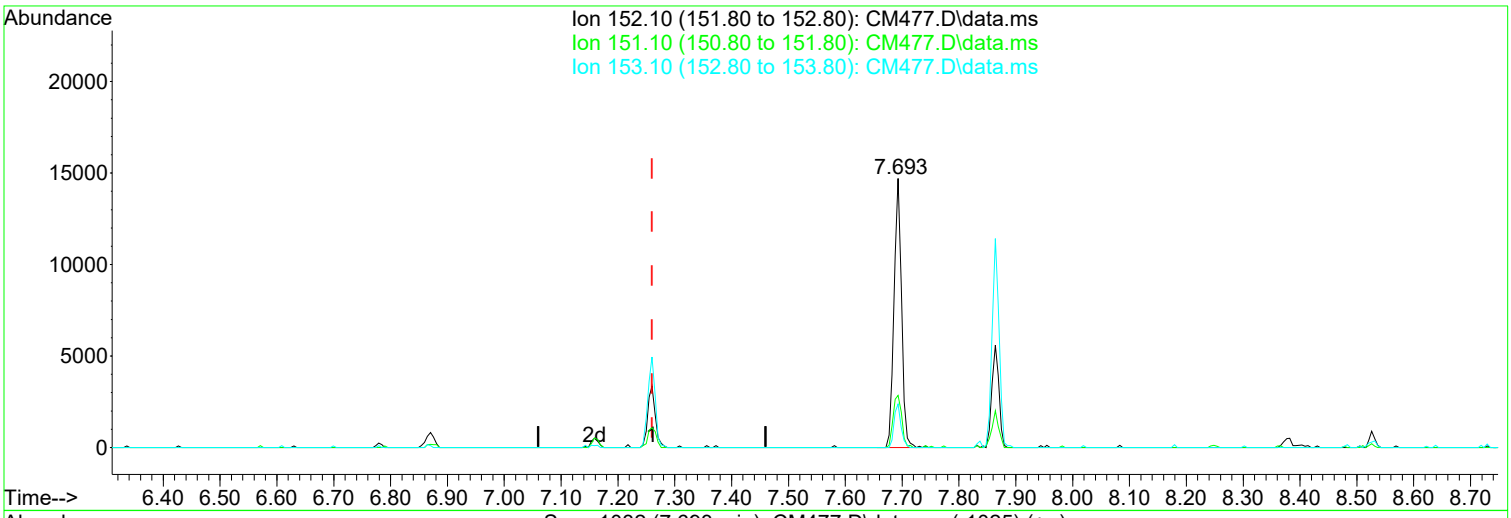


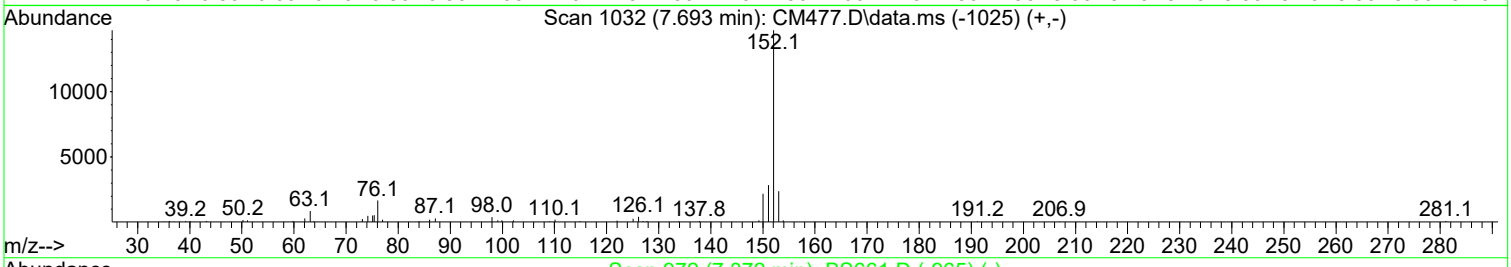
1st EDG 09/18/24
2nd AM 09/17/24

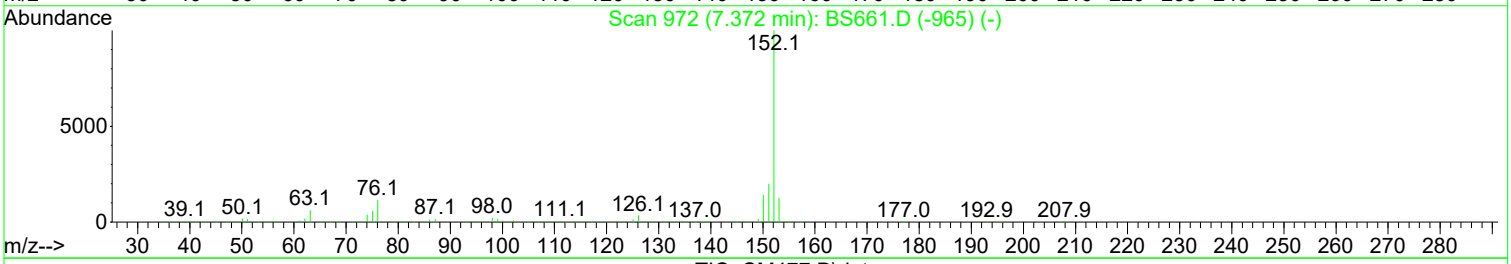
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM477.D
Acq On : 12 Aug 2024 3:22 pm
Operator : B.Allgeier
Sample : 0.1 STD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 22 10:33:26 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration







TIC: CM477.D\data.ms

(13) Acenaphthylene (TM)

7.693min (+ 0.433) 0.45 ppm m

response 13570

Ion	Exp%	Act%
152.10	100.00	100.00
151.10	27.20	19.34
153.10	150.80	16.17#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

09/04/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM476.D
Acq On : 12 Aug 2024 2:52 pm
Operator : B.Allgeier
Sample : 0.05 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 22 10:33:24 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

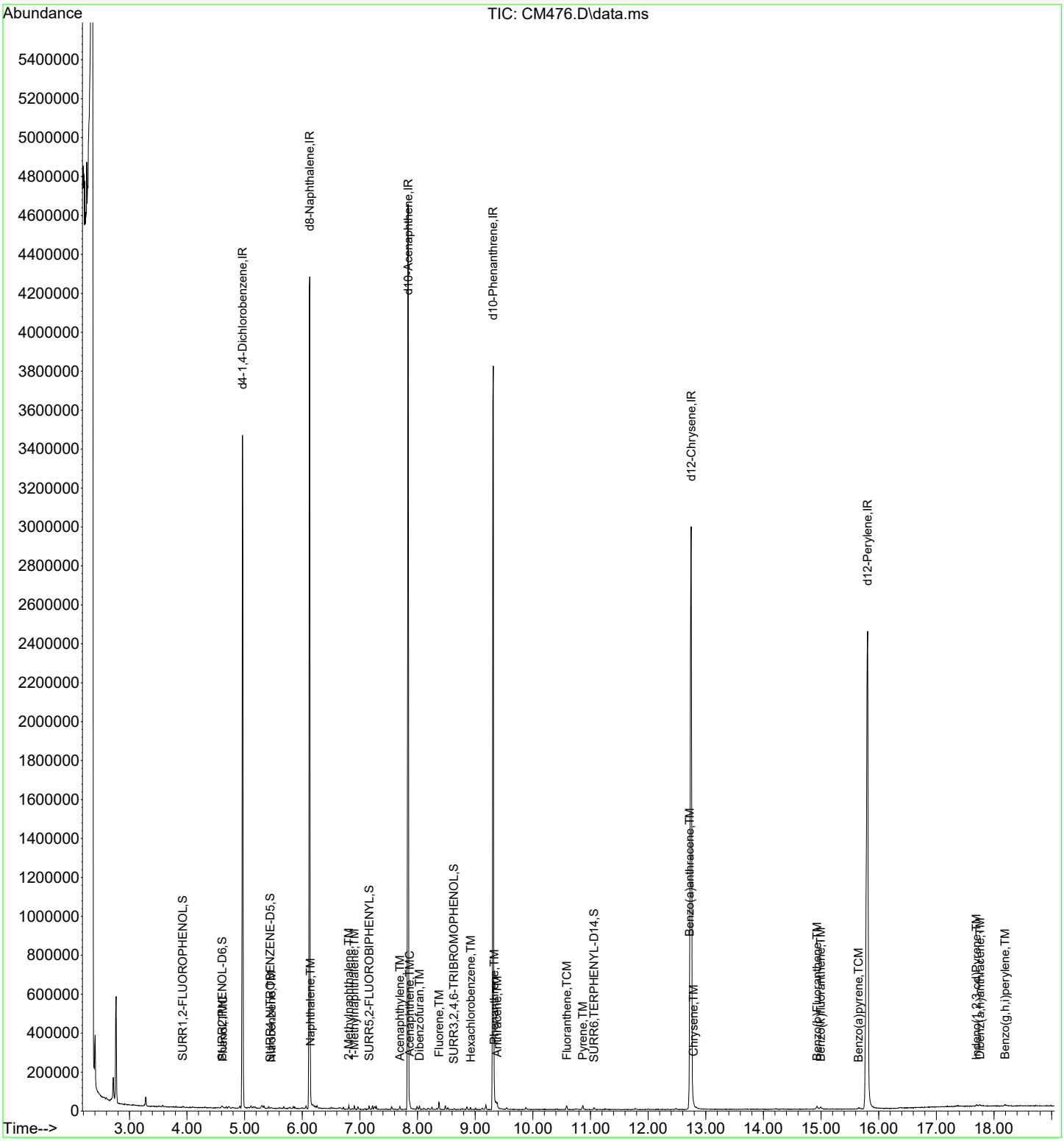
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	628928	20.00	ppm	0.00
5) d8-Naphthalene	6.128	136	2125248	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1144158	20.00	ppm	0.00
18) d10-Phenanthrene	9.312	188	1574365	20.00	ppm	0.00
23) d12-Chrysene	12.747	240	1779622	20.00	ppm	0.00
28) d12-Perylene	15.808	264	1861850	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.927	112	1698	0.04	ppm	0.00
Spiked Amount 4.000	Range 10 - 105		Recovery = 1.00%#			
3) SURR2,PHENOL-D6	4.611	99	1857	0.04	ppm	0.00
Spiked Amount 4.000	Range 10 - 107		Recovery = 1.00%#			
6) SURR4,NITROBENZENE-D5	5.444	82	1396	0.04	ppm	0.00
Spiked Amount 2.000	Range 37 - 117		Recovery = 2.00%#			
12) SURR5,2-FLUOROBIPHENYL	7.159	172	4984	0.05	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery = 2.50%#			
17) SURR3,2,4,6-TRIBROMOPH...	8.628	330	246m	0.03	ppm	0.02
Spiked Amount 4.000	Range 28 - 157		Recovery = 0.75%#			
25) SURR6,TERPHENYL-D14	11.064	244	4937	0.05	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery = 2.50%#			
Target Compounds						Qvalue
4) Phenol	4.627	94	2006	0.039	ppm	88
7) Nitrobenzene	5.465	77	1422	0.047	ppm	95
8) Naphthalene	6.144	128	8200	0.059	ppm	92
9) 2-Methylnaphthalene	6.806	142	5177	0.055	ppm	96
10) 1-Methylnaphthalene	6.902	142	4896	0.057	ppm	99
13) Acenaphthylene	7.693	152	7351m	0.244	ppm	
14) Acenaphthene	7.864	153	6041	0.073	ppm	97
15) Dibenzofuran	8.035	168	7709	0.071	ppm	92
16) Fluorene	8.371	166	6619	0.077	ppm	86
19) Hexachlorobenzene	8.922	284	1481	0.059	ppm	73
20) Phenanthrene	9.333	178	9922	0.090	ppm	97
21) Anthracene	9.381	178	9098	0.085	ppm	98
22) Fluoranthene	10.589	202	10547	0.087	ppm	92
24) Pyrene	10.866	202	10912	0.075	ppm	97
26) Benzo(a)anthracene	12.720	228	15418	0.126	ppm	86
27) Chrysene	12.790	228	9341	0.082	ppm	99
29) Benzo(b)Fluoranthene	14.932	252	6871	0.070	ppm	92
30) Benzo(k)fluoranthene	14.996	252	9328m	0.093	ppm	
31) Benzo(a)pyrene	15.653	252	6004	0.073	ppm	86
32) Indeno(1,2,3-cd)Pyrene	17.699	276	3428	0.056	ppm	98
33) Dibenz(a,h)anthracene	17.758	278	4931	0.065	ppm	97
34) Benzo(g,h,i)perylene	18.196	276	6086	0.071	ppm	85

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM476.D
Acq On : 12 Aug 2024 2:52 pm
Operator : B.Allgeier
Sample : 0.05 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

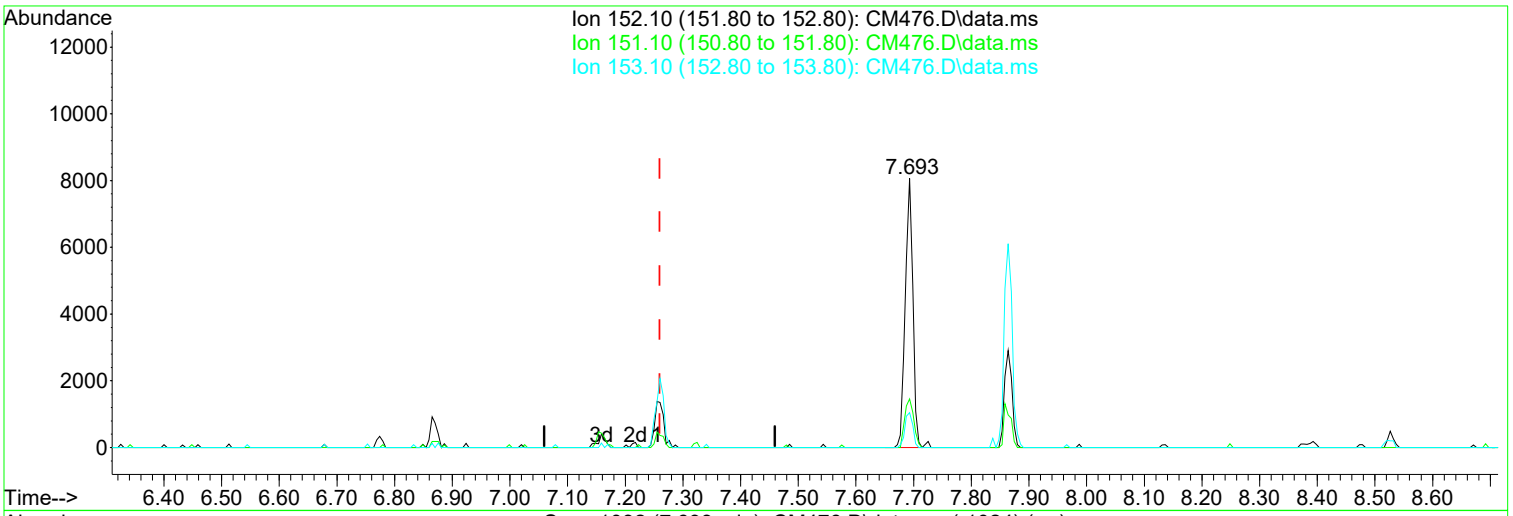
Quant Time: Aug 22 10:33:24 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration

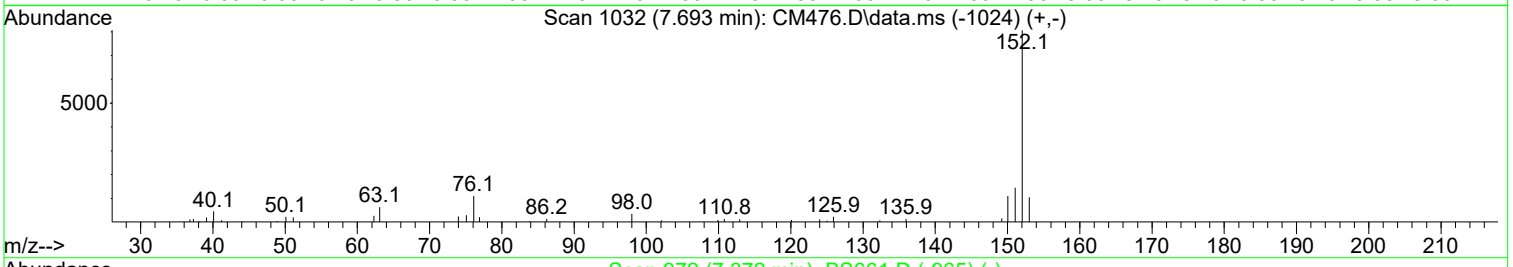


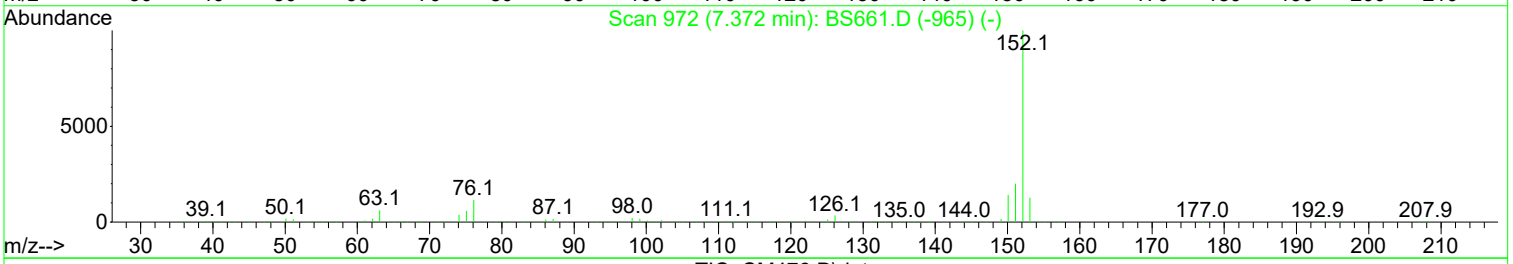
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM476.D
Acq On : 12 Aug 2024 2:52 pm
Operator : B.Allgeier
Sample : 0.05 STD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 22 10:33:24 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:32:49 2024
Response via : Initial Calibration







TIC: CM476.D\data.ms

(13) Acenaphthylene (TM)

7.693min (+ 0.433) 0.24 ppm m

response 7351

Ion	Exp%	Act%
152.10	100.00	100.00
151.10	27.20	18.06
153.10	150.80	12.95#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

09/04/24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM475.D
Acq On : 12 Aug 2024 2:23 pm
Operator : B.Allgeier
Sample : IB
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 10:48:31 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:38:49 2024
Response via : Initial Calibration

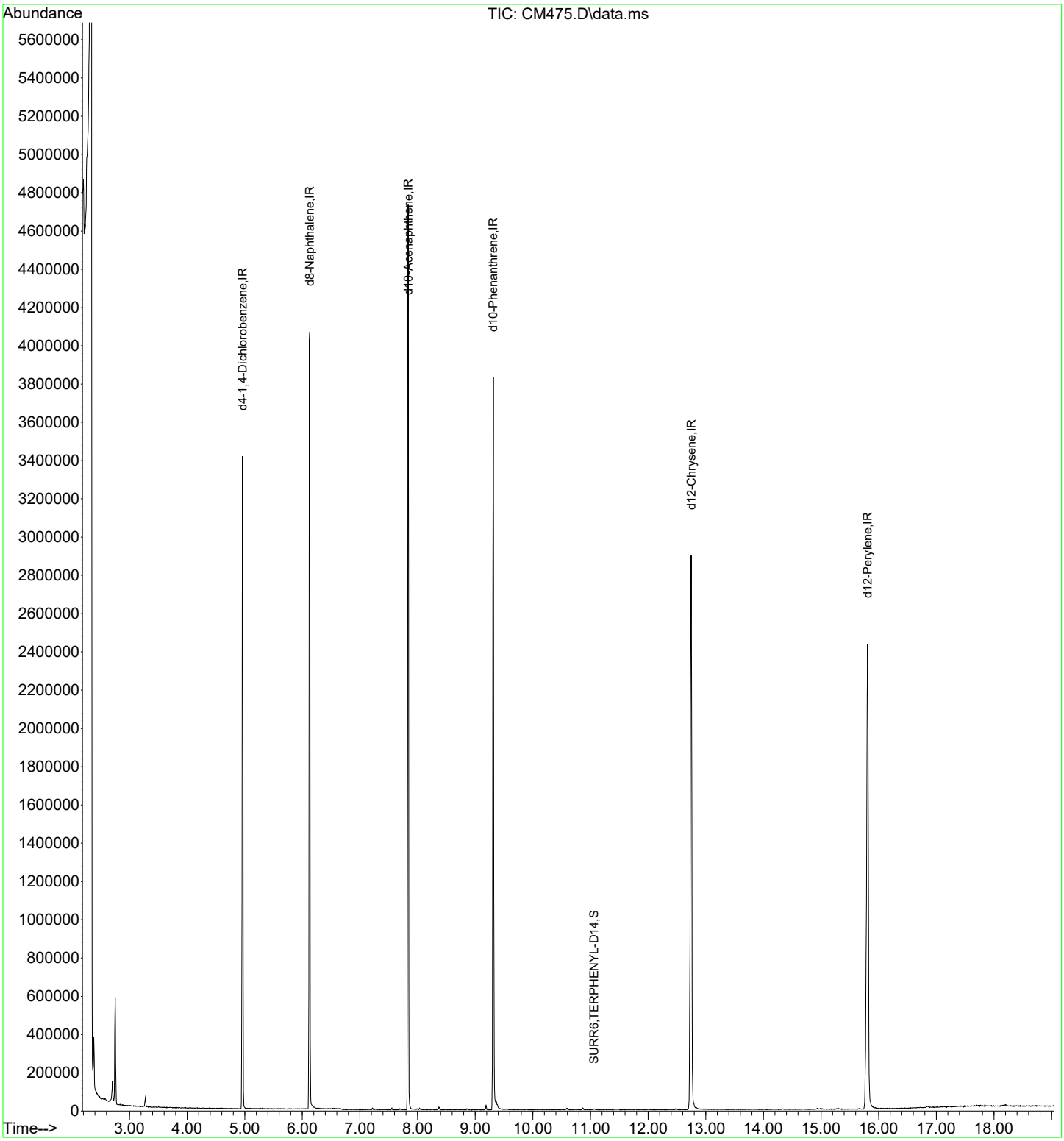
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	590084	20.00	ppm	0.00
5) d8-Naphthalene	6.128	136	2032868	20.00	ppm	0.00
11) d10-Acenaphthene	7.837	164	1106554	20.00	ppm	0.00
18) d10-Phenanthrene	9.312	188	1543128	20.00	ppm	0.00
23) d12-Chrysene	12.747	240	1705565	20.00	ppm	0.00
28) d12-Perylene	15.808	264	1815941	20.00	ppm	0.00
System Monitoring Compounds						
2) SURR1,2-FLUOROPHENOL	3.916	112	101	0.00	ppm	-0.02
Spiked Amount 4.000	Range 10 - 105		Recovery =	0.00%#		
3) SURR2,PHENOL-D6	0.000	99	0	0.00	ppm	
Spiked Amount 4.000	Range 10 - 107		Recovery =	0.00%#		
6) SURR4,NITROBENZENE-D5	5.460	82	101	0.00	ppm	0.00
Spiked Amount 2.000	Range 37 - 117		Recovery =	0.00%#		
12) SURR5,2-FLUOROBIPHENYL	7.153	172	311	0.00	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery =	0.00%#		
17) SURR3,2,4,6-TRIBROMOPH...	0.000	330	0	0.00	ppm	
Spiked Amount 4.000	Range 28 - 157		Recovery =	0.00%#		
25) SURR6,TERPHENYL-D14	11.064	244	1976	0.02	ppm	0.00
Spiked Amount 2.000	Range 40 - 133		Recovery =	1.00%#		
Target Compounds						Qvalue
22) Fluoranthene	10.588	202	4807	Below Cal		89

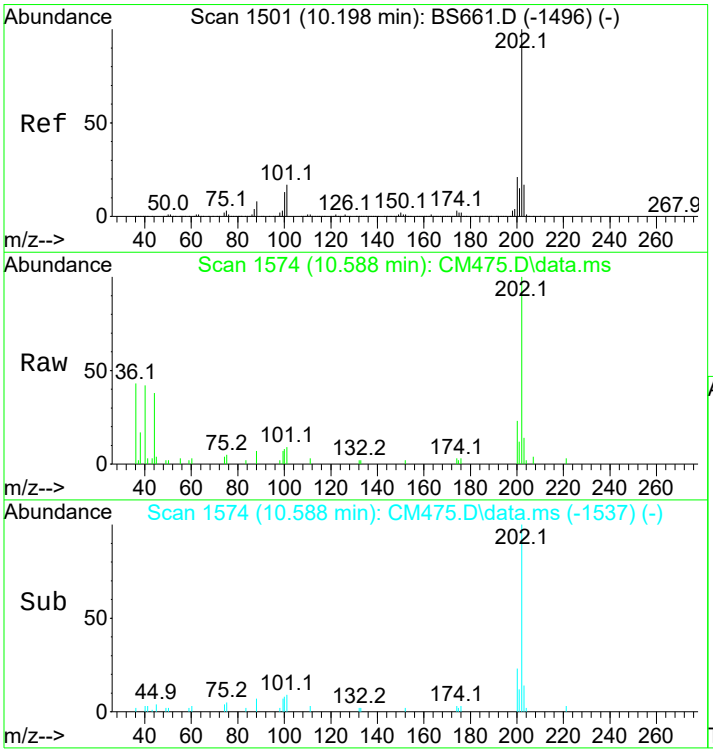
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM475.D
Acq On : 12 Aug 2024 2:23 pm
Operator : B.Allgeier
Sample : IB
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 22 10:48:31 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\PAH-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Aug 22 10:38:49 2024
Response via : Initial Calibration

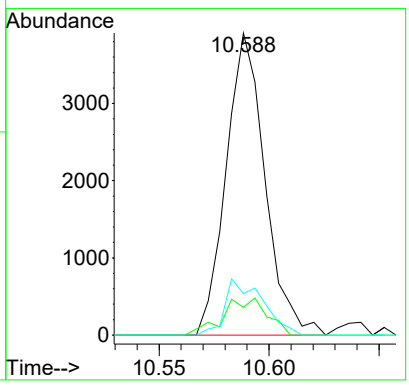




#22
Fluoranthene
Concen: Below Cal
RT: 10.588 min Scan# 1574
Delta R.T. -0.001 min
Lab File: CM475.D
Acq: 12 Aug 2024 2:23 pm

Tgt Ion:202 Resp: 4807

Ion	Ratio	Lower	Upper
202	100		
101	9.2	0.0	34.9
203	13.7	0.0	37.2



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM475.D
Acq On : 12 Aug 2024 2:23 pm
Operator : B.Allgeier
Sample : IB
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 14:06:23 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\8270-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 13 13:36:19 2024
Response via : Initial Calibration

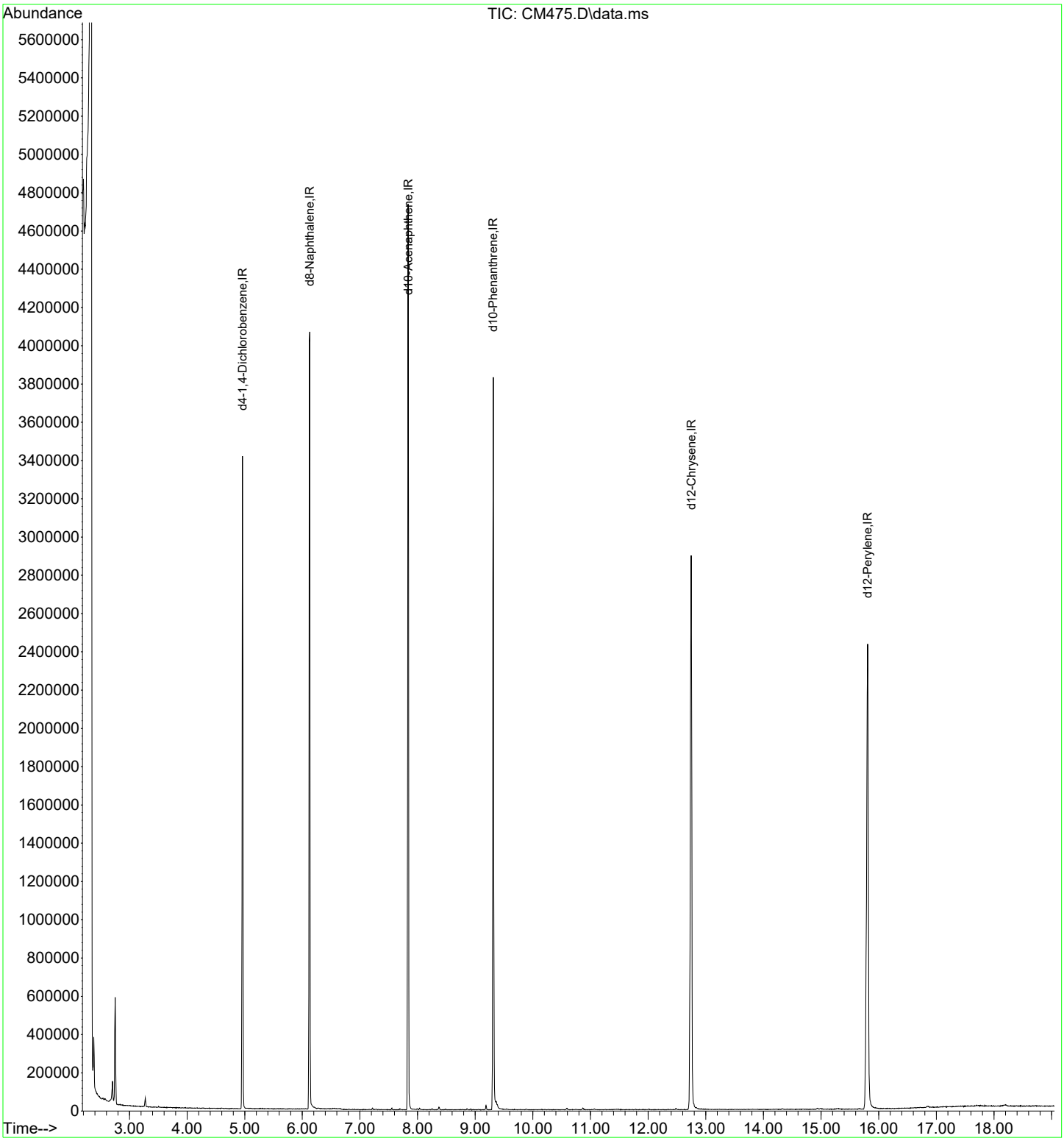
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.963	152	590084	20.00	ppm	0.00
34) d8-Naphthalene	6.128	136	2032868	20.00	ppm	0.00
58) d10-Acenaphthene	7.837	164	1106554	20.00	ppm	0.00
92) d10-Phenanthrene	9.312	188	1543128	20.00	ppm	0.00
118) d12-Chrysene	12.747	240	1705565	20.00	ppm	0.00
136) d12-Perylene	15.808	264	1819021m	20.00	ppm	0.00
System Monitoring Compounds						
8) SURR1,2-FLUOROPHENOL	3.916	112	101	0.00	ppm	-0.02
Spiked Amount 4.000	Range 10 - 105		Recovery =	0.00%#		
13) SURR2,PHENOL-D6	0.000	99	0	0.00	ppm	
Spiked Amount 4.000	Range 10 - 107		Recovery =	0.00%#		
35) SURR4,NITROBENZENE-D5	5.460	82	101	0.00	ppm	0.00
Spiked Amount 2.000	Range 37 - 117		Recovery =	0.00%#		
64) SURR5,2-FLUOROBIPHENYL	7.153	172	311	0.00	ppm	0.00
Spiked Amount 2.000	Range 39 - 119		Recovery =	0.00%#		
89) SURR3,2,4,6-TRIBROMOPH...	0.000	330	0	0.00	ppm	
Spiked Amount 4.000	Range 28 - 157		Recovery =	0.00%#		
125) SURR6,TERPHENYL-D14	0.000	244	0d	0.00	ppm	
Spiked Amount 2.000	Range 40 - 133		Recovery =	0.00%#		
Target Compounds						Qvalue
117) Fluoranthene	10.588	202	4807	Below Cal		90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM475.D
Acq On : 12 Aug 2024 2:23 pm
Operator : B.Allgeier
Sample : IB
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 14:06:23 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\8270-081224C.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Tue Aug 13 13:36:19 2024
Response via : Initial Calibration

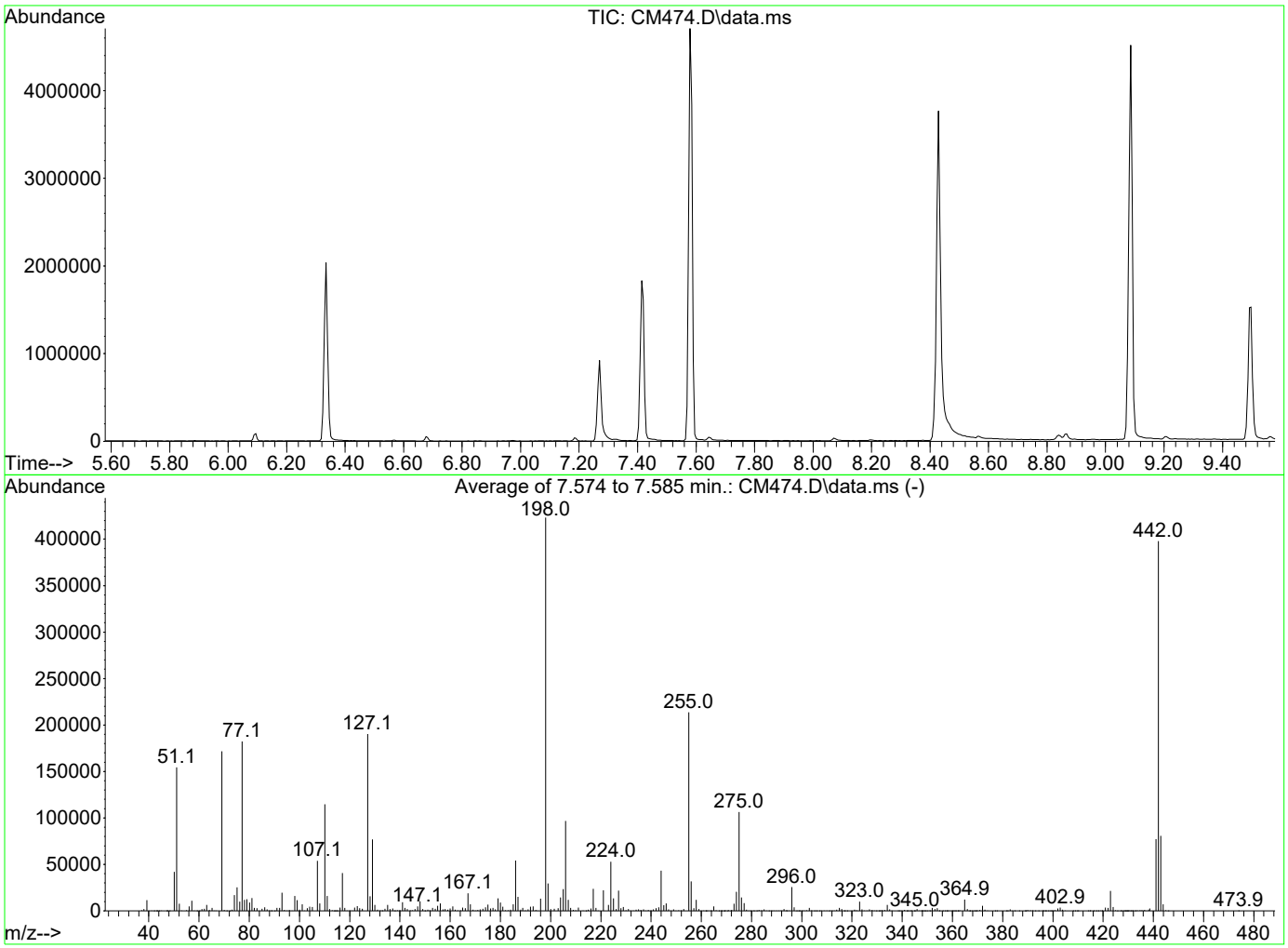


1st EDG 08/15/24
2nd BA 08/16/24

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM474.D
Acq On : 12 Aug 2024 1:35 pm
Operator : B.Allgeier
Sample : tune
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : I:\ACQUDATA\5973C\METHODS\TUNE-E.m
Title : TUNE CHECK
Last Update : Wed Mar 06 10:36:25 2024



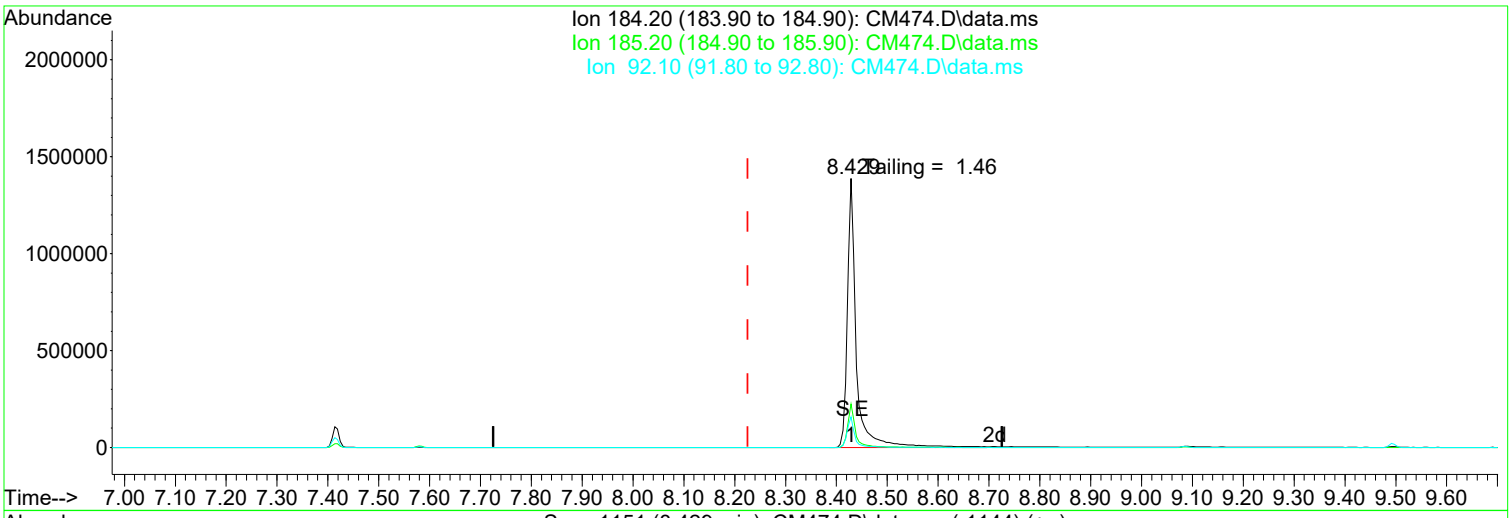
Spectrum Information: Average of 7.574 to 7.585 min.

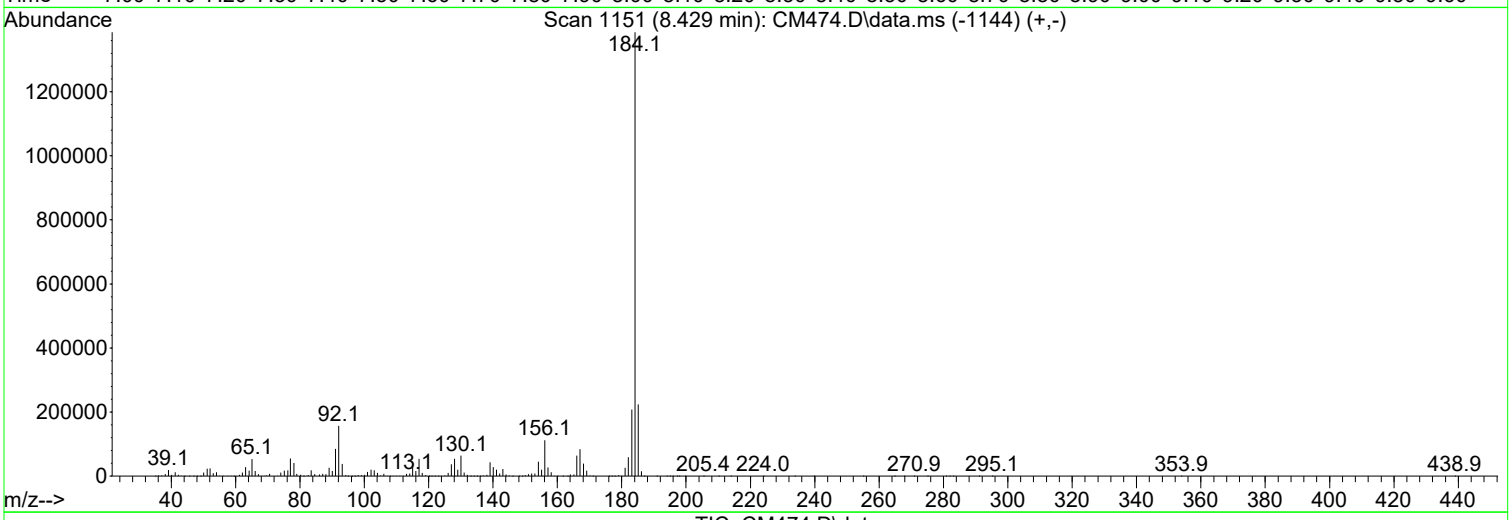
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	40.6	171653	PASS
70	69	0.00	2	0.6	1001	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	423189	PASS
199	198	5	9	7.0	29595	PASS
365	198	1	200	2.8	12042	PASS
441	443	0.01	150	95.7	77211	PASS
442	442	100	100	100.0	397952	PASS
443	442	15	24	20.3	80691	PASS

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM474.D
Acq On : 12 Aug 2024 1:35 pm
Operator : B.Allgeier
Sample : tune
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:15:37 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\TUNE-E.m
Quant Title : TUNE CHECK
QLast Update : Wed Mar 06 10:36:25 2024
Response via : Initial Calibration





TIC: CM474.D\data.ms

(8) Benzidine (T)

8.429min (+ 0.203) 121.59 ppm

response 1735124

Ion	Exp%	Act%
184.20	100.00	100.00
185.20	34.90	16.16
92.10	24.10	11.35
0.00	0.00	0.00

Manual Integration:

After

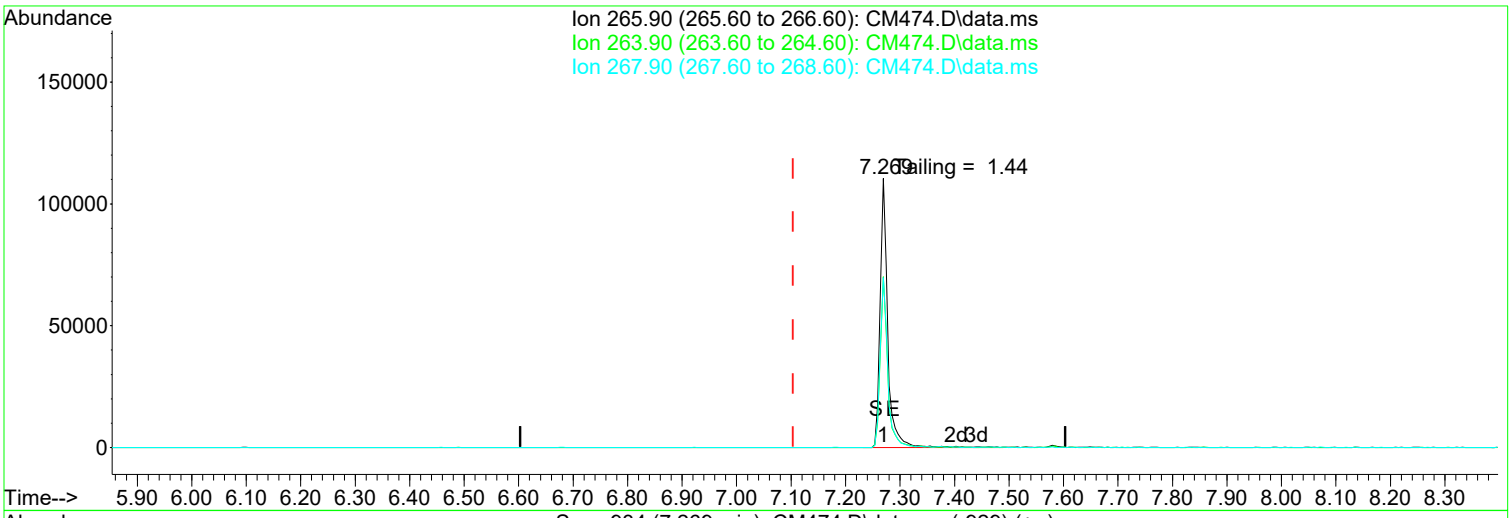
Other - Tailing

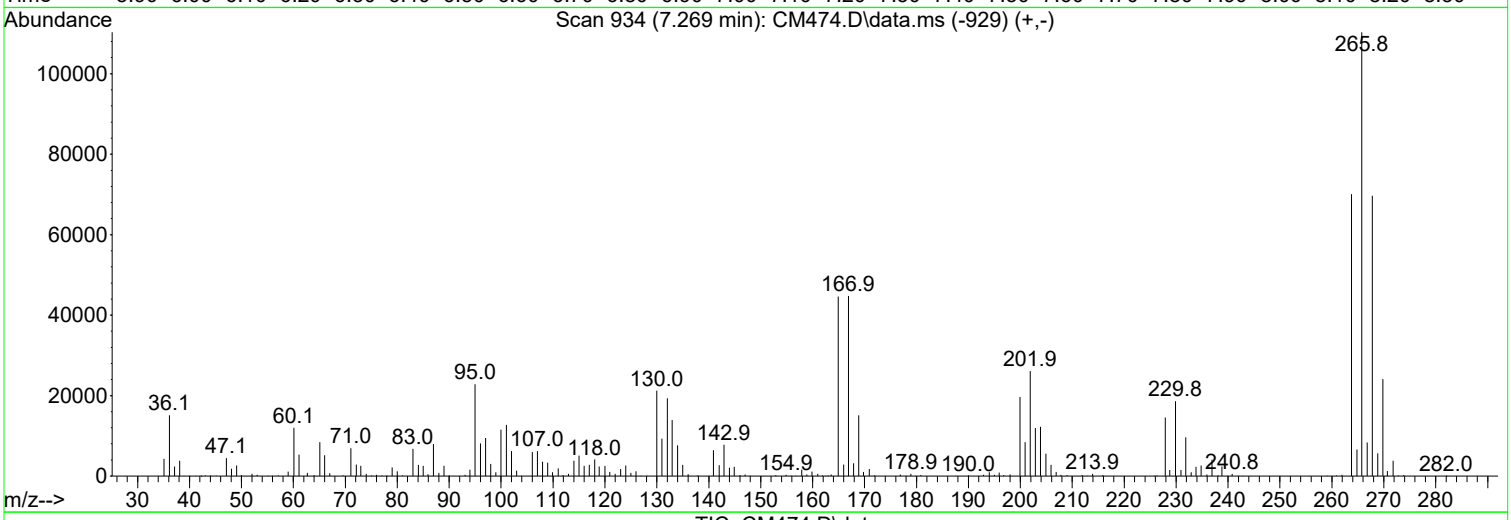
08/12/24

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973C\DATA\081224\
Data File : CM474.D
Acq On : 12 Aug 2024 1:35 pm
Operator : B.Allgeier
Sample : tune
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:15:37 2024
Quant Method : I:\ACQUDATA\5973C\METHODS\TUNE-E.m
Quant Title : TUNE CHECK
QLast Update : Wed Mar 06 10:36:25 2024
Response via : Initial Calibration





TIC: CM474.D\data.ms

(5) Pentachlorophenol (TCM)

7.269min (+ 0.166) 38.06 ppm

response 108239

Ion	Exp%	Act%
265.90	100.00	100.00
263.90	66.10	63.53
267.90	67.10	63.13
0.00	0.00	0.00

Manual Integration:

After

Other - Tailing

08/12/24

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 8/12/2024

Initial Calibration Summary
Low Level Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400160 **Signal ID:** 1
Instrument ID: R-MS-53

#	Lab Code	Sample Name	File Location	Acquisition Date
12	RC2400160-12	0.05 STD	I:\ACQUDATA\5973C\DATA\081224\CM476.D	08/12/2024 14:52
13	RC2400160-13	0.1 STD	I:\ACQUDATA\5973C\DATA\081224\CM477.D	08/12/2024 15:22
14	RC2400160-14	0.2 STD	I:\ACQUDATA\5973C\DATA\081224\CM478.D	08/12/2024 15:50
15	RC2400160-15	0.5 STD	I:\ACQUDATA\5973C\DATA\081224\CM479.D	08/12/2024 16:19
30	RC2400160-30	0.5 STD	I:\ACQUDATA\5973C\DATA\081224\CM479phenol.D	08/12/2024 16:19
16	RC2400160-16	1 STD	I:\ACQUDATA\5973C\DATA\081224\CM480.D	08/12/2024 16:49
31	RC2400160-31	1 STD	I:\ACQUDATA\5973C\DATA\081224\CM480phenol.D	08/12/2024 16:49
17	RC2400160-17	2 STD	I:\ACQUDATA\5973C\DATA\081224\CM481.D	08/12/2024 17:17
32	RC2400160-32	2 STD	I:\ACQUDATA\5973C\DATA\081224\CM481phenol.D	08/12/2024 17:17
33	RC2400160-33	5 STD	I:\ACQUDATA\5973C\DATA\081224\CM482phenol.D	08/12/2024 17:46
18	RC2400160-18	5 STD	I:\ACQUDATA\5973C\DATA\081224\CM482.D	08/12/2024 17:46
19	RC2400160-19	8 STD	I:\ACQUDATA\5973C\DATA\081224\CM483.D	08/12/2024 18:15
34	RC2400160-34	8 STD	I:\ACQUDATA\5973C\DATA\081224\CM483phenol.D	08/12/2024 18:15
35	RC2400160-35	10 STD	I:\ACQUDATA\5973C\DATA\081224\CM484phenol.D	08/12/2024 18:44
20	RC2400160-20	10 STD	I:\ACQUDATA\5973C\DATA\081224\CM484.D	08/12/2024 18:44
36	RC2400160-36	15 STD	I:\ACQUDATA\5973C\DATA\081224\CM485phenol.D	08/12/2024 19:12
21	RC2400160-21	15 STD	I:\ACQUDATA\5973C\DATA\081224\CM485.D	08/12/2024 19:12

Analyte

2-Fluorobiphenyl

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
15	0.500	1.625	16	1.000	1.669	17	2.000	1.715	18	5.000	1.54
19	8.000	1.295	20	10.000	1.178	21	15.000	1.09			

Acenaphthylene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
12	0.050	2.57	13	0.100	2.383	14	0.200	2.322	15	0.500	2.147
16	1.000	2.047	17	2.000	1.989	18	5.000	1.969	19	8.000	1.837
20	10.000	1.807	21	15.000	1.691						

Benz(a)anthracene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
12	0.050	3.465	13	0.100	2.326	14	0.200	1.858	15	0.500	1.513
16	1.000	1.372	17	2.000	1.31	18	5.000	1.367	19	8.000	1.303
20	10.000	1.288	21	15.000	1.237						

Benzo(a)pyrene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
12	0.050	1.29	13	0.100	0.9312	14	0.200	0.8977	15	0.500	0.8839
16	1.000	0.878	17	2.000	0.9456	18	5.000	1.071	19	8.000	1.027
20	10.000	1.013	21	15.000	1.006						

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 8/12/2024

Initial Calibration Summary
Low Level Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400160 **Signal ID:** 1
Instrument ID: R-MS-53

Analyte

Benzo(b)fluoranthene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
12	0.050	1.476	13	0.100	1.049	14	0.200	1.064	15	0.500	1.057
16	1.000	1.05	17	2.000	1.11	18	5.000	1.257	19	8.000	1.216
20	10.000	1.177	21	15.000	1.165						

Benzo(k)fluoranthene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
12	0.050	2.004	13	0.100	1.607	14	0.200	1.496	15	0.500	1.127
16	1.000	1.073	17	2.000	1.213	18	5.000	1.334	19	8.000	1.226
20	10.000	1.225	21	15.000	1.136						

Chrysene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
12	0.050	2.1	13	0.100	1.813	14	0.200	1.745	15	0.500	1.382
16	1.000	1.282	17	2.000	1.266	18	5.000	1.324	19	8.000	1.261
20	10.000	1.234	21	15.000	1.189						

Dibenz(a,h)anthracene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
12	0.050	1.059	13	0.100	0.7745	14	0.200	0.5638	15	0.500	0.8083
16	1.000	0.8201	17	2.000	0.9206	18	5.000	1.058	19	8.000	1.014
20	10.000	0.9911	21	15.000	0.9526						

Hexachlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
13	0.100	0.3217	14	0.200	0.3495	15	0.500	0.3174	16	1.000	0.3176
17	2.000	0.3118	18	5.000	0.3128	19	8.000	0.3024	20	10.000	0.2959
21	15.000	0.2855									

Indeno(1,2,3-cd)pyrene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
12	0.050	0.7365	13	0.100	0.674	14	0.200	0.5727	15	0.500	0.5927
16	1.000	0.6537	17	2.000	0.7228	18	5.000	0.9062	19	8.000	0.8686
20	10.000	0.8466	21	15.000	0.8431						

Nitrobenzene-d5

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
15	0.500	0.2739	16	1.000	0.2924	17	2.000	0.313	18	5.000	0.3269
19	8.000	0.3567	20	10.000	0.3668	21	15.000	0.3686			

p-Terphenyl-d14

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
15	0.500	1.045	16	1.000	1.071	17	2.000	1.062	18	5.000	1.008
19	8.000	0.9682	20	10.000	0.9382	21	15.000	0.8985			

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 8/12/2024

Initial Calibration Summary
Low Level Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400160 **Signal ID:** 1
Instrument ID: R-MS-53

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
2-Fluorobiphenyl	SURR	Average RF	% RSD	17.5	≤20	1.445	
Acenaphthylene	TRG	Average RF	% RSD	13.4	≤20	2.076	0.900
Benz(a)anthracene	TRG	Quadratic	COD	0.9998	≥0.99	1.704	0.800
Benzo(a)pyrene	TRG	Average RF	% RSD	12.4	≤20	0.9943	0.700
Benzo(b)fluoranthene	TRG	Average RF	% RSD	11.5	≤20	1.162	0.700
Benzo(k)fluoranthene	TRG	Quadratic	COD	0.9988	≥0.99	1.344	0.700
Chrysene	TRG	Quadratic	COD	0.9998	≥0.99	1.46	0.700
Dibenz(a,h)anthracene	TRG	Average RF	% RSD	17.4	≤20	0.8963	0.400
Hexachlorobenzene	TRG	Average RF	% RSD	5.8	≤20	0.3127	0.100
Indeno(1,2,3-cd)pyrene	TRG	Average RF	% RSD	16.1	≤20	0.7417	0.500
Nitrobenzene-d5	SURR	Average RF	% RSD	11.4	≤20	0.3283	
p-Terphenyl-d14	SURR	Average RF	% RSD	6.6	≤20	0.9987	

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility **Calibration Date:** 8/12/2024

Initial Calibration Verification Summary
Low Level Semivolatile Organic Compounds by GC/MS

Calibration ID: RC2400160 **Signal ID:** 1
Instrument ID: R-MS-53

#	Lab Code	Sample Name	File Location	Acquisition Date
39	RC2400160-39	ICV	I:\ACQUDATA\5973C\DATA\081224\CM486.D	08/12/2024 19:41
22	RC2400160-22	ICV	I:\ACQUDATA\5973C\DATA\081224\CM486.D	08/12/2024 19:41
38	RC2400160-38	ICV	I:\ACQUDATA\5973C\DATA\081224\CM486phenol.D	08/12/2024 19:41
11	RC2400160-11	ICV	I:\ACQUDATA\5973C\DATA\081224\CM486.D	08/12/2024 19:41

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Acenaphthylene	8.00	7.42	2.076E0	1.926E0	-7.220	±30	Average RF
Benz(a)anthracene	8.00	7.72	1.704E0	1.255E0	-3.447	±30	Quadratic
Benzo(a)pyrene	8.00	8.24	9.943E-1	1.024E0	2.97	±30	Average RF
Benzo(b)fluoranthene	8.00	8.29	1.162E0	1.204E0	3.59	±30	Average RF
Benzo(k)fluoranthene	8.00	7.66	1.344E0	1.171E0	-4.230	±30	Quadratic
Chrysene	8.00	7.53	1.46E0	1.185E0	-5.915	±30	Quadratic
Dibenz(a,h)anthracene	8.00	8.32	8.963E-1	9.321E-1	4.00	±30	Average RF
Hexachlorobenzene	8.00	7.14	3.127E-1	2.792E-1	-10.718	±30	Average RF
Indeno(1,2,3-cd)pyrene	8.00	9.12	7.417E-1	8.454E-1	13.98	±30	Average RF

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Analyzed:**	08/23/24 14:50

Continuing Calibration Verification (CCV) Summary
Low Level Semivolatile Organic Compounds by GC/MS

Analysis Method:	8270E	**Calibration Date:**	8/12/2024
File ID:	I:\ACQUDATA\5973C\DATA\082324\CM638.D\	**Calibration ID:**	RC2400160
Signal ID:	1	**Analysis Lot:**	851820
		Units:	ppm

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Acenaphthylene	5.00	4.36	2.0763	1.8093	-12.9	NA	±20	Average RF
Benz(a)anthracene	5.00	4.72	1.7038	1.2534	NA	-5.7	±20	Quadratic
Benzo(a)pyrene	5.00	4.96	0.9943	0.9867	-0.8	NA	±20	Average RF
Benzo(b)fluoranthene	5.00	5.19	1.1621	1.2069	3.9	NA	±20	Average RF
Benzo(k)fluoranthene	5.00	4.70	1.344	1.1763	NA	-5.9	±20	Quadratic
Chrysene	5.00	4.81	1.4596	1.2378	NA	-3.8	±20	Quadratic
Dibenz(a,h)anthracene	5.00	6.36	0.8963	1.1405	27.3*	NA	±20	Average RF
Hexachlorobenzene	5.00	4.82	0.3127	0.3016	-3.5	NA	±20	Average RF
Indeno(1,2,3-cd)pyrene	5.00	6.75	0.7417	1.0012	35.0*	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
2-Fluorobiphenyl	5.00	5.48	1.4446	1.5828	9.6	NA	±20	Average RF
Nitrobenzene-d5	5.00	4.91	0.3283	0.3225	-1.8	NA	±20	Average RF
p-Terphenyl-d14	5.00	5.46	0.9987	1.1048	10.6	NA	±20	Average RF

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B

Analysis Run Log
Low Level Semivolatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**851820
Instrument ID:R-MS-53

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\5973C\DATA\082324\CM637.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	14:25:00	
I:\ACQUDATA\5973C\DATA\082324\CM638.D\	Continuing Calibration Verification	RQ2410431-01	8/23/2024	14:50:00	
I:\ACQUDATA\5973C\DATA\082324\CM639.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	15:18:00	
I:\ACQUDATA\5973C\DATA\082324\CM640.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	15:46:00	
I:\ACQUDATA\5973C\DATA\082324\CM641.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	16:14:00	
I:\ACQUDATA\5973C\DATA\082324\CM642.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	16:43:00	
I:\ACQUDATA\5973C\DATA\082324\CM643.D\	Method Blank	RQ2410246-01	8/23/2024	17:12:00	
I:\ACQUDATA\5973C\DATA\082324\CM644.D\	Lab Control Sample	RQ2410246-02	8/23/2024	17:40:00	
I:\ACQUDATA\5973C\DATA\082324\CM645.D\	Duplicate Lab Control Sample	RQ2410246-03	8/23/2024	18:08:00	
I:\ACQUDATA\5973C\DATA\082324\CM646.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	18:36:00	
I:\ACQUDATA\5973C\DATA\082324\CM647.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	19:04:00	
I:\ACQUDATA\5973C\DATA\082324\CM648.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	19:33:00	
I:\ACQUDATA\5973C\DATA\082324\CM649.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	20:02:00	
I:\ACQUDATA\5973C\DATA\082324\CM650.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	20:30:00	
I:\ACQUDATA\5973C\DATA\082324\CM651.D\	2408140833A 300-001-GSV	R2407792-002	8/23/2024	20:58:00	
I:\ACQUDATA\5973C\DATA\082324\CM652.D\	2408150825A 300-002-GSV	R2407792-010	8/23/2024	21:26:00	
I:\ACQUDATA\5973C\DATA\082324\CM654.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	22:23:00	
I:\ACQUDATA\5973C\DATA\082324\CM655.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	22:51:00	
I:\ACQUDATA\5973C\DATA\082324\CM656.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	23:18:00	
I:\ACQUDATA\5973C\DATA\082324\CM657.D\	ZZZZZZZ	ZZZZZZZ	8/23/2024	23:46:00	
I:\ACQUDATA\5973C\DATA\082324\CM658.D\	ZZZZZZZ	ZZZZZZZ	8/24/2024	00:14:00	
I:\ACQUDATA\5973C\DATA\082324\CM659.D\	ZZZZZZZ	ZZZZZZZ	8/24/2024	00:42:00	
I:\ACQUDATA\5973C\DATA\082324\CM660.D\	ZZZZZZZ	ZZZZZZZ	8/24/2024	01:10:00	

Client: NASA/WSTF/Navarro **Service Request:**R2407792
Project: White Sands Test Facility/24EC008B

Analysis Run Log
Low Level Semivolatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**851820
Instrument ID:R-MS-53

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\5973C\DATA\082324 \CM661.D\	ZZZZZZZ	ZZZZZZZ	8/24/2024	01:37:00	

Analysis: 8270LL/625LL	**Analyst:** EDG	**Run Method:** LCTune, 8270LL	
Date: 8/23/24	**Instr.** R-MS-53	**Quant Method:** PAH-081234C.M, Tune	
Syringes: ~	**LIMS Run#:** 851820	**ICAL: RC** 240B160	

Pos.	Sample	Diln.	Stds. ID	File#	OK?	Comments
1	BLANK			CM1634		
↓	↓			635		
2	TUNE		236944	636		
↓	↓		↓	637	Y	
2	CCV		236948	638	Y	
3	RQ2410364-01MB		443659	639	Y	ARCONIC
4	-02LCS		↓	640	Y	↓
5	-03DLCS			641	Y	
6	R2407603-005		↓	642	Y	
7	RQ2410246-01MB		443507	643	Y	
8	-02LCS			644	Y	
9	-03DLCS			645	Y	
10	R2407677-001			646	N	above ICAL, RA @ 1:2
11	-002			647	Y	
12	-003			648	Y	
13	-004			649	Y	
14	R2407789-001			650	Y	
15	R2407792-002			651	Y	
16	-010			652	Y	
17	R2407803-002			653	Y	
18	R2407839-001			654	Y	
19	R2407841-001			655	Y	
20	R2407879-002			656	Y	
21	-010		↓	657	Y	
22	RQ2410365-01MB		443660	658	Y	
23	-02LCS		↓	659	Y	
24	-03DLCS			660	Y	
25	R2408016-002		↓	661	Y	

EDG 8/26/24

All samples = 1.05 mL +5.25 uL Combined IS/Surr.; 236819

Primary :_____ exp: Secondary :_____ exp:

Primary:_____ exp: Secondary :_____ exp:

Reagents:

Prep Summary Report

Client: NASA/WSTF/Navarro **Service Request:** R2407792
Project: White Sands Test Facility/24EC008B
Sample Matrix: Water

Low Level Semivolatile Organic Compounds by GC/MS

Prep Method: EPA 3510C **Extraction Lot:** 443507
Analytical Method: 8270E **Extraction Date:** 08/21/24 08:00

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
2408140833A 300-001-GSV	R2407792-002	8/14/24	8/16/24	500 mL	1 mL	
2408150825A 300-002-GSV	R2407792-010	8/15/24	8/16/24	500 mL	1 mL	
Method Blank	RQ2410246-01MB	NA	NA	500 mL	1 mL	
Lab Control Sample	RQ2410246-02LCS	NA	NA	500 mL	1 mL	
Duplicate Lab Control Sample	RQ2410246-03DLCS	NA	NA	500 mL	1 mL	

Preparation Information Benchsheet

Prep Run#: 443507
Team: Semivoa GCMS/KPROCOPIO

Prep WorkFlow: OrgExtLLAq(7)
Prep Method: EPA 3510C

Status: Prepped
Prep Date/Time: 8/21/24 08:00

Comments: _____

Reviewed By: _____ Date: _____ Spike Witness: JVANHEYNINGEN Date: _____

Chain of Custody

Relinquished By: _____ Date: _____

Received By: _____ Date: _____

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443507
Team: Semivoa GCMS/KPROCOPIO

Prep WorkFlow: OrgExtLLAq(7)
Prep Method: Method

Status: Prepped
Prep Date/Time: 8/21/24 08:00

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410246-01	MB		500mL	625/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861	
2	RQ2410246-01	MB		500mL	8270E/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861	
3	RQ2410246-02	LCS		500mL	625/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236151; 1.0000 mL/236861	
4	RQ2410246-02	LCS		500mL	8270E/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861; 1.0000 mL/236151	
5	RQ2410246-03	DLCS		500mL	625/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236151; 1.0000 mL/236861	
6	RQ2410246-03	DLCS		500mL	8270E/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861; 1.0000 mL/236151	
7	R2407677-001	OL-4434-01	.03	210mL	8270E/SVO LL	8	<2	>11	1.00mL	slight yellow tint, clear	1.0000 mL/236861	
8	R2407677-002	OL-4434-02	.03	220mL	8270E/SVO LL	8	<2	>11	1.00mL	slight yellow tint, clear	1.0000 mL/236861	
9	R2407677-003	OL-4434-03	.03	180mL	8270E/SVO LL	8	<2	>11	1.00mL	yellow tint, clear	1.0000 mL/236861	
10	R2407677-004	OL-4434-04	.03	240mL	8270E/SVO LL	8	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861	
11	R2407789-001	OL-4438-01	.03	240mL	8270E/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861	
12	R2407792-002	2408140833A 300-001-GSV	.01	500mL	8270E/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861	
13	R2407792-010	2408150825A 300-002-GSV	.01	500mL	8270E/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861	
14	R2407803-002	U-001 0815	.01	500mL	625/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861	
15	R2407839-001	OL-4439-01	.03	220mL	8270E/SVO LL	7	<2	>11	1.00mL	yellow tint, clear	1.0000 mL/236861	
16	R2407841-001	OL-4441-01	.03	220mL	8270E/SVO LL	7	<2	>11	1.00mL	orange, cloudy	1.0000 mL/236861	
17	R2407879-002	2408151005C BLM-25-455	.01	500mL	8270E/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861	
18	R2407879-010	2408160833A 400-001-GW	.01	500mL	8270E/SVO LL	7	<2	>11	1.00mL	colorless, clear	1.0000 mL/236861	

F-608

Spiking Solutions

Name: 8270 LVI LCS Spike 4ppm Inventory ID 236151 Logbook Ref: Expires On: 10/08/2024

Name: 8270 LVI Surrogate 2/4 ug/mL Inventory ID 236861 Logbook Ref: Expires On: 10/09/2024

Preparation Materials

Eppendorf Pipette Repeater	EXT #27 (232220)	Sulfuric Acid, 50% H2SO4	235526 (236776)	Dichloromethane (Methylene Chloride) 99.9% MeCl2	(236794)
Sodium Hydroxide 50% NaOH	233035 (233035)	pH Paper 0-14	CoA not available (236509)	Prepared Sodium Sulfate Na2SO4	(236813)

Preparation Steps

Step: Extraction
Started: 8/21/24 08:00
Finished: 8/21/24 14:00
By: KPROCOPIO
Comments

Step: Concentration
Started: 8/23/24 08:12
Finished: 8/23/24 12:20
By: JVANHEYNINGEN
Comments

Step: Final Volume
Started: 8/23/24 12:20
Finished: 8/23/24 12:20
By: JVANHEYNINGEN
Comments

Metals

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	8/14/24
Sample Matrix:	Water	**Date Received:**	8/16/24
Sample Name:	2408140834A 300-001-GSV		
Lab Code:	R2407792-003	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Aluminum, Total	6010D	**0.11**		mg/L	0.10	0.03	1	8/20/24	8/21/24 22:49	
Antimony, Total	6020B	**0.0003**	J	mg/L	0.0010	0.0002	1	8/22/24	8/27/24 13:56	
Arsenic, Total	6020B	**0.0010**		mg/L	0.0010	0.0004	1	8/22/24	8/27/24 13:56	
Barium, Total	6010D	**0.038**		mg/L	0.020	0.003	1	8/20/24	8/21/24 22:49	
Beryllium, Total	6010D	ND	U	mg/L	0.0030	0.0002	1	8/20/24	8/21/24 22:49	
Boron, Total	6010D	**0.29**		mg/L	0.20	0.02	1	8/20/24	8/21/24 22:49	
Cadmium, Total	6010D	ND	U	mg/L	0.0050	0.0004	1	8/20/24	8/21/24 22:49	
Calcium, Total	6010D	**120**		mg/L	1.0	0.3	1	8/20/24	8/21/24 22:49	
Chromium, Total	6010D	ND	U	mg/L	0.010	0.002	1	8/20/24	8/21/24 22:49	
Cobalt, Total	6010D	ND	U	mg/L	0.050	0.0009	1	8/20/24	8/21/24 22:49	
Copper, Total	6010D	ND	U	mg/L	0.020	0.004	1	8/20/24	8/21/24 22:49	
Iron, Total	6010D	**0.27**		mg/L	0.10	0.07	1	8/20/24	8/21/24 22:49	
Lead, Total	6010D	ND	U	mg/L	0.050	0.004	1	8/20/24	8/21/24 22:49	
Magnesium, Total	6010D	**84.3**		mg/L	1.0	0.03	1	8/20/24	8/21/24 22:49	
Manganese, Total	6010D	**0.158**		mg/L	0.010	0.004	1	8/20/24	8/21/24 22:49	
Mercury, Total	7470A	ND	U	mg/L	0.00020	0.00008	1	8/21/24	8/22/24 09:54	
Molybdenum, Total	6010D	**0.008**	J	mg/L	0.025	0.003	1	8/20/24	8/21/24 22:49	
Nickel, Total	6010D	**0.035**	J	mg/L	0.040	0.003	1	8/20/24	8/21/24 22:49	
Potassium, Total	6010D	**4.3**		mg/L	2.0	0.4	1	8/20/24	8/21/24 22:49	
Selenium, Total	6010D	ND	U	mg/L	0.010	0.007	1	8/20/24	8/21/24 22:49	
Silver, Total	6010D	ND	U	mg/L	0.010	0.0006	1	8/20/24	8/21/24 22:49	
Sodium, Total	6010D	**152**		mg/L	1.0	0.3	1	8/20/24	8/21/24 22:49	
Strontium, Total	6010D	**2.30**		mg/L	0.10	0.002	1	8/20/24	8/21/24 22:49	
Thallium, Total	6020B	**0.0002**	J	mg/L	0.0010	0.00004	1	8/22/24	8/27/24 13:56	
Tin, Total	6010D	ND	U	mg/L	0.50	0.008	1	8/20/24	8/21/24 22:49	
Vanadium, Total	6010D	**0.003**	J	mg/L	0.050	0.0007	1	8/20/24	8/21/24 22:49	
Zinc, Total	6010D	**0.022**		mg/L	0.020	0.003	1	8/20/24	8/21/24 22:49	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	8/14/24
Sample Matrix:	Water	**Date Received:**	8/16/24
Sample Name:	2408140940X WB-5-345		
Lab Code:	R2407792-008	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Aluminum, Total	6010D	ND	U	mg/L	0.10	0.03	1	8/20/24	8/21/24 22:52	
Antimony, Total	6020B	ND	U	mg/L	0.0010	0.0002	1	8/22/24	8/27/24 13:58	
Arsenic, Total	6020B	**0.0005**	J	mg/L	0.0010	0.0004	1	8/22/24	8/27/24 13:58	
Barium, Total	6010D	**0.024**		mg/L	0.020	0.003	1	8/20/24	8/21/24 22:52	
Beryllium, Total	6010D	ND	U	mg/L	0.0030	0.0002	1	8/20/24	8/21/24 22:52	
Boron, Total	6010D	**0.12**	J	mg/L	0.20	0.02	1	8/20/24	8/21/24 22:52	
Cadmium, Total	6010D	ND	U	mg/L	0.0050	0.0004	1	8/20/24	8/21/24 22:52	
Calcium, Total	6010D	**122**		mg/L	1.0	0.3	1	8/20/24	8/21/24 22:52	
Chromium, Total	6010D	**0.002**	J	mg/L	0.010	0.002	1	8/20/24	8/21/24 22:52	
Cobalt, Total	6010D	ND	U	mg/L	0.050	0.0009	1	8/20/24	8/21/24 22:52	
Copper, Total	6010D	ND	U	mg/L	0.020	0.004	1	8/20/24	8/21/24 22:52	
Iron, Total	6010D	**0.23**		mg/L	0.10	0.07	1	8/20/24	8/21/24 22:52	
Lead, Total	6010D	ND	U	mg/L	0.050	0.004	1	8/20/24	8/21/24 22:52	
Magnesium, Total	6010D	**76.5**		mg/L	1.0	0.03	1	8/20/24	8/21/24 22:52	
Manganese, Total	6010D	**0.010**	J	mg/L	0.010	0.004	1	8/20/24	8/21/24 22:52	
Mercury, Total	7470A	ND	U	mg/L	0.00020	0.00008	1	8/21/24	8/22/24 10:07	
Molybdenum, Total	6010D	ND	U	mg/L	0.025	0.003	1	8/20/24	8/21/24 22:52	
Nickel, Total	6010D	**0.023**	J	mg/L	0.040	0.003	1	8/20/24	8/21/24 22:52	
Potassium, Total	6010D	**3.4**		mg/L	2.0	0.4	1	8/20/24	8/21/24 22:52	
Selenium, Total	6010D	ND	U	mg/L	0.010	0.007	1	8/20/24	8/21/24 22:52	
Silver, Total	6010D	ND	U	mg/L	0.010	0.0006	1	8/20/24	8/21/24 22:52	
Sodium, Total	6010D	**48.5**		mg/L	1.0	0.3	1	8/20/24	8/21/24 22:52	
Strontium, Total	6010D	**12.9**		mg/L	1.0	0.02	10	8/20/24	8/23/24 09:56	
Thallium, Total	6020B	ND	U	mg/L	0.0010	0.00004	1	8/22/24	8/27/24 13:58	
Tin, Total	6010D	ND	U	mg/L	0.50	0.008	1	8/20/24	8/21/24 22:52	
Vanadium, Total	6010D	**0.0007**	J	mg/L	0.050	0.0007	1	8/20/24	8/21/24 22:52	
Zinc, Total	6010D	**0.022**		mg/L	0.020	0.003	1	8/20/24	8/21/24 22:52	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	8/15/24
Sample Matrix:	Water	**Date Received:**	8/16/24
Sample Name:	2408150826A 300-002-GSV		
Lab Code:	R2407792-011	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Aluminum, Total	6010D	**0.09**	J	mg/L	0.10	0.03	1	8/20/24	8/21/24 22:55	
Antimony, Total	6020B	**0.0005**	J	mg/L	0.0010	0.0002	1	8/22/24	8/27/24 13:59	
Arsenic, Total	6020B	**0.0045**		mg/L	0.0010	0.0004	1	8/22/24	8/27/24 13:59	
Barium, Total	6010D	**0.070**		mg/L	0.020	0.003	1	8/20/24	8/21/24 22:55	
Beryllium, Total	6010D	ND	U	mg/L	0.0030	0.0002	1	8/20/24	8/21/24 22:55	
Boron, Total	6010D	**0.13**	J	mg/L	0.20	0.02	1	8/20/24	8/21/24 22:55	
Cadmium, Total	6010D	ND	U	mg/L	0.0050	0.0004	1	8/20/24	8/21/24 22:55	
Calcium, Total	6010D	**94.5**		mg/L	1.0	0.3	1	8/20/24	8/21/24 22:55	
Chromium, Total	6010D	ND	U	mg/L	0.010	0.002	1	8/20/24	8/21/24 22:55	
Cobalt, Total	6010D	**0.002**	J	mg/L	0.050	0.0009	1	8/20/24	8/21/24 22:55	
Copper, Total	6010D	ND	U	mg/L	0.020	0.004	1	8/20/24	8/21/24 22:55	
Iron, Total	6010D	**0.46**		mg/L	0.10	0.07	1	8/20/24	8/21/24 22:55	
Lead, Total	6010D	ND	U	mg/L	0.050	0.004	1	8/20/24	8/21/24 22:55	
Magnesium, Total	6010D	**55.7**		mg/L	1.0	0.03	1	8/20/24	8/21/24 22:55	
Manganese, Total	6010D	**0.463**		mg/L	0.010	0.004	1	8/20/24	8/21/24 22:55	
Mercury, Total	7470A	ND	U	mg/L	0.00020	0.00008	1	8/21/24	8/22/24 10:10	
Molybdenum, Total	6010D	**0.036**		mg/L	0.025	0.003	1	8/20/24	8/21/24 22:55	
Nickel, Total	6010D	**0.031**	J	mg/L	0.040	0.003	1	8/20/24	8/21/24 22:55	
Potassium, Total	6010D	**3.8**		mg/L	2.0	0.4	1	8/20/24	8/21/24 22:55	
Selenium, Total	6010D	ND	U	mg/L	0.010	0.007	1	8/20/24	8/21/24 22:55	
Silver, Total	6010D	ND	U	mg/L	0.010	0.0006	1	8/20/24	8/21/24 22:55	
Sodium, Total	6010D	**68.9**		mg/L	1.0	0.3	1	8/20/24	8/21/24 22:55	
Strontium, Total	6010D	**1.81**		mg/L	0.10	0.002	1	8/20/24	8/21/24 22:55	
Thallium, Total	6020B	**0.0002**	J	mg/L	0.0010	0.00004	1	8/22/24	8/27/24 13:59	
Tin, Total	6010D	ND	U	mg/L	0.50	0.008	1	8/20/24	8/21/24 22:55	
Vanadium, Total	6010D	ND	U	mg/L	0.050	0.0007	1	8/20/24	8/21/24 22:55	
Zinc, Total	6010D	**0.322**		mg/L	0.020	0.003	1	8/20/24	8/21/24 22:55	

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R2407792-MB	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Aluminum, Total	6010D	ND	U	mg/L	0.10	0.03	1	8/20/24	8/21/24 21:57	
Antimony, Total	6020B	ND	U	mg/L	0.0010	0.0002	1	8/22/24	8/27/24 13:52	
Arsenic, Total	6020B	ND	U	mg/L	0.0010	0.0004	1	8/22/24	8/27/24 13:52	
Barium, Total	6010D	ND	U	mg/L	0.020	0.003	1	8/20/24	8/21/24 21:57	
Beryllium, Total	6010D	ND	U	mg/L	0.0030	0.0002	1	8/20/24	8/21/24 21:57	
Boron, Total	6010D	ND	U	mg/L	0.20	0.02	1	8/20/24	8/21/24 21:57	
Cadmium, Total	6010D	ND	U	mg/L	0.0050	0.0004	1	8/20/24	8/21/24 21:57	
Calcium, Total	6010D	ND	U	mg/L	1.0	0.3	1	8/20/24	8/21/24 21:57	
Chromium, Total	6010D	ND	U	mg/L	0.010	0.002	1	8/20/24	8/21/24 21:57	
Cobalt, Total	6010D	ND	U	mg/L	0.050	0.0009	1	8/20/24	8/21/24 21:57	
Copper, Total	6010D	ND	U	mg/L	0.020	0.004	1	8/20/24	8/21/24 21:57	
Iron, Total	6010D	ND	U	mg/L	0.10	0.07	1	8/20/24	8/21/24 21:57	
Lead, Total	6010D	ND	U	mg/L	0.050	0.004	1	8/20/24	8/21/24 21:57	
Magnesium, Total	6010D	ND	U	mg/L	1.0	0.03	1	8/20/24	8/21/24 21:57	
Manganese, Total	6010D	ND	U	mg/L	0.010	0.004	1	8/20/24	8/21/24 21:57	
Mercury, Total	7470A	ND	U	mg/L	0.00020	0.00008	1	8/21/24	8/22/24 09:39	
Molybdenum, Total	6010D	ND	U	mg/L	0.025	0.003	1	8/20/24	8/21/24 21:57	
Nickel, Total	6010D	ND	U	mg/L	0.040	0.003	1	8/20/24	8/21/24 21:57	
Potassium, Total	6010D	ND	U	mg/L	2.0	0.4	1	8/20/24	8/21/24 21:57	
Selenium, Total	6010D	ND	U	mg/L	0.010	0.007	1	8/20/24	8/21/24 21:57	
Silver, Total	6010D	ND	U	mg/L	0.010	0.0006	1	8/20/24	8/21/24 21:57	
Sodium, Total	6010D	ND	U	mg/L	1.0	0.3	1	8/20/24	8/21/24 21:57	
Strontium, Total	6010D	ND	U	mg/L	0.10	0.002	1	8/20/24	8/21/24 21:57	
Thallium, Total	6020B	ND	U	mg/L	0.0010	0.00004	1	8/22/24	8/27/24 13:52	
Tin, Total	6010D	ND	U	mg/L	0.50	0.008	1	8/20/24	8/21/24 21:57	
Vanadium, Total	6010D	ND	U	mg/L	0.050	0.0007	1	8/20/24	8/21/24 21:57	
Zinc, Total	6010D	ND	U	mg/L	0.020	0.003	1	8/20/24	8/21/24 21:57	

Metals Data Cover Sheet

Run Date: 8/21/2024

Data File: 082124A-ICP7

Primary Reviewer: N. Mansen

Secondary Reviewer: C.Kutzer

LIMS Runs:	LIMS Preps:	
851508	443265	T2
851509	443449	T2
851510	443447	T2
851511	443446	T2
851512	443448	CCV4
851513	443139	T2

Comments:
N/A

ICP-7 Run Log

Serial number: MY2309CQ22

Analyst: NM Date: 8/21/24 Data File: 082124A-ICP7

	Prep Date	Lot #		Prep Date	Lot #
MRL	–	–	Cal Std 1	7/29/24	M875000 3B
ICSA ISIC	7/12/24	M875004 6A	Cal Std 2 1/100 calc, 3 1/50 calc, 4 1/10 calc, 5 1/5 calc		
ICSAB	–	–	Cal Std ~~5 HLCCV1~~ 6	7/29/24	M875001 4A
Int. Std	8/16/24	M875005 7G	HLCCV2 A	7/12/24	M875003 6A
ICV/CCV	8/21/24	M875007 2G	HLCCV2 B	8/15/24	M875010 1B

~~(Cal Std 4 is a 1/5 and Cal Std 3 is a 1/100 dilution of Cal Std 5)~~ NM 8/21/24

Blank Prep - Daily	NHO3	HCl	Pipet Used	DOD Pipet Verification	IEC Date
Lot	235979	235981	M36,M37	–	–

1:1	PBS-443265	1:33	PBW-443447	S1:3	Continuing Calibration Verification	2:28	PBW-443448
1:2	LCSS-443265	1:34	LCSW-443447	S1:4	Continuing Calibration Blank	2:29	LCSW-443448
1:3	R2407593-004 3X	1:35	R2407825-002	2:1	PBW-443446	2:30	DLCSW-443448
1:4	R2407593-006 3X	1:36	R2407825-003	2:2	LCSW-443446	2:31	R2407708-001
1:5	R2407593-008 3X	1:37	R2407825-004	2:3	R2407573-002	2:32	~~R2407708-002~~ NM 8/21/24
1:6	R2407593-010 3X	1:38	R2407825-005	2:4	R2407573-004	2:33	R2407719-001
1:7	R2407593-010L 15X	1:39	R2407825-006	2:5	R2407573-004S	2:34	R2407719-002
S1:3	Continuing Calibration Verification	1:40	R2407825-007	2:6	R2407573-004SD	2:35	R2407723-001
S1:4	Continuing Calibration Blank	1:41	R2407825-008	2:7	R2407573-004A	2:36	R2407723-001L 5X
1:8	PBW-443449	1:42	R2407825-008S	2:8	R2407573-004L 5X	2:37	R2407724-001
1:9	FBLK-443449	S1:3	Continuing Calibration Verification	2:9	R2407573-006	S1:5	Continuing Calibration Verification1
1:10	LCSW-443449	S1:4	Continuing Calibration Blank	2:10	R2407573-008	S1:6	Continuing Calibration Blank1
1:11	DLCSW-443449	1:43	R2407825-008SD	S1:5	Continuing Calibration Verification1	2:38	R2407724-002
1:12	R2407601-002	1:44	R2407825-008A	S1:6	Continuing Calibration Blank1	2:39	R2407724-003
1:13	R2407601-004	1:45	R2407825-008L 5X	2:11	R2407573-010	2:40	R2407724-004
1:14	R2407601-006	1:46	R2407825-009	2:12	R2407573-011	2:41	R2407724-005
1:15	R2407601-008	1:47	R2407825-010	2:13	R2407573-012	2:42	R2407724-006
1:16	R2407601-010	1:48	R2407825-011	2:14	R2407573-013	2:43	R2407792-003
1:17	R2407601-012	1:49	R2407825-012	2:15	R2407596-001	2:44	R2407792-008
S1:3	Continuing Calibration Verification	1:50	R2407825-013	2:16	R2407601-021	2:45	R2407792-011
S1:4	Continuing Calibration Blank	1:51	R2407825-014	2:17	R2407624-001	2:46	R2407812-002
1:18	R2407601-014	1:52	R2407825-015	2:18	R2407624-002	2:47	R2407825-021
1:19	R2407601-016	S1:3	Continuing Calibration Verification	2:19	R2407624-003	S1:5	Continuing Calibration Verification1
1:20	R2407601-018	S1:4	Continuing Calibration Blank	2:20	R2407624-004	S1:6	Continuing Calibration Blank1
1:21	R2407601-019	1:53	R2407825-016	S1:5	Continuing Calibration Verification1	2:48	R2407825-023
1:22	R2407601-020	1:54	R2407825-017	S1:6	Continuing Calibration Blank1	2:49	R2407825-039
1:23	R2407601-022	1:55	R2407825-018	2:21	R2407624-005	2:50	R2407827-001
1:24	R2407601-024	1:56	R2407825-019	2:22	R2407624-006	2:51	R2407827-002
1:25	R2407601-026	1:57	R2407825-020	2:23	R2407624-007	2:52	R2407708-001 5X
1:26	R2407601-028	1:58	R2407825-001	2:24	R2407624-008	2:53	~~R2407708-002 5X~~ NM 8/21/24
1:27	R2407601-030			2:25	R2407624-009	2:54	R2407723-001 5X
S1:3	Continuing Calibration Verification			2:26	R2407624-010	S1:5	Continuing Calibration Verification1
S1:4	Continuing Calibration Blank			2:27	R2407596-001 5X	S1:6	Continuing Calibration Blank1
1:28	R2407601-032			S1:5	Continuing Calibration Verification1		
1:29	R2407601-034			S1:6	Continuing Calibration Blank1		
1:30	R2407601-036						
1:31	R2407601-038						
1:32	R2407601-038L 5X						
S1:3	Continuing Calibration Verification						
S1:4	Continuing Calibration Blank						

S1:5 CCV
S1:6 CCB
3:1 PBW-443139
3:2 LCSW-443139
3:3 R2407457-002 10x
3:4 R2407457-002L 50x
3:5 R2407633-001 3x
3:6 R2407633-002 10x
3:7 R2407633-001 10x
S1:5 CCV
S1:6 CCB

Created Date/Time	8/21/2024 14:36:25	Software Version	7.6.1.12212
Instrument Name	MY2309CQ22	Firmware Version	5590
File Path	C:\Agilent\ICP Expert\My Results\2024\082124A-ICP7.esws		
Notes	NM 8/21/24		

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
8/21/2024 15:32:22	Blank	Ag (328.068 nm)	0.0000	N/A	16.9452
	Blank	Al (237.312 nm)	0.0000	N/A	-15.6696
	Blank	As (188.980 nm)	0.0000	N/A	-2.4643
	Blank	B (249.772 nm)	0.0000	N/A	84.0657
	Blank	Ba (230.424 nm)	0.0000	N/A	13.5437
	Blank	Be (313.107 nm)	0.0000	N/A	-16.5354
	Blank	Ca (317.933 nm)	0.0000	N/A	3044.3527
	Blank	Cd (214.439 nm)	0.0000	N/A	11.6073
	Blank	Co (230.786 nm)	0.0000	N/A	2.2170
	Blank	Cr (267.716 nm)	0.0000	N/A	21.9123
	Blank	Cu (327.395 nm)	0.0000	N/A	-143.2292
	Blank	Fe (234.350 nm)	0.0000	N/A	55.0283
	Blank	K (766.491 nm)	0.0000	N/A	547.0162
	Blank	Mg (279.078 nm)	0.0000	N/A	4.1589
	Blank	Mn (257.610 nm)	0.0000	N/A	9.4120
	Blank	Mo (202.032 nm)	0.0000	N/A	5.4795
	Blank	Na (588.995 nm)	0.0000	N/A	-12535.0032
	Blank	Ni (230.299 nm)	0.0000	N/A	5.7595
	Blank	Pb (220.353 nm)	0.0000	N/A	3.4855
	Blank	Sb (217.582 nm)	0.0000	N/A	2.5686
	Blank	Se (196.026 nm)	0.0000	N/A	1.5341
	Blank	Si (252.851 nm)	0.0000	N/A	62.2582
	Blank	Sn (189.925 nm)	0.0000	N/A	7.0330
	Blank	Sr (216.596 nm)	0.0000	N/A	8.1731
	Blank	Ti (336.122 nm)	0.0000	N/A	66.3763
	Blank	Tl (190.794 nm)	0.0000	N/A	-2.7673
	Blank	V (292.401 nm)	0.0000	N/A	7.8504
	Blank	Y (360.074 nm)	1.00	0.00	556122.74
	Blank	Y_R (360.074 nm)	1.00	0.00	556253.45
	Blank	Zn (213.857 nm)	0.0000	N/A	14.2127
8/21/2024 15:35:37	Standard 1	Ag (328.068 nm)		N/A	17.6821
	Standard 1	Al (237.312 nm)	0.1000	N/A	261.3921
	Standard 1	As (188.980 nm)	0.0100	N/A	14.8177
	Standard 1	B (249.772 nm)		N/A	265.8450
	Standard 1	Ba (230.424 nm)	0.0200	N/A	1265.6880
	Standard 1	Be (313.107 nm)	0.0030	N/A	3502.3052
	Standard 1	Ca (317.933 nm)		N/A	3233.1900
	Standard 1	Cd (214.439 nm)	0.0050	N/A	344.8443
	Standard 1	Co (230.786 nm)		N/A	6.7537
	Standard 1	Cr (267.716 nm)		N/A	32.6681
	Standard 1	Cu (327.395 nm)	0.0100	N/A	339.4091
	Standard 1	Fe (234.350 nm)		N/A	315.7804
	Standard 1	K (766.491 nm)		N/A	551.9291
	Standard 1	Mg (279.078 nm)		N/A	4.0900
	Standard 1	Mn (257.610 nm)	0.0100	N/A	3735.4341
	Standard 1	Mo (202.032 nm)	0.0250	N/A	284.2233
	Standard 1	Na (588.995 nm)		N/A	-12304.9459
	Standard 1	Ni (230.299 nm)		N/A	0.1119
	Standard 1	Pb (220.353 nm)	0.0050	N/A	31.0250
	Standard 1	Sb (217.582 nm)	0.0600	N/A	142.8092
	Standard 1	Se (196.026 nm)		N/A	4.8230
	Standard 1	Si (252.851 nm)		N/A	641.1834

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Standard 1	Sn (189.925 nm)		N/A	9.7453
	Standard 1	Sr (216.596 nm)		N/A	9.9417
	Standard 1	Ti (336.122 nm)		N/A	92.6104
	Standard 1	Tl (190.794 nm)	0.0100	N/A	7.3647
	Standard 1	V (292.401 nm)		N/A	9.6833
	Standard 1	Y (360.074 nm)	1.00	0.28	555217.38
	Standard 1	Y_R (360.074 nm)	1.00	0.28	555332.77
	Standard 1	Zn (213.857 nm)		N/A	59.0364
8/21/2024 15:38:52	Standard 2	Ag (328.068 nm)	0.0100	N/A	650.4601
	Standard 2	Al (237.312 nm)	0.2000	N/A	528.2453
	Standard 2	As (188.980 nm)	0.0200	N/A	32.8860
	Standard 2	B (249.772 nm)	0.1000	N/A	4407.6413
	Standard 2	Ba (230.424 nm)	0.2000	N/A	12868.4221
	Standard 2	Be (313.107 nm)	0.0050	N/A	6102.9297
	Standard 2	Ca (317.933 nm)	0.5000	N/A	27375.7108
	Standard 2	Cd (214.439 nm)	0.0100	N/A	660.0372
	Standard 2	Co (230.786 nm)	0.0500	N/A	1084.2884
	Standard 2	Cr (267.716 nm)	0.0100	N/A	621.3428
	Standard 2	Cu (327.395 nm)	0.0250	N/A	1011.2728
	Standard 2	Fe (234.350 nm)	0.1000	N/A	2495.6621
	Standard 2	K (766.491 nm)	0.5000	N/A	1040.7808
	Standard 2	Mg (279.078 nm)	0.5000	N/A	2189.1644
	Standard 2	Mn (257.610 nm)	0.0150	N/A	5623.1545
	Standard 2	Mo (202.032 nm)	0.0500	N/A	557.9513
	Standard 2	Na (588.995 nm)	0.5000	N/A	-4254.3506
	Standard 2	Ni (230.299 nm)	0.0400	N/A	554.0071
	Standard 2	Pb (220.353 nm)	0.0100	N/A	55.8547
	Standard 2	Sb (217.582 nm)	0.1000	N/A	241.0635
	Standard 2	Se (196.026 nm)	0.0100	N/A	10.0863
	Standard 2	Si (252.851 nm)	0.5000	N/A	3386.6970
	Standard 2	Sn (189.925 nm)	0.1000	N/A	289.3036
	Standard 2	Sr (216.596 nm)	0.0500	N/A	1013.9692
	Standard 2	Ti (336.122 nm)	0.0500	N/A	7901.5712
	Standard 2	Tl (190.794 nm)	0.0200	N/A	18.2149
	Standard 2	V (292.401 nm)	0.0500	N/A	1945.1374
	Standard 2	Y (360.074 nm)	1.01	0.25	560561.21
	Standard 2	Y_R (360.074 nm)	1.01	0.25	560799.26
	Standard 2	Zn (213.857 nm)	0.0200	N/A	1422.8128
8/21/2024 15:42:08	Standard 3	Ag (328.068 nm)	0.0200	N/A	1266.0284
	Standard 3	Al (237.312 nm)	0.4000	N/A	1074.2200
	Standard 3	As (188.980 nm)	0.0400	N/A	66.0450
	Standard 3	B (249.772 nm)	0.2000	N/A	8736.9258
	Standard 3	Ba (230.424 nm)	0.4000	N/A	25605.6376
	Standard 3	Be (313.107 nm)	0.0100	N/A	12264.3107
	Standard 3	Ca (317.933 nm)	1.0000	N/A	42400.0562
	Standard 3	Cd (214.439 nm)	0.0200	N/A	1307.5083
	Standard 3	Co (230.786 nm)	0.1000	N/A	2157.2605
	Standard 3	Cr (267.716 nm)	0.0200	N/A	1208.1028
	Standard 3	Cu (327.395 nm)	0.0500	N/A	2150.5975
	Standard 3	Fe (234.350 nm)	0.2000	N/A	4887.3682
	Standard 3	K (766.491 nm)	1.0000	N/A	1609.0117
	Standard 3	Mg (279.078 nm)	1.0000	N/A	4338.4964
	Standard 3	Mn (257.610 nm)	0.0300	N/A	11138.3922
	Standard 3	Mo (202.032 nm)	0.1000	N/A	1110.7077
	Standard 3	Na (588.995 nm)	1.0000	N/A	4087.7253
	Standard 3	Ni (230.299 nm)	0.0800	N/A	1099.9518
	Standard 3	Pb (220.353 nm)	0.0200	N/A	109.4443

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Standard 3	Sb (217.582 nm)	0.2000	N/A	471.4413
	Standard 3	Se (196.026 nm)	0.0200	N/A	20.8725
	Standard 3	Si (252.851 nm)	1.0000	N/A	6692.8642
	Standard 3	Sn (189.925 nm)	0.2000	N/A	574.2842
	Standard 3	Sr (216.596 nm)	0.1000	N/A	2007.7607
	Standard 3	Ti (336.122 nm)	0.1000	N/A	15693.7660
	Standard 3	Tl (190.794 nm)	0.0400	N/A	37.4063
	Standard 3	V (292.401 nm)	0.1000	N/A	3853.1992
	Standard 3	Y (360.074 nm)	1.01	0.25	560683.39
	Standard 3	Y_R (360.074 nm)	1.01	0.25	560828.25
	Standard 3	Zn (213.857 nm)	0.0400	N/A	2584.7625
8/21/2024 15:45:23	Standard 4	Ag (328.068 nm)	0.1000	N/A	6352.2418
	Standard 4	Al (237.312 nm)	2.0000	N/A	5371.8976
	Standard 4	As (188.980 nm)	0.2000	N/A	348.8695
	Standard 4	B (249.772 nm)	1.0000	N/A	44256.5870
	Standard 4	Ba (230.424 nm)	2.0000	N/A	127409.7423
	Standard 4	Be (313.107 nm)	0.0500	N/A	62838.9861
	Standard 4	Ca (317.933 nm)	5.0000	N/A	200568.2442
	Standard 4	Cd (214.439 nm)	0.1000	N/A	6503.0502
	Standard 4	Co (230.786 nm)	0.5000	N/A	10721.6773
	Standard 4	Cr (267.716 nm)	0.1000	N/A	5869.9804
	Standard 4	Cu (327.395 nm)	0.2500	N/A	11314.0901
	Standard 4	Fe (234.350 nm)	1.0000	N/A	24194.8777
	Standard 4	K (766.491 nm)	5.0000	N/A	6036.7903
	Standard 4	Mg (279.078 nm)	5.0000	N/A	21907.8523
	Standard 4	Mn (257.610 nm)	0.1500	N/A	55133.1310
	Standard 4	Mo (202.032 nm)	0.5000	N/A	5623.0045
	Standard 4	Na (588.995 nm)	5.0000	N/A	72553.6757
	Standard 4	Ni (230.299 nm)	0.4000	N/A	5447.6380
	Standard 4	Pb (220.353 nm)	0.1000	N/A	552.3851
	Standard 4	Sb (217.582 nm)	1.0000	N/A	2390.0746
	Standard 4	Se (196.026 nm)	0.1000	N/A	83.9103
	Standard 4	Si (252.851 nm)	5.0000	N/A	33802.8555
	Standard 4	Sn (189.925 nm)	1.0000	N/A	2852.4497
	Standard 4	Sr (216.596 nm)	0.5000	N/A	10024.0355
	Standard 4	Ti (336.122 nm)	0.5000	N/A	78713.9433
	Standard 4	Tl (190.794 nm)	0.2000	N/A	196.6558
	Standard 4	V (292.401 nm)	0.5000	N/A	19442.7757
	Standard 4	Y (360.074 nm)	0.99	0.28	552617.27
	Standard 4	Y_R (360.074 nm)	0.99	0.28	552832.49
	Standard 4	Zn (213.857 nm)	0.2000	N/A	12750.5462
8/21/2024 15:48:38	Standard 5	Ag (328.068 nm)	0.2000	N/A	12736.7108
	Standard 5	Al (237.312 nm)	4.0000	N/A	10785.5714
	Standard 5	As (188.980 nm)	0.4000	N/A	696.6899
	Standard 5	B (249.772 nm)	2.0000	N/A	89705.0001
	Standard 5	Ba (230.424 nm)	4.0000	N/A	254839.3585
	Standard 5	Be (313.107 nm)	0.1000	N/A	127086.3821
	Standard 5	Ca (317.933 nm)	10.0000	N/A	399359.7023
	Standard 5	Cd (214.439 nm)	0.2000	N/A	13004.9775
	Standard 5	Co (230.786 nm)	1.0000	N/A	21349.0694
	Standard 5	Cr (267.716 nm)	0.2000	N/A	11713.1676
	Standard 5	Cu (327.395 nm)	0.5000	N/A	22954.9426
	Standard 5	Fe (234.350 nm)	2.0000	N/A	48050.3308
	Standard 5	K (766.491 nm)	10.0000	N/A	11782.0369
	Standard 5	Mg (279.078 nm)	10.0000	N/A	43633.9759
	Standard 5	Mn (257.610 nm)	0.3000	N/A	109827.7842
	Standard 5	Mo (202.032 nm)	1.0000	N/A	11353.3538

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Standard 5	Na (588.995 nm)	10.0000	N/A	160220.4808
	Standard 5	Ni (230.299 nm)	0.8000	N/A	10832.8842
	Standard 5	Pb (220.353 nm)	0.2000	N/A	1091.9183
	Standard 5	Sb (217.582 nm)	2.0000	N/A	4802.7284
	Standard 5	Se (196.026 nm)	0.2000	N/A	167.8789
	Standard 5	Si (252.851 nm)	10.0000	N/A	67625.7034
	Standard 5	Sn (189.925 nm)	2.0000	N/A	5656.1696
	Standard 5	Sr (216.596 nm)	1.0000	N/A	20070.2989
	Standard 5	Ti (336.122 nm)	1.0000	N/A	159043.2746
	Standard 5	Tl (190.794 nm)	0.4000	N/A	396.3743
	Standard 5	V (292.401 nm)	1.0000	N/A	38881.3483
	Standard 5	Y (360.074 nm)	0.98	0.32	545746.46
	Standard 5	Y_R (360.074 nm)	0.98	0.32	545954.24
	Standard 5	Zn (213.857 nm)	0.4000	N/A	25600.8586
8/21/2024 15:51:53	Standard 6	Ag (328.068 nm)	1.0000	N/A	64002.3769
	Standard 6	Al (237.312 nm)	20.0000	N/A	54011.2115
	Standard 6	As (188.980 nm)	2.0000	N/A	3564.0759
	Standard 6	B (249.772 nm)	10.0000	N/A	458686.3687
	Standard 6	Ba (230.424 nm)	20.0000	N/A	1221373.2054
	Standard 6	Be (313.107 nm)	0.5000	N/A	632956.5190
	Standard 6	Ca (317.933 nm)	50.0000	N/A	1941518.9921
	Standard 6	Cd (214.439 nm)	1.0000	N/A	63913.7638
	Standard 6	Co (230.786 nm)	5.0000	N/A	103862.1159
	Standard 6	Cr (267.716 nm)	1.0000	N/A	57502.8657
	Standard 6	Cu (327.395 nm)	2.5000	N/A	117353.4695
	Standard 6	Fe (234.350 nm)	10.0000	N/A	235266.1502
	Standard 6	K (766.491 nm)	50.0000	N/A	59666.9577
	Standard 6	Mg (279.078 nm)	50.0000	N/A	217696.8511
	Standard 6	Mn (257.610 nm)	1.5000	N/A	538463.4741
	Standard 6	Mo (202.032 nm)	5.0000	N/A	56488.1509
	Standard 6	Na (588.995 nm)	50.0000	N/A	857492.8148
	Standard 6	Ni (230.299 nm)	4.0000	N/A	52787.3093
	Standard 6	Pb (220.353 nm)	1.0000	N/A	5297.2807
	Standard 6	Sb (217.582 nm)	10.0000	N/A	24201.5916
	Standard 6	Se (196.026 nm)	1.0000	N/A	849.4120
	Standard 6	Si (252.851 nm)	50.0000	N/A	342918.2639
	Standard 6	Sn (189.925 nm)	10.0000	N/A	27548.9055
	Standard 6	Sr (216.596 nm)	5.0000	N/A	97966.7146
	Standard 6	Ti (336.122 nm)	5.0000	N/A	794877.0701
	Standard 6	Tl (190.794 nm)	2.0000	N/A	1916.7961
	Standard 6	V (292.401 nm)	5.0000	N/A	195067.8687
	Standard 6	Y (360.074 nm)	0.94	0.30	522004.47
	Standard 6	Y_R (360.074 nm)	0.94	0.30	522163.53
	Standard 6	Zn (213.857 nm)	2.0000	N/A	128471.3276
8/21/2024 15:55:37	Initial Calibration Verification	Ag (328.068 nm)	0.5091	0.16	32484.1314
	Initial Calibration Verification	Al (237.312 nm)	9.8106	0.07	26481.4731
	Initial Calibration Verification	As (188.980 nm)	0.9918	0.19	1750.5011
	Initial Calibration Verification	B (249.772 nm)	2.3375	0.21	104232.3473
	Initial Calibration Verification	Ba (230.424 nm)	9.8379	0.47	622742.9262
	Initial Calibration Verification	Be (313.107 nm)	0.2472	0.19	309241.2099
	Initial Calibration Verification	Ca (317.933 nm)	24.9290	0.29	1004654.7027
	Initial Calibration Verification	Cd (214.439 nm)	0.4996	0.20	32400.2934
	Initial Calibration Verification	Co (230.786 nm)	2.4747	0.45	52776.3214
	Initial Calibration Verification	Cr (267.716 nm)	0.5145	0.24	29886.8422
	Initial Calibration Verification	Cu (327.395 nm)	1.2454	0.13	57380.2930
	Initial Calibration Verification	Fe (234.350 nm)	4.9234	0.23	118500.4145
	Initial Calibration Verification	K (766.491 nm)	24.5159	0.27	29479.8250

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Initial Calibration Verification	Mg (279.078 nm)	25.4968	0.24	111215.7995
	Initial Calibration Verification	Mn (257.610 nm)	0.7345	0.24	269484.6722
	Initial Calibration Verification	Mo (202.032 nm)	2.5746	0.29	28957.1202
	Initial Calibration Verification	Na (588.995 nm)	24.9280	0.49	417521.0516
	Initial Calibration Verification	Ni (230.299 nm)	2.0067	0.21	27111.3569
	Initial Calibration Verification	Pb (220.353 nm)	0.4987	0.14	2714.8613
	Initial Calibration Verification	Sb (217.582 nm)	4.9387	0.08	11902.7753
	Initial Calibration Verification	Se (196.026 nm)	0.4839	0.90	411.7309
	Initial Calibration Verification	Si (252.851 nm)	10.0230	0.48	66664.2598
	Initial Calibration Verification	Sn (189.925 nm)	4.9791	0.27	14079.5865
	Initial Calibration Verification	Sr (216.596 nm)	2.5038	0.50	50102.1519
	Initial Calibration Verification	Ti (336.122 nm)	2.5983	0.20	408927.5600
	Initial Calibration Verification	Tl (190.794 nm)	0.9980	0.38	969.4735
	Initial Calibration Verification	V (292.401 nm)	2.5389	0.23	98627.2317
	Initial Calibration Verification	Y (360.074 nm)	0.96	0.28	534137.14
	Initial Calibration Verification	Y_R (360.074 nm)	0.96	0.28	534344.06
	Initial Calibration Verification	Zn (213.857 nm)	0.9908	0.21	63803.5694
8/21/2024 15:58:51	Initial Calibration Blank	Ag (328.068 nm)	0.0000 u	> 100.00	18.6296
	Initial Calibration Blank	Al (237.312 nm)	0.0026	28.72	-8.7040
	Initial Calibration Blank	As (188.980 nm)	0.0012	56.24	-0.3273
	Initial Calibration Blank	B (249.772 nm)	0.0037	5.69	248.6382
	Initial Calibration Blank	Ba (230.424 nm)	0.0001	99.69	19.9450
	Initial Calibration Blank	Be (313.107 nm)	0.0000 u	> 100.00	-16.8276
	Initial Calibration Blank	Ca (317.933 nm)	-0.0004 u	67.79	3029.7691
	Initial Calibration Blank	Cd (214.439 nm)	-0.0001 u	29.04	7.9636
	Initial Calibration Blank	Co (230.786 nm)	0.0002 u	> 100.00	5.4987
	Initial Calibration Blank	Cr (267.716 nm)	0.0001	55.17	27.6468
	Initial Calibration Blank	Cu (327.395 nm)	0.0002	66.23	-134.5636
	Initial Calibration Blank	Fe (234.350 nm)	0.0027	14.03	119.0816
	Initial Calibration Blank	K (766.491 nm)	0.0459	24.30	601.1829
	Initial Calibration Blank	Mg (279.078 nm)	-0.0021 u	17.70	-4.8937
	Initial Calibration Blank	Mn (257.610 nm)	0.0000 u	> 100.00	13.1268
	Initial Calibration Blank	Mo (202.032 nm)	0.0036	21.21	46.1736
	Initial Calibration Blank	Na (588.995 nm)	0.0019 u	> 100.00	-12503.0813
	Initial Calibration Blank	Ni (230.299 nm)	-0.0002 u	68.99	3.4118
	Initial Calibration Blank	Pb (220.353 nm)	-0.0007 u	62.96	-0.1377
	Initial Calibration Blank	Sb (217.582 nm)	0.0074	29.53	20.3111
	Initial Calibration Blank	Se (196.026 nm)	-0.0006 u	> 100.00	1.0002
	Initial Calibration Blank	Si (252.851 nm)	0.0045	32.27	92.1268
	Initial Calibration Blank	Sn (189.925 nm)	-0.0004 u	52.03	6.0083
	Initial Calibration Blank	Sr (216.596 nm)	0.0000 u	> 100.00	8.7154
	Initial Calibration Blank	Ti (336.122 nm)	0.0050	24.40	857.9856
	Initial Calibration Blank	Tl (190.794 nm)	0.0023	58.08	-0.5403
	Initial Calibration Blank	V (292.401 nm)	0.0002	> 100.00	15.7117
	Initial Calibration Blank	Y (360.074 nm)	1.00	0.19	556129.88
	Initial Calibration Blank	Y_R (360.074 nm)	1.00	0.19	556335.68
	Initial Calibration Blank	Zn (213.857 nm)	0.0000 u	> 100.00	13.9471
8/21/2024 16:02:05	Mixed SIC/ICS	Ag (328.068 nm)	0.0000 u	> 100.00	17.7962
	Mixed SIC/ICS	Al (237.312 nm)	506.3604 o	0.34	1367601.3294
	Mixed SIC/ICS	As (188.980 nm)	-0.0011 u	96.40	-4.4035
	Mixed SIC/ICS	B (249.772 nm)	0.1169	0.46	5291.8460
	Mixed SIC/ICS	Ba (230.424 nm)	0.0024	4.21	164.0163
	Mixed SIC/ICS	Be (313.107 nm)	0.0006	0.84	741.7823
	Mixed SIC/ICS	Ca (317.933 nm)	430.4687 o	0.50	17298623.3925
	Mixed SIC/ICS	Cd (214.439 nm)	0.0027	3.92	186.2766
	Mixed SIC/ICS	Co (230.786 nm)	0.0014	8.62	32.1785
	Mixed SIC/ICS	Cr (267.716 nm)	0.0012	8.01	93.2398

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Mixed SIC/ICS	Cu (327.395 nm)	0.0012	20.81	-86.4945
	Mixed SIC/ICS	Fe (234.350 nm)	177.6072 o	0.39	4272894.3227
	Mixed SIC/ICS	K (766.491 nm)	0.1955	19.24	777.7539
	Mixed SIC/ICS	Mg (279.078 nm)	525.5783 o	0.49	2292469.6294
	Mixed SIC/ICS	Mn (257.610 nm)	0.0019	0.79	702.9413
	Mixed SIC/ICS	Mo (202.032 nm)	0.0010	77.70	16.3995
	Mixed SIC/ICS	Na (588.995 nm)	0.0000 u	> 100.00	-12535.8121
	Mixed SIC/ICS	Ni (230.299 nm)	0.0013	52.87	22.7115
	Mixed SIC/ICS	Pb (220.353 nm)	-0.0010 u	75.77	-2.1921
	Mixed SIC/ICS	Sb (217.582 nm)	0.0007 u	> 100.00	4.2614
	Mixed SIC/ICS	Se (196.026 nm)	0.0067	31.12	7.1728
	Mixed SIC/ICS	Si (252.851 nm)	0.0176	6.27	179.4020
	Mixed SIC/ICS	Sn (189.925 nm)	0.0021	89.73	12.8992
	Mixed SIC/ICS	Sr (216.596 nm)	0.0194	1.46	396.4765
	Mixed SIC/ICS	Ti (336.122 nm)	0.0012	38.23	250.7988
	Mixed SIC/ICS	Tl (190.794 nm)	0.0001 u	> 100.00	-2.7076
	Mixed SIC/ICS	V (292.401 nm)	-0.0004 u	32.14	-9.1042
	Mixed SIC/ICS	Y (360.074 nm)	0.84	0.28	465134.33
	Mixed SIC/ICS	Y_R (360.074 nm)	0.84	0.28	465296.24
	Mixed SIC/ICS	Zn (213.857 nm)	0.0288 K	0.67	1868.5016 K
8/21/2024 16:05:20	HLCCVA	Ag (328.068 nm)	2.1790 o	0.27	138985.1859
	HLCCVA	Al (237.312 nm)	505.3871 o	0.14	1364972.7237
	HLCCVA	As (188.980 nm)	4.2189 o	0.09	7454.1782
	HLCCVA	B (249.772 nm)	47.9571 o	0.26	2136865.1788
	HLCCVA	Ba (230.424 nm)	37.6035 o	0.24	2380271.7535
	HLCCVA	Be (313.107 nm)	0.9999 o	0.24	1250995.9351
	HLCCVA	Ca (317.933 nm)	227.9194 o	0.48	9160500.5914
	HLCCVA	Cd (214.439 nm)	1.9023 o	0.37	123335.4671
	HLCCVA	Co (230.786 nm)	9.3670 o	0.38	199758.3797
	HLCCVA	Cr (267.716 nm)	9.8843 o	0.44	573734.6131
	HLCCVA	Cu (327.395 nm)	21.8290 o	0.16	1008077.0517
	HLCCVA	Fe (234.350 nm)	92.0200 o	0.35	2213855.0064
	HLCCVA	K (766.491 nm)	119.7271 Qo	0.10	141844.7023 Q
	HLCCVA	Mg (279.078 nm)	517.5646 o	0.48	2257515.4822
	HLCCVA	Mn (257.610 nm)	9.3918 o	0.52	3445524.7646
	HLCCVA	Mo (202.032 nm)	10.0269 o	0.37	112756.9546
	HLCCVA	Na (588.995 nm)	257.5065 o	0.27	4429957.2184
	HLCCVA	Ni (230.299 nm)	7.3009 o	0.39	98625.9122
	HLCCVA	Pb (220.353 nm)	9.3620 o	0.40	50908.7767
	HLCCVA	Sb (217.582 nm)	0.0201	21.50	51.0483
	HLCCVA	Se (196.026 nm)	10.0638 o	0.16	8532.1428
	HLCCVA	Si (252.851 nm)	66.9202 Qo	0.34	444739.8231 Q
	HLCCVA	Sn (189.925 nm)	0.0021	43.23	13.0635
	HLCCVA	Sr (216.596 nm)	9.6653 o	0.58	193379.9645
	HLCCVA	Ti (336.122 nm)	10.2112 o	0.28	1606893.2692
	HLCCVA	Tl (190.794 nm)	3.6983 o	0.10	3600.0319
	HLCCVA	V (292.401 nm)	10.1065 o	0.36	392580.3277
	HLCCVA	Y (360.074 nm)	0.83	0.17	463650.07
	HLCCVA	Y_R (360.074 nm)	0.83	0.17	463804.17
	HLCCVA	Zn (213.857 nm)	10.2147 o	0.33	657631.7730
8/21/2024 16:08:35	HLCCVB	Ag (328.068 nm)	0.0000 u	> 100.00	14.4537
	HLCCVB	Al (237.312 nm)	0.0188	10.21	35.0766
	HLCCVB	As (188.980 nm)	0.0006 u	> 100.00	-1.4053
	HLCCVB	B (249.772 nm)	0.0406	6.43	1891.6113
	HLCCVB	Ba (230.424 nm)	0.0007	9.62	56.7457
	HLCCVB	Be (313.107 nm)	0.0000	1.66	-6.8135
	HLCCVB	Ca (317.933 nm)	183.9443 o	0.27	7393648.7654

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	HLCCVB	Cd (214.439 nm)	0.0008	3.98	63.7481
	HLCCVB	Co (230.786 nm)	0.0000 u	> 100.00	2.5070
	HLCCVB	Cr (267.716 nm)	0.0013	5.54	95.2895
	HLCCVB	Cu (327.395 nm)	4.2569 o	0.08	196468.4282
	HLCCVB	Fe (234.350 nm)	37.7845 o	0.21	909066.4245
	HLCCVB	K (766.491 nm)	111.9898 Qo	0.18	132713.4403 Q
	HLCCVB	Mg (279.078 nm)	414.7315 o	0.28	1808978.5468
	HLCCVB	Mn (257.610 nm)	0.0111	0.50	4078.7325
	HLCCVB	Mo (202.032 nm)	0.0058	12.87	70.7346
	HLCCVB	Na (588.995 nm)	154.0793 o	0.29	2645634.0966
	HLCCVB	Ni (230.299 nm)	0.0018	16.66	30.7474
	HLCCVB	Pb (220.353 nm)	0.0010 u	> 100.00	8.9601
	HLCCVB	Sb (217.582 nm)	0.0004 u	> 100.00	3.4990
	HLCCVB	Se (196.026 nm)	-0.0001 u	> 100.00	1.4218
	HLCCVB	Si (252.851 nm)	0.0206	22.37	199.2303
	HLCCVB	Sn (189.925 nm)	0.0000 u	> 100.00	7.0297
	HLCCVB	Sr (216.596 nm)	0.0071	1.40	150.2973
	HLCCVB	Ti (336.122 nm)	0.0212	10.25	3403.3120
	HLCCVB	Tl (190.794 nm)	2.8225 o	0.11	2746.8848
	HLCCVB	V (292.401 nm)	0.0003	89.23	17.9325
	HLCCVB	Y (360.074 nm)	0.87	0.35	485400.94
	HLCCVB	Y_R (360.074 nm)	0.87	0.35	485548.50
	HLCCVB	Zn (213.857 nm)	0.0090	0.55	593.6725
8/21/2024 16:11:49	Continuing Calibration Verification	Ag (328.068 nm)	0.5090	0.11	32477.0629
	Continuing Calibration Verification	Al (237.312 nm)	9.8208	0.04	26509.1932
	Continuing Calibration Verification	As (188.980 nm)	0.9935	0.24	1753.5547
	Continuing Calibration Verification	B (249.772 nm)	2.3476	0.14	104682.3097
	Continuing Calibration Verification	Ba (230.424 nm)	9.8301	0.53	622244.3155
	Continuing Calibration Verification	Be (313.107 nm)	0.2475	0.20	309666.3570
	Continuing Calibration Verification	Ca (317.933 nm)	24.9913	0.29	1007155.6369
	Continuing Calibration Verification	Cd (214.439 nm)	0.5006	0.34	32463.5286
	Continuing Calibration Verification	Co (230.786 nm)	2.4769	0.16	52823.1541
	Continuing Calibration Verification	Cr (267.716 nm)	0.5155	0.18	29942.0730
	Continuing Calibration Verification	Cu (327.395 nm)	1.2424	0.06	57241.3855
	Continuing Calibration Verification	Fe (234.350 nm)	4.9428	0.25	118967.9014
	Continuing Calibration Verification	K (766.491 nm)	24.7263	0.29	29728.0672
	Continuing Calibration Verification	Mg (279.078 nm)	25.5732	0.26	111549.1781
	Continuing Calibration Verification	Mn (257.610 nm)	0.7356	0.21	269888.6776
	Continuing Calibration Verification	Mo (202.032 nm)	2.5774	0.39	28987.9165
	Continuing Calibration Verification	Na (588.995 nm)	24.9192	0.54	417370.1089
	Continuing Calibration Verification	Ni (230.299 nm)	2.0079	0.31	27127.5655
	Continuing Calibration Verification	Pb (220.353 nm)	0.4975	0.04	2708.7838
	Continuing Calibration Verification	Sb (217.582 nm)	4.9346	0.19	11892.6763
	Continuing Calibration Verification	Se (196.026 nm)	0.4855	0.40	413.0480
	Continuing Calibration Verification	Si (252.851 nm)	10.1105	0.90	67245.7895
	Continuing Calibration Verification	Sn (189.925 nm)	4.9786	0.15	14078.1118
	Continuing Calibration Verification	Sr (216.596 nm)	2.5025	0.42	50075.7531
	Continuing Calibration Verification	Ti (336.122 nm)	2.5972	0.21	408761.5019
	Continuing Calibration Verification	Tl (190.794 nm)	0.9989	0.47	970.3715
	Continuing Calibration Verification	V (292.401 nm)	2.5416	0.16	98733.2973
	Continuing Calibration Verification	Y (360.074 nm)	0.96	0.15	533182.40
	Continuing Calibration Verification	Y_R (360.074 nm)	0.96	0.15	533401.42
	Continuing Calibration Verification	Zn (213.857 nm)	0.9923	0.17	63900.5042
8/21/2024 16:15:03	Continuing Calibration Blank	Ag (328.068 nm)	0.0000 u	> 100.00	19.4595
	Continuing Calibration Blank	Al (237.312 nm)	0.0016 u	> 100.00	-11.2200
	Continuing Calibration Blank	As (188.980 nm)	-0.0003 u	> 100.00	-2.9727
	Continuing Calibration Blank	B (249.772 nm)	0.0070	6.87	397.0876

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank	Ba (230.424 nm)	0.0002	20.33	25.2627
	Continuing Calibration Blank	Be (313.107 nm)	0.0000	60.99	-10.3242
	Continuing Calibration Blank	Ca (317.933 nm)	0.0001 u	> 100.00	3049.8305
	Continuing Calibration Blank	Cd (214.439 nm)	0.0000 u	> 100.00	9.3823
	Continuing Calibration Blank	Co (230.786 nm)	0.0002 u	> 100.00	5.5192
	Continuing Calibration Blank	Cr (267.716 nm)	0.0001	49.87	29.9682
	Continuing Calibration Blank	Cu (327.395 nm)	0.0001	58.90	-140.0814
	Continuing Calibration Blank	Fe (234.350 nm)	0.0034	18.25	136.0673
	Continuing Calibration Blank	K (766.491 nm)	0.1862	7.91	766.7236
	Continuing Calibration Blank	Mg (279.078 nm)	-0.0002 u	> 100.00	3.4073
	Continuing Calibration Blank	Mn (257.610 nm)	0.0000	65.51	17.3717
	Continuing Calibration Blank	Mo (202.032 nm)	0.0036	20.30	46.2119
	Continuing Calibration Blank	Na (588.995 nm)	0.0432	21.64	-11789.8188
	Continuing Calibration Blank	Ni (230.299 nm)	0.0000 u	> 100.00	6.1525
	Continuing Calibration Blank	Pb (220.353 nm)	-0.0006 u	> 100.00	0.4552
	Continuing Calibration Blank	Sb (217.582 nm)	0.0069	12.50	19.2342
	Continuing Calibration Blank	Se (196.026 nm)	0.0015	> 100.00	2.8464
	Continuing Calibration Blank	Si (252.851 nm)	0.0050	15.12	95.8000
	Continuing Calibration Blank	Sn (189.925 nm)	-0.0006 u	71.41	5.4172
	Continuing Calibration Blank	Sr (216.596 nm)	0.0001	74.40	10.4515
	Continuing Calibration Blank	Ti (336.122 nm)	0.0046	24.20	794.2230
	Continuing Calibration Blank	Tl (190.794 nm)	0.0028	36.00	-0.0528
	Continuing Calibration Blank	V (292.401 nm)	0.0001 u	> 100.00	9.8382
	Continuing Calibration Blank	Y (360.074 nm)	1.00	0.11	555398.52
	Continuing Calibration Blank	Y_R (360.074 nm)	1.00	0.11	555596.05
	Continuing Calibration Blank	Zn (213.857 nm)	0.0000	> 100.00	16.5876
8/21/2024 16:18:16	PBS-443265	Ag (328.068 nm)	0.0000 u	26.04	14.1087
	PBS-443265	Al (237.312 nm)	0.0039	46.10	-5.0236
	PBS-443265	As (188.980 nm)	-0.0018 u	39.71	-5.6655
	PBS-443265	B (249.772 nm)	0.0075	1.61	417.1739
	PBS-443265	Ba (230.424 nm)	0.0001	46.18	21.0189
	PBS-443265	Be (313.107 nm)	0.0000 u	> 100.00	-12.3880
	PBS-443265	Ca (317.933 nm)	0.0177	0.97	3757.0443
	PBS-443265	Cd (214.439 nm)	0.0001	27.97	19.1314
	PBS-443265	Co (230.786 nm)	0.0002 u	> 100.00	6.2619
	PBS-443265	Cr (267.716 nm)	0.0005	20.98	52.9849
	PBS-443265	Cu (327.395 nm)	0.0002	88.09	-136.2126
	PBS-443265	Fe (234.350 nm)	0.0133	5.11	376.0462
	PBS-443265	K (766.491 nm)	0.1221	16.17	691.1662
	PBS-443265	Mg (279.078 nm)	0.0018	54.22	11.8363
	PBS-443265	Mn (257.610 nm)	0.0003	5.38	107.0096
	PBS-443265	Mo (202.032 nm)	0.0018	25.19	25.1800
	PBS-443265	Na (588.995 nm)	0.0539	3.51	-11605.9287
	PBS-443265	Ni (230.299 nm)	0.0005	10.30	12.3369
	PBS-443265	Pb (220.353 nm)	-0.0004 u	> 100.00	1.0785
	PBS-443265	Sb (217.582 nm)	0.0043	49.07	13.0029
	PBS-443265	Se (196.026 nm)	0.0029	87.47	4.0020
	PBS-443265	Si (252.851 nm)	0.0186	14.65	185.5805
	PBS-443265	Sn (189.925 nm)	0.0077	9.36	28.8670
	PBS-443265	Sr (216.596 nm)	0.0000 u	> 100.00	8.7448
	PBS-443265	Ti (336.122 nm)	0.0027	28.10	493.6528
	PBS-443265	Tl (190.794 nm)	0.0000 u	> 100.00	-2.7509
	PBS-443265	V (292.401 nm)	0.0002	30.52	17.2244
	PBS-443265	Y (360.074 nm)	1.01	0.45	559469.94
	PBS-443265	Y_R (360.074 nm)	1.01	0.45	559601.43
	PBS-443265	Zn (213.857 nm)	0.0006	3.90	54.4556
8/21/2024 16:21:30	LCSS-443265	Ag (328.068 nm)	0.0480	0.27	3077.3273

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	LCSS-443265	Al (237.312 nm)	1.9025	0.14	5122.6967
	LCSS-443265	As (188.980 nm)	0.0359	3.87	60.9661
	LCSS-443265	B (249.772 nm)	0.8724	0.12	38952.7201
	LCSS-443265	Ba (230.424 nm)	1.9497	0.50	123427.5484
	LCSS-443265	Be (313.107 nm)	0.0481	0.21	60206.3623
	LCSS-443265	Ca (317.933 nm)	1.9544	0.28	81568.9641
	LCSS-443265	Cd (214.439 nm)	0.0494	0.27	3211.9979
	LCSS-443265	Co (230.786 nm)	0.4921	0.30	10495.7121
	LCSS-443265	Cr (267.716 nm)	0.2014	0.22	11713.8116
	LCSS-443265	Cu (327.395 nm)	0.2532	0.23	11550.7174
	LCSS-443265	Fe (234.350 nm)	0.9965	0.29	24029.6867
	LCSS-443265	K (766.491 nm)	18.6209	0.09	22522.7420
	LCSS-443265	Mg (279.078 nm)	1.9055	0.29	8315.3757
	LCSS-443265	Mn (257.610 nm)	0.4782	0.22	175454.1174
	LCSS-443265	Mo (202.032 nm)	0.5008	0.44	5637.3788
	LCSS-443265	Na (588.995 nm)	19.0410	0.20	315959.4538
	LCSS-443265	Ni (230.299 nm)	0.4856	0.28	6565.1264
	LCSS-443265	Pb (220.353 nm)	0.4987	0.35	2715.0316
	LCSS-443265	Sb (217.582 nm)	0.4878	0.27	1177.9001
	LCSS-443265	Se (196.026 nm)	0.9108	0.87	773.6002
	LCSS-443265	Si (252.851 nm)	0.3142	1.01	2149.8541
	LCSS-443265	Sn (189.925 nm)	4.7844	0.23	13529.2159
	LCSS-443265	Sr (216.596 nm)	1.9708	0.28	39437.0868
	LCSS-443265	Ti (336.122 nm)	0.5085	0.18	80081.4294
	LCSS-443265	Tl (190.794 nm)	1.9257	0.18	1873.2194
	LCSS-443265	V (292.401 nm)	0.4944	0.22	19210.3600
	LCSS-443265	Y (360.074 nm)	0.98	0.38	546938.87
	LCSS-443265	Y_R (360.074 nm)	0.98	0.37	547141.38
	LCSS-443265	Zn (213.857 nm)	0.4793	0.17	30870.6335
8/21/2024 16:24:44	R2407593-004 3X	Ag (328.068 nm)	0.0001 u	> 100.00	24.1181
	R2407593-004 3X	Al (237.312 nm)	42.1496 o	0.28	113825.1001
	R2407593-004 3X	As (188.980 nm)	0.0103	7.54	15.8018
	R2407593-004 3X	B (249.772 nm)	0.0909	0.05	4135.6110
	R2407593-004 3X	Ba (230.424 nm)	0.1954	0.16	12380.4564
	R2407593-004 3X	Be (313.107 nm)	0.0014	0.59	1698.3306
	R2407593-004 3X	Ca (317.933 nm)	126.4723 o	0.08	5084510.2154
	R2407593-004 3X	Cd (214.439 nm)	0.0014	3.09	101.4850
	R2407593-004 3X	Co (230.786 nm)	0.0250	1.05	536.1668
	R2407593-004 3X	Cr (267.716 nm)	0.0740	0.12	4314.6466
	R2407593-004 3X	Cu (327.395 nm)	0.0169	2.11	637.1524
	R2407593-004 3X	Fe (234.350 nm)	78.9457 o	0.13	1899316.6147
	R2407593-004 3X	K (766.491 nm)	6.6815	0.66	8432.3079
	R2407593-004 3X	Mg (279.078 nm)	90.0254 o	0.10	392676.8400
	R2407593-004 3X	Mn (257.610 nm)	1.1118	0.12	407907.0268
	R2407593-004 3X	Mo (202.032 nm)	0.0027	14.27	36.2490
	R2407593-004 3X	Na (588.995 nm)	0.2832	3.09	-7649.1267
	R2407593-004 3X	Ni (230.299 nm)	0.1091	0.21	1480.0664
	R2407593-004 3X	Pb (220.353 nm)	0.0090	5.23	52.3292
	R2407593-004 3X	Sb (217.582 nm)	-0.0001 u	> 100.00	2.3698
	R2407593-004 3X	Se (196.026 nm)	-0.0026 u	> 100.00	-0.6884
	R2407593-004 3X	Si (252.851 nm)	3.5236	0.20	23476.0116
	R2407593-004 3X	Sn (189.925 nm)	0.0040	17.19	18.3368
	R2407593-004 3X	Sr (216.596 nm)	0.3605	0.23	7220.7515
	R2407593-004 3X	Ti (336.122 nm)	0.2947	0.18	46443.7703
	R2407593-004 3X	Tl (190.794 nm)	0.0039	45.61	1.0443
	R2407593-004 3X	V (292.401 nm)	0.0614	0.16	2393.5123
	R2407593-004 3X	Y (360.074 nm)	0.95	0.05	530027.16

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407593-004 3X	Y_R (360.074 nm)	0.95	0.05	530197.65
	R2407593-004 3X	Zn (213.857 nm)	0.1198	0.22	7726.7644
8/21/2024 16:27:58	R2407593-006 3X	Ag (328.068 nm)	0.0000 u	> 100.00	17.1408
	R2407593-006 3X	Al (237.312 nm)	42.2659 o	0.36	114139.3911
	R2407593-006 3X	As (188.980 nm)	0.0157	5.10	25.2477
	R2407593-006 3X	B (249.772 nm)	0.0920	0.38	4182.7985
	R2407593-006 3X	Ba (230.424 nm)	0.1107	0.11	7018.4363
	R2407593-006 3X	Be (313.107 nm)	0.0015	0.66	1805.4187
	R2407593-006 3X	Ca (317.933 nm)	131.5320 o	0.09	5287798.2765
	R2407593-006 3X	Cd (214.439 nm)	0.0016	3.38	118.3906
	R2407593-006 3X	Co (230.786 nm)	0.0303	0.45	648.2287
	R2407593-006 3X	Cr (267.716 nm)	0.0736	0.18	4293.0849
	R2407593-006 3X	Cu (327.395 nm)	0.0242	0.79	974.1773
	R2407593-006 3X	Fe (234.350 nm)	79.9124 o	0.16	1922573.0143
	R2407593-006 3X	K (766.491 nm)	6.9172	0.38	8710.3925
	R2407593-006 3X	Mg (279.078 nm)	90.0347 o	0.14	392717.0475
	R2407593-006 3X	Mn (257.610 nm)	1.1219	0.14	411587.3817
	R2407593-006 3X	Mo (202.032 nm)	0.0020	5.09	28.1835
	R2407593-006 3X	Na (588.995 nm)	0.2744	1.62	-7801.8790
	R2407593-006 3X	Ni (230.299 nm)	0.1090	0.74	1478.7535
	R2407593-006 3X	Pb (220.353 nm)	0.0158	3.24	89.2662
	R2407593-006 3X	Sb (217.582 nm)	0.0001 u	> 100.00	2.7901
	R2407593-006 3X	Se (196.026 nm)	0.0008 u	> 100.00	2.1793
	R2407593-006 3X	Si (252.851 nm)	3.5231	0.21	23472.9669
	R2407593-006 3X	Sn (189.925 nm)	0.0038	25.13	17.7277
	R2407593-006 3X	Sr (216.596 nm)	0.4120	0.22	8251.8802
	R2407593-006 3X	Ti (336.122 nm)	0.3025	0.14	47665.9124
	R2407593-006 3X	Tl (190.794 nm)	0.0025	86.06	-0.3081
	R2407593-006 3X	V (292.401 nm)	0.0605	0.47	2359.4199
	R2407593-006 3X	Y (360.074 nm)	0.95	0.26	528032.35
	R2407593-006 3X	Y_R (360.074 nm)	0.95	0.26	528129.55
	R2407593-006 3X	Zn (213.857 nm)	0.1411	0.30	9097.3628
8/21/2024 16:31:12	R2407593-008 3X	Ag (328.068 nm)	0.0001 u	> 100.00	20.6034
	R2407593-008 3X	Al (237.312 nm)	43.4895 o	0.22	117444.2457
	R2407593-008 3X	As (188.980 nm)	0.0145	12.09	23.1948
	R2407593-008 3X	B (249.772 nm)	0.0907	0.04	4124.8620
	R2407593-008 3X	Ba (230.424 nm)	0.1832	0.29	11610.9564
	R2407593-008 3X	Be (313.107 nm)	0.0014	0.70	1779.3566
	R2407593-008 3X	Ca (317.933 nm)	137.6856 o	0.17	5535041.4559
	R2407593-008 3X	Cd (214.439 nm)	0.0016	3.42	116.3596
	R2407593-008 3X	Co (230.786 nm)	0.0292	1.16	625.7822
	R2407593-008 3X	Cr (267.716 nm)	0.0728	0.06	4247.1222
	R2407593-008 3X	Cu (327.395 nm)	0.0527	0.51	2292.0554
	R2407593-008 3X	Fe (234.350 nm)	79.1805 o	0.11	1904965.1097
	R2407593-008 3X	K (766.491 nm)	6.9667	0.20	8768.8406
	R2407593-008 3X	Mg (279.078 nm)	106.5434 o	0.15	464724.7426
	R2407593-008 3X	Mn (257.610 nm)	1.3290	0.14	487556.0293
	R2407593-008 3X	Mo (202.032 nm)	0.0018	17.88	26.1412
	R2407593-008 3X	Na (588.995 nm)	0.2917	1.13	-7501.9219
	R2407593-008 3X	Ni (230.299 nm)	0.1088	0.15	1475.9656
	R2407593-008 3X	Pb (220.353 nm)	0.0153	8.32	86.8170
	R2407593-008 3X	Sb (217.582 nm)	-0.0007 u	30.17	0.9758
	R2407593-008 3X	Se (196.026 nm)	0.0005 u	> 100.00	1.9464
	R2407593-008 3X	Si (252.851 nm)	3.7843	0.24	25208.4281
	R2407593-008 3X	Sn (189.925 nm)	0.0036	44.74	17.1815
	R2407593-008 3X	Sr (216.596 nm)	0.2510	0.56	5030.3624
	R2407593-008 3X	Ti (336.122 nm)	0.2717	0.08	42821.7481

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407593-008 3X	Tl (190.794 nm)	0.0023	87.13	-0.5217
	R2407593-008 3X	V (292.401 nm)	0.0601	0.35	2341.2022
	R2407593-008 3X	Y (360.074 nm)	0.95	0.28	526921.68
	R2407593-008 3X	Y_R (360.074 nm)	0.95	0.28	527015.49
	R2407593-008 3X	Zn (213.857 nm)	0.1401	0.25	9036.4372
8/21/2024 16:34:26	R2407593-010 3X	Ag (328.068 nm)	0.0000 u	> 100.00	18.7896
	R2407593-010 3X	Al (237.312 nm)	38.8867 o	0.92	105012.3920
	R2407593-010 3X	As (188.980 nm)	0.0101	11.59	15.4210
	R2407593-010 3X	B (249.772 nm)	0.0668	0.44	3059.0096
	R2407593-010 3X	Ba (230.424 nm)	0.1149	0.89	7285.2896
	R2407593-010 3X	Be (313.107 nm)	0.0013	0.71	1596.7009
	R2407593-010 3X	Ca (317.933 nm)	187.9747 o	0.67	7555582.4676
	R2407593-010 3X	Cd (214.439 nm)	0.0012	2.06	91.0231
	R2407593-010 3X	Co (230.786 nm)	0.0241	0.86	516.2890
	R2407593-010 3X	Cr (267.716 nm)	0.0644	0.86	3761.1186
	R2407593-010 3X	Cu (327.395 nm)	0.0233	1.27	934.8194
	R2407593-010 3X	Fe (234.350 nm)	64.2060 o	0.73	1544711.1340
	R2407593-010 3X	K (766.491 nm)	6.5382	1.06	8263.1539
	R2407593-010 3X	Mg (279.078 nm)	94.7041 o	0.79	413084.2498
	R2407593-010 3X	Mn (257.610 nm)	1.0825	0.78	397138.1059
	R2407593-010 3X	Mo (202.032 nm)	0.0017	11.14	24.3492
	R2407593-010 3X	Na (588.995 nm)	0.2952	0.91	-7442.6500
	R2407593-010 3X	Ni (230.299 nm)	0.0992	0.22	1345.5001
	R2407593-010 3X	Pb (220.353 nm)	0.0130	8.87	74.2774
	R2407593-010 3X	Sb (217.582 nm)	0.0004 u	> 100.00	3.6330
	R2407593-010 3X	Se (196.026 nm)	0.0045	42.81	5.3365
	R2407593-010 3X	Si (252.851 nm)	3.6112	0.89	24057.9952
	R2407593-010 3X	Sn (189.925 nm)	0.0033	8.33	16.2530
	R2407593-010 3X	Sr (216.596 nm)	0.2977	0.77	5964.7934
	R2407593-010 3X	Ti (336.122 nm)	0.1955	0.81	30832.3009
	R2407593-010 3X	Tl (190.794 nm)	0.0030	25.83	0.2010
	R2407593-010 3X	V (292.401 nm)	0.0519	0.65	2024.0939
	R2407593-010 3X	Y (360.074 nm)	0.94	0.28	524206.23
	R2407593-010 3X	Y_R (360.074 nm)	0.94	0.28	524363.57
	R2407593-010 3X	Zn (213.857 nm)	0.1212	0.93	7817.5037
8/21/2024 16:37:40	R2407593-010L 15X	Ag (328.068 nm)	0.0000 u	> 100.00	16.8583
	R2407593-010L 15X	Al (237.312 nm)	7.7668	0.66	20961.4736
	R2407593-010L 15X	As (188.980 nm)	0.0013 u	> 100.00	-0.1425
	R2407593-010L 15X	B (249.772 nm)	0.0168	1.12	831.0485
	R2407593-010L 15X	Ba (230.424 nm)	0.0233	0.65	1487.8327
	R2407593-010L 15X	Be (313.107 nm)	0.0002	3.73	245.6509
	R2407593-010L 15X	Ca (317.933 nm)	39.7662	0.52	1600789.9551
	R2407593-010L 15X	Cd (214.439 nm)	0.0001	25.06	20.8351
	R2407593-010L 15X	Co (230.786 nm)	0.0049	2.33	106.1739
	R2407593-010L 15X	Cr (267.716 nm)	0.0132	0.83	789.1529
	R2407593-010L 15X	Cu (327.395 nm)	0.0047	8.30	74.2498
	R2407593-010L 15X	Fe (234.350 nm)	13.4320 o	0.52	323200.1617
	R2407593-010L 15X	K (766.491 nm)	1.2096	1.49	1974.5529
	R2407593-010L 15X	Mg (279.078 nm)	18.8304	0.58	82138.5248
	R2407593-010L 15X	Mn (257.610 nm)	0.2201	0.58	80772.4122
	R2407593-010L 15X	Mo (202.032 nm)	0.0004 u	> 100.00	10.4033
	R2407593-010L 15X	Na (588.995 nm)	0.0518	5.71	-11641.7498
	R2407593-010L 15X	Ni (230.299 nm)	0.0203	1.53	280.4421
	R2407593-010L 15X	Pb (220.353 nm)	0.0024	27.80	16.7384
	R2407593-010L 15X	Sb (217.582 nm)	0.0001 u	> 100.00	2.8105
	R2407593-010L 15X	Se (196.026 nm)	-0.0023 u	> 100.00	-0.4066
	R2407593-010L 15X	Si (252.851 nm)	0.7343	0.55	4941.3218

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407593-010L 15X	Sn (189.925 nm)	-0.0001 u	> 100.00	6.7544
	R2407593-010L 15X	Sr (216.596 nm)	0.0606	0.55	1220.1727
	R2407593-010L 15X	Ti (336.122 nm)	0.0390	0.32	6205.2775
	R2407593-010L 15X	Tl (190.794 nm)	0.0023	39.52	-0.5617
	R2407593-010L 15X	V (292.401 nm)	0.0105	1.23	414.4550
	R2407593-010L 15X	Y (360.074 nm)	0.98	0.11	544891.00
	R2407593-010L 15X	Y_R (360.074 nm)	0.98	0.11	545064.94
	R2407593-010L 15X	Zn (213.857 nm)	0.0248	0.81	1610.0173
8/21/2024 16:40:54	Continuing Calibration Verification	Ag (328.068 nm)	0.5091	0.07	32485.4143
	Continuing Calibration Verification	Al (237.312 nm)	9.8332	0.13	26542.6513
	Continuing Calibration Verification	As (188.980 nm)	0.9916	0.17	1750.1013
	Continuing Calibration Verification	B (249.772 nm)	2.3324	0.24	104004.6034
	Continuing Calibration Verification	Ba (230.424 nm)	9.8130	1.03	621163.6001
	Continuing Calibration Verification	Be (313.107 nm)	0.2471	0.29	309114.5060
	Continuing Calibration Verification	Ca (317.933 nm)	24.9443	0.36	1005268.0245
	Continuing Calibration Verification	Cd (214.439 nm)	0.5001	0.39	32433.0671
	Continuing Calibration Verification	Co (230.786 nm)	2.4800	0.37	52889.0162
	Continuing Calibration Verification	Cr (267.716 nm)	0.5144	0.28	29880.2192
	Continuing Calibration Verification	Cu (327.395 nm)	1.2425	0.90	57242.6269
	Continuing Calibration Verification	Fe (234.350 nm)	4.9394	0.32	118886.1474
	Continuing Calibration Verification	K (766.491 nm)	24.4732	0.18	29429.4714
	Continuing Calibration Verification	Mg (279.078 nm)	25.4996	0.33	111228.0827
	Continuing Calibration Verification	Mn (257.610 nm)	0.7354	0.27	269818.4716
	Continuing Calibration Verification	Mo (202.032 nm)	2.5775	0.33	28988.7452
	Continuing Calibration Verification	Na (588.995 nm)	24.9152	0.23	417300.3329
	Continuing Calibration Verification	Ni (230.299 nm)	2.0066	0.27	27110.8587
	Continuing Calibration Verification	Pb (220.353 nm)	0.4984	0.23	2713.3135
	Continuing Calibration Verification	Sb (217.582 nm)	4.9305	0.29	11882.8674
	Continuing Calibration Verification	Se (196.026 nm)	0.4862	0.99	413.6713
	Continuing Calibration Verification	Si (252.851 nm)	9.9448	0.79	66144.4553
	Continuing Calibration Verification	Sn (189.925 nm)	4.9788	0.34	14078.7664
	Continuing Calibration Verification	Sr (216.596 nm)	2.5095	0.21	50214.6373
	Continuing Calibration Verification	Ti (336.122 nm)	2.5887	0.26	407425.5416
	Continuing Calibration Verification	Tl (190.794 nm)	0.9985	0.30	969.9066
	Continuing Calibration Verification	V (292.401 nm)	2.5372	0.26	98560.2450
	Continuing Calibration Verification	Y (360.074 nm)	0.96	0.35	533441.67
	Continuing Calibration Verification	Y_R (360.074 nm)	0.96	0.35	533634.02
	Continuing Calibration Verification	Zn (213.857 nm)	0.9916	0.14	63851.3419
8/21/2024 16:44:08	Continuing Calibration Blank	Ag (328.068 nm)	0.0001 u	> 100.00	23.9539
	Continuing Calibration Blank	Al (237.312 nm)	0.0027	9.70	-8.3767
	Continuing Calibration Blank	As (188.980 nm)	0.0009 u	91.38	-0.8460
	Continuing Calibration Blank	B (249.772 nm)	0.0024	3.49	189.9411
	Continuing Calibration Blank	Ba (230.424 nm)	0.0002	33.19	27.2696
	Continuing Calibration Blank	Be (313.107 nm)	0.0000 u	> 100.00	-15.2629
	Continuing Calibration Blank	Ca (317.933 nm)	0.0002 u	> 100.00	3053.8808
	Continuing Calibration Blank	Cd (214.439 nm)	-0.0001 u	82.37	8.1848
	Continuing Calibration Blank	Co (230.786 nm)	0.0002	26.30	5.5222
	Continuing Calibration Blank	Cr (267.716 nm)	0.0001	69.47	29.4800
	Continuing Calibration Blank	Cu (327.395 nm)	0.0000 u	> 100.00	-141.0761
	Continuing Calibration Blank	Fe (234.350 nm)	0.0034	14.78	137.6831
	Continuing Calibration Blank	K (766.491 nm)	0.0647	42.46	623.3846
	Continuing Calibration Blank	Mg (279.078 nm)	-0.0004 u	> 100.00	2.5844
	Continuing Calibration Blank	Mn (257.610 nm)	0.0000	81.41	14.3673
	Continuing Calibration Blank	Mo (202.032 nm)	0.0033	17.19	42.8003
	Continuing Calibration Blank	Na (588.995 nm)	-0.0141 u	30.95	-12778.5074
	Continuing Calibration Blank	Ni (230.299 nm)	0.0001 u	> 100.00	6.7167
	Continuing Calibration Blank	Pb (220.353 nm)	-0.0007 u	54.05	-0.2526

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank	Sb (217.582 nm)	0.0084	10.99	22.9122
	Continuing Calibration Blank	Se (196.026 nm)	0.0008 u	> 100.00	2.2343
	Continuing Calibration Blank	Si (252.851 nm)	0.0043	44.91	91.1289
	Continuing Calibration Blank	Sn (189.925 nm)	-0.0006 u	28.92	5.2095
	Continuing Calibration Blank	Sr (216.596 nm)	0.0000 u	> 100.00	9.0623
	Continuing Calibration Blank	Ti (336.122 nm)	0.0043	24.96	738.6915
	Continuing Calibration Blank	Tl (190.794 nm)	0.0016 u	> 100.00	-1.2384
	Continuing Calibration Blank	V (292.401 nm)	0.0003	49.71	18.4197
	Continuing Calibration Blank	Y (360.074 nm)	1.00	0.18	556635.84
	Continuing Calibration Blank	Y_R (360.074 nm)	1.00	0.18	556824.09
	Continuing Calibration Blank	Zn (213.857 nm)	0.0000 u	> 100.00	15.9419
8/21/2024 16:47:22	PBW-443449	Ag (328.068 nm)	0.0001 u	> 100.00	20.3226
	PBW-443449	Al (237.312 nm)	0.0016	88.08	-11.3890
	PBW-443449	As (188.980 nm)	0.0000 u	> 100.00	-2.5504
	PBW-443449	B (249.772 nm)	0.0031	4.60	220.1275
	PBW-443449	Ba (230.424 nm)	0.0001	55.03	17.4706
	PBW-443449	Be (313.107 nm)	0.0000	29.25	-13.2645
	PBW-443449	Ca (317.933 nm)	0.0081	3.15	3370.1461
	PBW-443449	Cd (214.439 nm)	0.0000 u	> 100.00	12.7308
	PBW-443449	Co (230.786 nm)	0.0001	73.17	4.1334
	PBW-443449	Cr (267.716 nm)	0.0003	35.98	39.2375
	PBW-443449	Cu (327.395 nm)	0.0004	8.85	-122.9733
	PBW-443449	Fe (234.350 nm)	0.0054	4.88	185.5089
	PBW-443449	K (766.491 nm)	0.0202 u	> 100.00	570.8733
	PBW-443449	Mg (279.078 nm)	0.0005	> 100.00	6.2543
	PBW-443449	Mn (257.610 nm)	0.0001	3.55	53.9771
	PBW-443449	Mo (202.032 nm)	0.0011	26.12	17.2873
	PBW-443449	Na (588.995 nm)	0.0059	76.18	-12433.1067
	PBW-443449	Ni (230.299 nm)	0.0003	55.82	10.0251
	PBW-443449	Pb (220.353 nm)	0.0003 u	> 100.00	5.2211
	PBW-443449	Sb (217.582 nm)	0.0147	7.92	37.9178
	PBW-443449	Se (196.026 nm)	0.0009 u	> 100.00	2.2839
	PBW-443449	Si (252.851 nm)	0.0180	2.87	181.9119
	PBW-443449	Sn (189.925 nm)	-0.0005 u	> 100.00	5.4998
	PBW-443449	Sr (216.596 nm)	0.0000 u	> 100.00	7.6922
	PBW-443449	Ti (336.122 nm)	0.0016	33.87	318.8585
	PBW-443449	Tl (190.794 nm)	0.0002 u	> 100.00	-2.6083
	PBW-443449	V (292.401 nm)	-0.0001 u	94.00	5.8109
	PBW-443449	Y (360.074 nm)	1.02	0.23	565741.21
	PBW-443449	Y_R (360.074 nm)	1.02	0.23	565925.79
	PBW-443449	Zn (213.857 nm)	0.0003	9.65	35.7808
8/21/2024 16:50:36	FBLK-443449	Ag (328.068 nm)	0.0001 u	> 100.00	23.4551
	FBLK-443449	Al (237.312 nm)	0.0018	49.04	-10.7254
	FBLK-443449	As (188.980 nm)	0.0002 u	> 100.00	-2.1052
	FBLK-443449	B (249.772 nm)	0.0028	2.20	210.9497
	FBLK-443449	Ba (230.424 nm)	0.0001	66.24	19.3454
	FBLK-443449	Be (313.107 nm)	0.0000 u	> 100.00	-21.3531
	FBLK-443449	Ca (317.933 nm)	0.0109	0.87	3482.7939
	FBLK-443449	Cd (214.439 nm)	0.0000 u	62.48	10.1576
	FBLK-443449	Co (230.786 nm)	0.0001	53.40	5.1147
	FBLK-443449	Cr (267.716 nm)	0.0002	47.31	32.7951
	FBLK-443449	Cu (327.395 nm)	0.0006	28.27	-116.8449
	FBLK-443449	Fe (234.350 nm)	0.0081	0.74	250.7984
	FBLK-443449	K (766.491 nm)	0.0283	70.09	580.4604
	FBLK-443449	Mg (279.078 nm)	0.0002 u	> 100.00	5.1615
	FBLK-443449	Mn (257.610 nm)	0.0001	4.78	47.7223
	FBLK-443449	Mo (202.032 nm)	0.0006	47.53	11.9543

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	FBLK-443449	Na (588.995 nm)	0.0085	36.38	-12388.0035
	FBLK-443449	Ni (230.299 nm)	0.0005	29.46	13.1151
	FBLK-443449	Pb (220.353 nm)	-0.0008 u	89.58	-0.5949
	FBLK-443449	Sb (217.582 nm)	0.0086	5.47	23.2225
	FBLK-443449	Se (196.026 nm)	0.0015 u	> 100.00	2.8073
	FBLK-443449	Si (252.851 nm)	0.0171	7.77	175.7621
	FBLK-443449	Sn (189.925 nm)	0.0003 u	> 100.00	7.8190
	FBLK-443449	Sr (216.596 nm)	-0.0001 u	84.22	6.2162
	FBLK-443449	Ti (336.122 nm)	0.0009	35.40	215.1147
	FBLK-443449	Tl (190.794 nm)	0.0013	> 100.00	-1.5476
	FBLK-443449	V (292.401 nm)	0.0000 u	> 100.00	9.0162
	FBLK-443449	Y (360.074 nm)	1.02	0.28	565568.92
	FBLK-443449	Y_R (360.074 nm)	1.02	0.28	565749.74
	FBLK-443449	Zn (213.857 nm)	0.0005	2.42	45.5456
8/21/2024 16:53:50	LCSW-443449	Ag (328.068 nm)	0.0480	0.57	3075.1790
	LCSW-443449	Al (237.312 nm)	1.9110	0.18	5145.5903
	LCSW-443449	As (188.980 nm)	0.0379	4.24	64.5169
	LCSW-443449	B (249.772 nm)	0.8869	0.14	39599.3282
	LCSW-443449	Ba (230.424 nm)	1.9039	0.36	120528.2203
	LCSW-443449	Be (313.107 nm)	0.0477	0.27	59608.1506
	LCSW-443449	Ca (317.933 nm)	1.8967	0.27	79250.0337
	LCSW-443449	Cd (214.439 nm)	0.0490	0.17	3185.1213
	LCSW-443449	Co (230.786 nm)	0.4813	0.17	10266.4855
	LCSW-443449	Cr (267.716 nm)	0.1944	0.23	11302.7950
	LCSW-443449	Cu (327.395 nm)	0.2460	0.21	11219.5546
	LCSW-443449	Fe (234.350 nm)	0.9666	0.25	23308.3552
	LCSW-443449	K (766.491 nm)	18.3033	0.20	22147.8808
	LCSW-443449	Mg (279.078 nm)	1.8938	0.16	8264.5677
	LCSW-443449	Mn (257.610 nm)	0.4655	0.20	170801.3063
	LCSW-443449	Mo (202.032 nm)	0.4872	0.66	5483.4692
	LCSW-443449	Na (588.995 nm)	18.6945	0.13	309981.5136
	LCSW-443449	Ni (230.299 nm)	0.4784	0.24	6467.8826
	LCSW-443449	Pb (220.353 nm)	0.4929	0.43	2683.4256
	LCSW-443449	Sb (217.582 nm)	0.4878	0.34	1177.9043
	LCSW-443449	Se (196.026 nm)	0.9716	0.43	825.0765
	LCSW-443449	Si (252.851 nm)	0.3137	0.29	2146.9291
	LCSW-443449	Sn (189.925 nm)	4.7499	0.23	13431.8101
	LCSW-443449	Sr (216.596 nm)	1.9388	0.31	38796.7334
	LCSW-443449	Ti (336.122 nm)	0.4940	0.20	77808.2895
	LCSW-443449	Tl (190.794 nm)	1.9144	0.42	1862.1992
	LCSW-443449	V (292.401 nm)	0.4772	0.12	18543.1678
	LCSW-443449	Y (360.074 nm)	0.99	0.22	551425.16
	LCSW-443449	Y_R (360.074 nm)	0.99	0.22	551617.27
	LCSW-443449	Zn (213.857 nm)	0.4858	0.23	31292.9303
8/21/2024 16:57:05	DLCSW-443449	Ag (328.068 nm)	0.0470	0.38	3015.1198
	DLCSW-443449	Al (237.312 nm)	1.8749	0.14	5048.2217
	DLCSW-443449	As (188.980 nm)	0.0369	2.21	62.7878
	DLCSW-443449	B (249.772 nm)	0.8692	0.13	38810.0453
	DLCSW-443449	Ba (230.424 nm)	1.8692	0.26	118331.7698
	DLCSW-443449	Be (313.107 nm)	0.0468	0.24	58522.0913
	DLCSW-443449	Ca (317.933 nm)	1.8629	0.23	77890.9109
	DLCSW-443449	Cd (214.439 nm)	0.0481	0.37	3128.9610
	DLCSW-443449	Co (230.786 nm)	0.4729	0.29	10087.2800
	DLCSW-443449	Cr (267.716 nm)	0.1909	0.25	11104.4087
	DLCSW-443449	Cu (327.395 nm)	0.2418	0.13	11024.0178
	DLCSW-443449	Fe (234.350 nm)	0.9505	0.26	22921.2735
	DLCSW-443449	K (766.491 nm)	17.9657	0.13	21749.4738

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	DLCSW-443449	Mg (279.078 nm)	1.8566	0.14	8102.2315
	DLCSW-443449	Mn (257.610 nm)	0.4567	0.22	167566.1409
	DLCSW-443449	Mo (202.032 nm)	0.4894	0.49	5508.7077
	DLCSW-443449	Na (588.995 nm)	18.3490	0.12	304021.1946
	DLCSW-443449	Ni (230.299 nm)	0.4676	0.35	6322.1541
	DLCSW-443449	Pb (220.353 nm)	0.4850	0.30	2640.4277
	DLCSW-443449	Sb (217.582 nm)	0.4873	0.33	1176.8260
	DLCSW-443449	Se (196.026 nm)	0.9762	0.56	829.0031
	DLCSW-443449	Si (252.851 nm)	0.3193	0.59	2184.0162
	DLCSW-443449	Sn (189.925 nm)	4.7743	0.28	13500.8298
	DLCSW-443449	Sr (216.596 nm)	1.9497	0.27	39015.9448
	DLCSW-443449	Ti (336.122 nm)	0.4957	0.12	78075.2695
	DLCSW-443449	Tl (190.794 nm)	1.8765	0.24	1825.2906
	DLCSW-443449	V (292.401 nm)	0.4683	0.21	18199.4045
	DLCSW-443449	Y (360.074 nm)	0.99	0.27	551427.43
	DLCSW-443449	Y_R (360.074 nm)	0.99	0.27	551599.80
	DLCSW-443449	Zn (213.857 nm)	0.4768	0.17	30708.5227
8/21/2024 17:00:19	R2407601-002	Ag (328.068 nm)	0.0000 u	> 100.00	19.0871
	R2407601-002	Al (237.312 nm)	0.0126	6.33	18.4778
	R2407601-002	As (188.980 nm)	0.0006 u	> 100.00	-1.4379
	R2407601-002	B (249.772 nm)	0.4225	0.17	18910.8734
	R2407601-002	Ba (230.424 nm)	0.2210	0.25	14001.3257
	R2407601-002	Be (313.107 nm)	0.0000	77.94	-14.7587
	R2407601-002	Ca (317.933 nm)	9.0800	0.31	367866.2288
	R2407601-002	Cd (214.439 nm)	0.0000	85.88	13.9878
	R2407601-002	Co (230.786 nm)	0.0000 u	> 100.00	2.8398
	R2407601-002	Cr (267.716 nm)	0.0005	24.12	52.2880
	R2407601-002	Cu (327.395 nm)	0.0007	19.72	-112.0491
	R2407601-002	Fe (234.350 nm)	0.0760	0.65	1883.0728
	R2407601-002	K (766.491 nm)	1.7458	5.02	2607.3780
	R2407601-002	Mg (279.078 nm)	1.7278	0.24	7540.4325
	R2407601-002	Mn (257.610 nm)	0.0067	0.17	2460.2892
	R2407601-002	Mo (202.032 nm)	0.0028	15.26	37.1511
	R2407601-002	Na (588.995 nm)	307.6095 o	0.30	5294332.3040
	R2407601-002	Ni (230.299 nm)	0.0100	1.32	140.4128
	R2407601-002	Pb (220.353 nm)	-0.0002 u	> 100.00	2.3092
	R2407601-002	Sb (217.582 nm)	0.0030	51.12	9.7159
	R2407601-002	Se (196.026 nm)	-0.0007 u	> 100.00	0.9031
	R2407601-002	Si (252.851 nm)	2.8817	0.08	19211.1701
	R2407601-002	Sn (189.925 nm)	0.0019	28.91	12.4542
	R2407601-002	Sr (216.596 nm)	0.4631	0.39	9273.2416
	R2407601-002	Ti (336.122 nm)	0.0021	24.17	389.3762
	R2407601-002	Tl (190.794 nm)	0.0024	64.23	-0.4736
	R2407601-002	V (292.401 nm)	0.0002	34.76	14.4928
	R2407601-002	Y (360.074 nm)	0.93	0.21	515249.46
	R2407601-002	Y_R (360.074 nm)	0.93	0.21	515371.86
	R2407601-002	Zn (213.857 nm)	0.0009	14.07	74.3834
8/21/2024 17:03:34	R2407601-004	Ag (328.068 nm)	0.0000 u	> 100.00	14.9722
	R2407601-004	Al (237.312 nm)	0.0098	21.25	10.8854
	R2407601-004	As (188.980 nm)	-0.0011 u	> 100.00	-4.3833
	R2407601-004	B (249.772 nm)	0.4085	0.22	18287.3611
	R2407601-004	Ba (230.424 nm)	0.1471	0.21	9323.9085
	R2407601-004	Be (313.107 nm)	0.0000 u	> 100.00	-15.7095
	R2407601-004	Ca (317.933 nm)	6.9427	0.27	281992.3431
	R2407601-004	Cd (214.439 nm)	0.0000 u	> 100.00	14.2855
	R2407601-004	Co (230.786 nm)	0.0002	68.73	5.8712
	R2407601-004	Cr (267.716 nm)	0.0003	21.32	42.2021

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407601-004	Cu (327.395 nm)	0.0003	8.39	-128.1186
	R2407601-004	Fe (234.350 nm)	0.0487	0.32	1226.9600
	R2407601-004	K (766.491 nm)	1.7216	1.01	2578.7732
	R2407601-004	Mg (279.078 nm)	1.5863	0.18	6923.2891
	R2407601-004	Mn (257.610 nm)	0.0127	0.25	4660.1089
	R2407601-004	Mo (202.032 nm)	0.0011	24.07	18.0161
	R2407601-004	Na (588.995 nm)	287.8927 o	0.49	4954178.7646
	R2407601-004	Ni (230.299 nm)	0.0084	5.64	119.7238
	R2407601-004	Pb (220.353 nm)	-0.0001 u	> 100.00	2.6712
	R2407601-004	Sb (217.582 nm)	0.0037	42.58	11.5395
	R2407601-004	Se (196.026 nm)	0.0002 u	> 100.00	1.6741
	R2407601-004	Si (252.851 nm)	2.5929	0.13	17291.9602
	R2407601-004	Sn (189.925 nm)	0.0005	94.82	8.3262
	R2407601-004	Sr (216.596 nm)	0.3858	0.20	7726.6768
	R2407601-004	Ti (336.122 nm)	0.0007	27.22	182.5970
	R2407601-004	Tl (190.794 nm)	0.0009 u	> 100.00	-1.9339
	R2407601-004	V (292.401 nm)	0.0001 u	> 100.00	11.9244
	R2407601-004	Y (360.074 nm)	0.93	0.24	516601.14
	R2407601-004	Y_R (360.074 nm)	0.93	0.24	516747.50
	R2407601-004	Zn (213.857 nm)	0.0020	0.98	144.9097
8/21/2024 17:06:48	R2407601-006	Ag (328.068 nm)	0.0000 u	> 100.00	16.3610
	R2407601-006	Al (237.312 nm)	0.0036	5.42	-5.9546
	R2407601-006	As (188.980 nm)	0.0014	84.85	0.0521
	R2407601-006	B (249.772 nm)	0.1783	0.16	8028.5557
	R2407601-006	Ba (230.424 nm)	0.0903	0.11	5730.9365
	R2407601-006	Be (313.107 nm)	0.0000 u	> 100.00	-23.6267
	R2407601-006	Ca (317.933 nm)	50.2864	0.36	2023474.3679
	R2407601-006	Cd (214.439 nm)	0.0001	29.64	14.9036
	R2407601-006	Co (230.786 nm)	-0.0001 u	19.52	0.9165
	R2407601-006	Cr (267.716 nm)	0.0005	8.20	52.1826
	R2407601-006	Cu (327.395 nm)	0.0004	39.67	-125.4993
	R2407601-006	Fe (234.350 nm)	0.0081	1.79	250.1358
	R2407601-006	K (766.491 nm)	2.4196	0.89	3402.5349
	R2407601-006	Mg (279.078 nm)	33.7123	0.28	147050.3968
	R2407601-006	Mn (257.610 nm)	0.0441	0.27	16199.4912
	R2407601-006	Mo (202.032 nm)	0.0061	3.98	74.5460
	R2407601-006	Na (588.995 nm)	48.3794	0.16	822104.3575
	R2407601-006	Ni (230.299 nm)	0.0163	0.51	225.2645
	R2407601-006	Pb (220.353 nm)	-0.0002 u	> 100.00	2.1749
	R2407601-006	Sb (217.582 nm)	0.0029	26.64	9.6517
	R2407601-006	Se (196.026 nm)	0.0015 u	> 100.00	2.7715
	R2407601-006	Si (252.851 nm)	5.2744	0.19	35110.0849
	R2407601-006	Sn (189.925 nm)	-0.0007 u	> 100.00	4.9642
	R2407601-006	Sr (216.596 nm)	2.7608	0.30	55243.1672
	R2407601-006	Ti (336.122 nm)	0.0004	31.77	135.7420
	R2407601-006	Tl (190.794 nm)	0.0019	21.33	-0.9384
	R2407601-006	V (292.401 nm)	0.0000 u	> 100.00	9.6395
	R2407601-006	Y (360.074 nm)	0.96	0.21	535536.67
	R2407601-006	Y_R (360.074 nm)	0.96	0.21	535680.03
	R2407601-006	Zn (213.857 nm)	0.0071	0.65	472.8479
8/21/2024 17:10:01	R2407601-008	Ag (328.068 nm)	0.0001 u	> 100.00	20.5633
	R2407601-008	Al (237.312 nm)	0.0024	14.77	-9.1981
	R2407601-008	As (188.980 nm)	0.0067	12.51	9.3670
	R2407601-008	B (249.772 nm)	0.1069	0.17	4848.7532
	R2407601-008	Ba (230.424 nm)	0.0282	0.18	1800.2280
	R2407601-008	Be (313.107 nm)	0.0000	55.01	-10.9882
	R2407601-008	Ca (317.933 nm)	73.2783 o	0.30	2947256.8797

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407601-008	Cd (214.439 nm)	0.0000 u	> 100.00	12.3309
	R2407601-008	Co (230.786 nm)	0.0003	54.48	7.8399
	R2407601-008	Cr (267.716 nm)	0.0005	7.80	51.9401
	R2407601-008	Cu (327.395 nm)	0.0005	18.66	-121.2624
	R2407601-008	Fe (234.350 nm)	0.0047	1.91	167.1400
	R2407601-008	K (766.491 nm)	2.8652	0.55	3928.4025
	R2407601-008	Mg (279.078 nm)	50.3506	0.23	219623.2257
	R2407601-008	Mn (257.610 nm)	0.0490	0.14	17977.8341
	R2407601-008	Mo (202.032 nm)	0.0060	9.49	72.5203
	R2407601-008	Na (588.995 nm)	21.2427	0.20	353942.7061
	R2407601-008	Ni (230.299 nm)	0.0230	2.35	316.8909
	R2407601-008	Pb (220.353 nm)	-0.0008 u	83.73	-0.6212
	R2407601-008	Sb (217.582 nm)	0.0016	> 100.00	6.5241
	R2407601-008	Se (196.026 nm)	-0.0010 u	> 100.00	0.6445
	R2407601-008	Si (252.851 nm)	6.6618	0.16	44329.1239
	R2407601-008	Sn (189.925 nm)	-0.0006 u	> 100.00	5.2784
	R2407601-008	Sr (216.596 nm)	2.9286	0.22	58599.9864
	R2407601-008	Ti (336.122 nm)	0.0001	90.34	83.4845
	R2407601-008	Tl (190.794 nm)	0.0016	78.58	-1.1997
	R2407601-008	V (292.401 nm)	0.0003	52.26	19.4620
	R2407601-008	Y (360.074 nm)	0.96	0.28	534057.65
	R2407601-008	Y_R (360.074 nm)	0.96	0.28	534211.10
	R2407601-008	Zn (213.857 nm)	0.0017	3.05	126.3934
8/21/2024 17:13:15	R2407601-010	Ag (328.068 nm)	0.0000 u	> 100.00	15.3593
	R2407601-010	Al (237.312 nm)	0.0017	45.97	-11.1653
	R2407601-010	As (188.980 nm)	-0.0018 u	95.75	-5.7091
	R2407601-010	B (249.772 nm)	0.5095	0.16	22786.1999
	R2407601-010	Ba (230.424 nm)	0.1776	0.28	11253.7334
	R2407601-010	Be (313.107 nm)	0.0000	14.17	-13.6899
	R2407601-010	Ca (317.933 nm)	167.4462 o	0.40	6730777.0094
	R2407601-010	Cd (214.439 nm)	0.0001	51.25	17.2401
	R2407601-010	Co (230.786 nm)	0.0000 u	68.61	1.2034
	R2407601-010	Cr (267.716 nm)	0.0007	13.38	61.8618
	R2407601-010	Cu (327.395 nm)	0.0003	36.61	-129.2159
	R2407601-010	Fe (234.350 nm)	0.0303	0.26	783.4803
	R2407601-010	K (766.491 nm)	3.4816	1.74	4655.8250
	R2407601-010	Mg (279.078 nm)	61.5788 o	0.35	268598.5417
	R2407601-010	Mn (257.610 nm)	0.1730	0.23	63475.1371
	R2407601-010	Mo (202.032 nm)	0.0002 u	> 100.00	7.3415
	R2407601-010	Na (588.995 nm)	255.1792 o	0.41	4389806.7860
	R2407601-010	Ni (230.299 nm)	0.0164	2.04	227.7237
	R2407601-010	Pb (220.353 nm)	0.0001 u	> 100.00	3.9123
	R2407601-010	Sb (217.582 nm)	0.0012	58.68	5.4015
	R2407601-010	Se (196.026 nm)	-0.0002 u	> 100.00	1.4039
	R2407601-010	Si (252.851 nm)	4.8089	0.25	32016.9128
	R2407601-010	Sn (189.925 nm)	-0.0006 u	> 100.00	5.2718
	R2407601-010	Sr (216.596 nm)	4.7545	0.32	95131.0174
	R2407601-010	Ti (336.122 nm)	0.0000 u	73.71	60.0483
	R2407601-010	Tl (190.794 nm)	0.0002 u	> 100.00	-2.5893
	R2407601-010	V (292.401 nm)	0.0003	92.49	19.2297
	R2407601-010	Y (360.074 nm)	0.90	0.11	502973.10
	R2407601-010	Y_R (360.074 nm)	0.90	0.11	503106.11
	R2407601-010	Zn (213.857 nm)	0.0009	0.19	70.5601
8/21/2024 17:16:29	R2407601-012	Ag (328.068 nm)	0.0001	45.34	23.8910
	R2407601-012	Al (237.312 nm)	0.0229	1.59	46.1992
	R2407601-012	As (188.980 nm)	-0.0005 u	> 100.00	-3.3518
	R2407601-012	B (249.772 nm)	2.2144	0.19	98747.3220

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407601-012	Ba (230.424 nm)	0.0123	1.06	789.8500
	R2407601-012	Be (313.107 nm)	0.0000 u	> 100.00	-18.2895
	R2407601-012	Ca (317.933 nm)	274.5025 o	0.23	11032138.2145
	R2407601-012	Cd (214.439 nm)	0.0001 u	> 100.00	14.8491
	R2407601-012	Co (230.786 nm)	0.0000 u	> 100.00	1.1731
	R2407601-012	Cr (267.716 nm)	0.0004	13.81	46.5929
	R2407601-012	Cu (327.395 nm)	0.0009	56.88	-99.8616
	R2407601-012	Fe (234.350 nm)	0.1846	0.29	4496.0411
	R2407601-012	K (766.491 nm)	1.9288	1.30	2823.2910
	R2407601-012	Mg (279.078 nm)	92.4777 o	0.22	403372.8960
	R2407601-012	Mn (257.610 nm)	0.1174	0.17	43082.8282
	R2407601-012	Mo (202.032 nm)	0.0007	7.01	13.1029
	R2407601-012	Na (588.995 nm)	24.7632	0.12	414677.9502
	R2407601-012	Ni (230.299 nm)	0.0167	1.85	231.9360
	R2407601-012	Pb (220.353 nm)	-0.0001 u	> 100.00	2.7020
	R2407601-012	Sb (217.582 nm)	0.0013 u	> 100.00	5.8173
	R2407601-012	Se (196.026 nm)	-0.0007 u	> 100.00	0.9446
	R2407601-012	Si (252.851 nm)	4.8049	0.18	31990.6378
	R2407601-012	Sn (189.925 nm)	-0.0010 u	60.54	4.1329
	R2407601-012	Sr (216.596 nm)	0.4466	0.17	8942.7848
	R2407601-012	Ti (336.122 nm)	-0.0001 u	73.73	50.6314
	R2407601-012	Tl (190.794 nm)	0.0025	31.56	-0.3529
	R2407601-012	V (292.401 nm)	0.0005	19.50	26.0990
	R2407601-012	Y (360.074 nm)	0.93	0.33	516807.83
	R2407601-012	Y_R (360.074 nm)	0.93	0.33	516948.86
	R2407601-012	Zn (213.857 nm)	0.0022	1.33	158.5896
8/21/2024 17:19:43	Continuing Calibration Verification	Ag (328.068 nm)	0.5087	0.10	32461.9280
	Continuing Calibration Verification	Al (237.312 nm)	9.8511	0.09	26590.9576
	Continuing Calibration Verification	As (188.980 nm)	0.9945	0.24	1755.2538
	Continuing Calibration Verification	B (249.772 nm)	2.3364	0.17	104186.3294
	Continuing Calibration Verification	Ba (230.424 nm)	9.8007	0.64	620386.5990
	Continuing Calibration Verification	Be (313.107 nm)	0.2470	0.28	308969.9047
	Continuing Calibration Verification	Ca (317.933 nm)	24.9615	0.29	1005957.7941
	Continuing Calibration Verification	Cd (214.439 nm)	0.5004	0.40	32451.0039
	Continuing Calibration Verification	Co (230.786 nm)	2.4779	0.35	52845.4194
	Continuing Calibration Verification	Cr (267.716 nm)	0.5150	0.23	29912.8878
	Continuing Calibration Verification	Cu (327.395 nm)	1.2458	0.22	57396.1490
	Continuing Calibration Verification	Fe (234.350 nm)	4.9258	0.28	118559.5294
	Continuing Calibration Verification	K (766.491 nm)	24.5601	0.03	29531.9618
	Continuing Calibration Verification	Mg (279.078 nm)	25.4589	0.27	111050.5113
	Continuing Calibration Verification	Mn (257.610 nm)	0.7356	0.27	269881.1482
	Continuing Calibration Verification	Mo (202.032 nm)	2.5821	0.31	29041.1985
	Continuing Calibration Verification	Na (588.995 nm)	24.9435	0.44	417789.7735
	Continuing Calibration Verification	Ni (230.299 nm)	2.0089	0.23	27141.9020
	Continuing Calibration Verification	Pb (220.353 nm)	0.4997	0.54	2720.3059
	Continuing Calibration Verification	Sb (217.582 nm)	4.9597	0.20	11953.2162
	Continuing Calibration Verification	Se (196.026 nm)	0.4847	0.88	412.3841
	Continuing Calibration Verification	Si (252.851 nm)	9.9129	0.68	65932.3455
	Continuing Calibration Verification	Sn (189.925 nm)	4.9816	0.31	14086.5613
	Continuing Calibration Verification	Sr (216.596 nm)	2.5078	0.42	50181.3138
	Continuing Calibration Verification	Ti (336.122 nm)	2.5920	0.23	407935.8550
	Continuing Calibration Verification	Tl (190.794 nm)	0.9930	0.41	964.6355
	Continuing Calibration Verification	V (292.401 nm)	2.5388	0.20	98622.6197
	Continuing Calibration Verification	Y (360.074 nm)	0.96	0.38	533726.52
	Continuing Calibration Verification	Y_R (360.074 nm)	0.96	0.38	533886.11
	Continuing Calibration Verification	Zn (213.857 nm)	0.9910	0.14	63815.6107
8/21/2024 17:22:57	Continuing Calibration Blank	Ag (328.068 nm)	0.0001 u	> 100.00	20.4400

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank	Al (237.312 nm)	0.0009	31.32	-13.2440
	Continuing Calibration Blank	As (188.980 nm)	0.0004	> 100.00	-1.6880
	Continuing Calibration Blank	B (249.772 nm)	0.0024	4.52	189.9126
	Continuing Calibration Blank	Ba (230.424 nm)	0.0002	24.04	28.6279
	Continuing Calibration Blank	Be (313.107 nm)	0.0000	41.18	-9.6899
	Continuing Calibration Blank	Ca (317.933 nm)	0.0009	25.10	3078.5248
	Continuing Calibration Blank	Cd (214.439 nm)	-0.0001 u	42.35	8.1781
	Continuing Calibration Blank	Co (230.786 nm)	0.0002 u	> 100.00	5.4708
	Continuing Calibration Blank	Cr (267.716 nm)	0.0000 u	> 100.00	21.7210
	Continuing Calibration Blank	Cu (327.395 nm)	0.0001 u	> 100.00	-138.6922
	Continuing Calibration Blank	Fe (234.350 nm)	0.0026	20.98	118.4379
	Continuing Calibration Blank	K (766.491 nm)	0.0914	24.07	654.8499
	Continuing Calibration Blank	Mg (279.078 nm)	0.0002 u	> 100.00	5.0115
	Continuing Calibration Blank	Mn (257.610 nm)	0.0000	13.47	23.2813
	Continuing Calibration Blank	Mo (202.032 nm)	0.0036	11.05	46.1612
	Continuing Calibration Blank	Na (588.995 nm)	0.0552	5.74	-11581.9734
	Continuing Calibration Blank	Ni (230.299 nm)	-0.0001 u	92.68	3.8439
	Continuing Calibration Blank	Pb (220.353 nm)	-0.0008 u	18.24	-0.8823
	Continuing Calibration Blank	Sb (217.582 nm)	0.0059	33.90	16.7117
	Continuing Calibration Blank	Se (196.026 nm)	-0.0032 u	> 100.00	-1.1940
	Continuing Calibration Blank	Si (252.851 nm)	0.0036	29.37	86.1277
	Continuing Calibration Blank	Sn (189.925 nm)	-0.0001 u	> 100.00	6.8345
	Continuing Calibration Blank	Sr (216.596 nm)	0.0000 u	> 100.00	8.6094
	Continuing Calibration Blank	Ti (336.122 nm)	0.0043	24.89	744.6777
	Continuing Calibration Blank	Tl (190.794 nm)	0.0008 u	> 100.00	-1.9783
	Continuing Calibration Blank	V (292.401 nm)	0.0002	76.53	14.7169
	Continuing Calibration Blank	Y (360.074 nm)	1.00	0.13	556115.42
	Continuing Calibration Blank	Y_R (360.074 nm)	1.00	0.13	556281.95
	Continuing Calibration Blank	Zn (213.857 nm)	0.0000 u	> 100.00	15.8807
8/21/2024 17:26:10	R2407601-014	Ag (328.068 nm)	0.0002 u	> 100.00	29.3962
	R2407601-014	Al (237.312 nm)	0.0043	81.39	-3.9487
	R2407601-014	As (188.980 nm)	-0.0002 u	> 100.00	-2.8611
	R2407601-014	B (249.772 nm)	3.3986	0.29	151514.1702
	R2407601-014	Ba (230.424 nm)	0.0325	0.30	2068.9926
	R2407601-014	Be (313.107 nm)	0.0000 u	> 100.00	-19.9360
	R2407601-014	Ca (317.933 nm)	285.3509 o	0.41	11468011.3625
	R2407601-014	Cd (214.439 nm)	0.0000 u	> 100.00	11.5804
	R2407601-014	Co (230.786 nm)	0.0000 u	> 100.00	2.5411
	R2407601-014	Cr (267.716 nm)	0.0004	22.76	44.0677
	R2407601-014	Cu (327.395 nm)	0.0004	37.36	-122.7845
	R2407601-014	Fe (234.350 nm)	0.0113	2.15	327.2954
	R2407601-014	K (766.491 nm)	2.5900	0.49	3603.6538
	R2407601-014	Mg (279.078 nm)	108.6921 o	0.39	474096.8008
	R2407601-014	Mn (257.610 nm)	0.1608	0.29	58993.7042
	R2407601-014	Mo (202.032 nm)	0.0010	11.45	17.0551
	R2407601-014	Na (588.995 nm)	91.5967 o	0.24	1567688.3139
	R2407601-014	Ni (230.299 nm)	0.0201	1.40	276.7621
	R2407601-014	Pb (220.353 nm)	-0.0003 u	> 100.00	2.0842
	R2407601-014	Sb (217.582 nm)	0.0078	13.68	21.3800
	R2407601-014	Se (196.026 nm)	-0.0011 u	> 100.00	0.6327
	R2407601-014	Si (252.851 nm)	6.2179	0.20	41379.6019
	R2407601-014	Sn (189.925 nm)	0.0000 u	> 100.00	7.1320
	R2407601-014	Sr (216.596 nm)	2.7486	0.59	54998.1576
	R2407601-014	Ti (336.122 nm)	0.0009	41.39	207.7411
	R2407601-014	Tl (190.794 nm)	0.0026	74.25	-0.1898
	R2407601-014	V (292.401 nm)	0.0003	71.81	18.8928
	R2407601-014	Y (360.074 nm)	0.92	0.26	509744.10

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407601-014	Y_R (360.074 nm)	0.92	0.26	509855.01
	R2407601-014	Zn (213.857 nm)	0.0016	2.95	114.0113
8/21/2024 17:29:24	R2407601-016	Ag (328.068 nm)	0.0002	50.71	32.1823
	R2407601-016	Al (237.312 nm)	0.0001 u	> 100.00	-15.3613
	R2407601-016	As (188.980 nm)	-0.0005 u	> 100.00	-3.3335
	R2407601-016	B (249.772 nm)	3.1815	0.22	141840.7032
	R2407601-016	Ba (230.424 nm)	0.0096	0.62	623.7945
	R2407601-016	Be (313.107 nm)	0.0000	95.60	-14.9907
	R2407601-016	Ca (317.933 nm)	349.0843 o	0.20	14028720.6953
	R2407601-016	Cd (214.439 nm)	0.0000	83.38	14.2052
	R2407601-016	Co (230.786 nm)	0.0001 u	92.40	4.6537
	R2407601-016	Cr (267.716 nm)	0.0004	25.44	47.2834
	R2407601-016	Cu (327.395 nm)	0.0004	36.62	-123.1220
	R2407601-016	Fe (234.350 nm)	0.1560	0.48	3808.0515
	R2407601-016	K (766.491 nm)	16.0281	0.34	19462.7936
	R2407601-016	Mg (279.078 nm)	81.7459 o	0.19	356563.0475
	R2407601-016	Mn (257.610 nm)	0.2819	0.19	103444.4906
	R2407601-016	Mo (202.032 nm)	0.0008	12.77	14.3630
	R2407601-016	Na (588.995 nm)	19.9460	0.14	331572.5096
	R2407601-016	Ni (230.299 nm)	0.0208	4.08	286.6009
	R2407601-016	Pb (220.353 nm)	-0.0006 u	> 100.00	0.2326
	R2407601-016	Sb (217.582 nm)	0.0035	45.76	11.0775
	R2407601-016	Se (196.026 nm)	-0.0047 u	> 100.00	-2.4530
	R2407601-016	Si (252.851 nm)	5.7463	0.36	38245.9254
	R2407601-016	Sn (189.925 nm)	0.0002 u	> 100.00	7.6889
	R2407601-016	Sr (216.596 nm)	1.4252	0.30	28522.7383
	R2407601-016	Ti (336.122 nm)	0.0001 u	> 100.00	85.5188
	R2407601-016	Tl (190.794 nm)	0.0018	> 100.00	-1.0049
	R2407601-016	V (292.401 nm)	0.0003	40.42	19.3554
	R2407601-016	Y (360.074 nm)	0.92	0.34	512870.01
	R2407601-016	Y_R (360.074 nm)	0.92	0.34	512994.74
	R2407601-016	Zn (213.857 nm)	0.0045	1.67	305.1631
8/21/2024 17:32:38	R2407601-018	Ag (328.068 nm)	0.0002	60.68	26.9014
	R2407601-018	Al (237.312 nm)	-0.0001 u	> 100.00	-16.0634
	R2407601-018	As (188.980 nm)	0.0019	92.54	0.9493
	R2407601-018	B (249.772 nm)	3.3175	0.22	147899.3019
	R2407601-018	Ba (230.424 nm)	0.0322	0.28	2053.5310
	R2407601-018	Be (313.107 nm)	0.0000 u	> 100.00	-24.6323
	R2407601-018	Ca (317.933 nm)	279.5938 o	0.28	11236698.3457
	R2407601-018	Cd (214.439 nm)	0.0000	86.01	14.0418
	R2407601-018	Co (230.786 nm)	0.0000 u	> 100.00	2.3591
	R2407601-018	Cr (267.716 nm)	0.0005	7.61	52.0166
	R2407601-018	Cu (327.395 nm)	0.0014	13.71	-79.8725
	R2407601-018	Fe (234.350 nm)	0.0113	3.49	326.9940
	R2407601-018	K (766.491 nm)	2.6003	1.06	3615.8160
	R2407601-018	Mg (279.078 nm)	106.1066 o	0.26	462819.7530
	R2407601-018	Mn (257.610 nm)	0.1587	0.20	58239.0220
	R2407601-018	Mo (202.032 nm)	0.0005	21.19	11.0423
	R2407601-018	Na (588.995 nm)	90.8323 o	0.17	1554499.4657
	R2407601-018	Ni (230.299 nm)	0.0216	1.80	297.5732
	R2407601-018	Pb (220.353 nm)	-0.0005 u	> 100.00	0.9752
	R2407601-018	Sb (217.582 nm)	0.0024	35.82	8.3436
	R2407601-018	Se (196.026 nm)	-0.0006 u	75.37	1.0189
	R2407601-018	Si (252.851 nm)	6.0649	0.18	40363.0024
	R2407601-018	Sn (189.925 nm)	-0.0004 u	> 100.00	5.8929
	R2407601-018	Sr (216.596 nm)	2.6960	0.43	53945.9835
	R2407601-018	Ti (336.122 nm)	-0.0001 u	48.20	57.6039

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407601-018	Tl (190.794 nm)	0.0027 u	> 100.00	-0.1685
	R2407601-018	V (292.401 nm)	0.0003 u	> 100.00	17.8930
	R2407601-018	Y (360.074 nm)	0.92	0.25	509137.71
	R2407601-018	Y_R (360.074 nm)	0.92	0.25	509253.97
	R2407601-018	Zn (213.857 nm)	0.0017	2.98	125.5468
8/21/2024 17:35:52	R2407601-019	Ag (328.068 nm)	0.0001 u	> 100.00	20.8772
	R2407601-019	Al (237.312 nm)	0.0035	18.03	-6.3459
	R2407601-019	As (188.980 nm)	-0.0006 u	> 100.00	-3.5956
	R2407601-019	B (249.772 nm)	0.3392	0.18	15195.8483
	R2407601-019	Ba (230.424 nm)	0.0130	1.46	838.2777
	R2407601-019	Be (313.107 nm)	0.0000 u	95.74	-18.5036
	R2407601-019	Ca (317.933 nm)	91.7778 o	0.32	3690538.6929
	R2407601-019	Cd (214.439 nm)	0.0001	22.53	15.5452
	R2407601-019	Co (230.786 nm)	0.0001 u	> 100.00	4.3473
	R2407601-019	Cr (267.716 nm)	0.0005	38.54	48.5560
	R2407601-019	Cu (327.395 nm)	0.0002	43.61	-135.5359
	R2407601-019	Fe (234.350 nm)	0.0195	1.72	523.9119
	R2407601-019	K (766.491 nm)	3.3253	1.56	4471.4602
	R2407601-019	Mg (279.078 nm)	21.8665	0.26	95381.3286
	R2407601-019	Mn (257.610 nm)	0.0676	0.26	24819.9461
	R2407601-019	Mo (202.032 nm)	0.0136	1.35	158.0379
	R2407601-019	Na (588.995 nm)	8.4676	0.14	133548.4786
	R2407601-019	Ni (230.299 nm)	0.0175	3.58	242.1157
	R2407601-019	Pb (220.353 nm)	0.0000 u	> 100.00	3.3583
	R2407601-019	Sb (217.582 nm)	0.0005 u	> 100.00	3.7589
	R2407601-019	Se (196.026 nm)	0.0008 u	> 100.00	2.2123
	R2407601-019	Si (252.851 nm)	5.1157	0.07	34055.8563
	R2407601-019	Sn (189.925 nm)	-0.0003 u	> 100.00	6.2332
	R2407601-019	Sr (216.596 nm)	0.6932	0.26	13876.9659
	R2407601-019	Ti (336.122 nm)	0.0003	53.60	112.0548
	R2407601-019	Tl (190.794 nm)	0.0012 u	98.13	-1.5782
	R2407601-019	V (292.401 nm)	0.0001	79.39	12.0667
	R2407601-019	Y (360.074 nm)	0.97	0.32	538769.60
	R2407601-019	Y_R (360.074 nm)	0.97	0.32	538908.26
	R2407601-019	Zn (213.857 nm)	0.0010	7.20	79.2759
8/21/2024 17:39:06	R2407601-020	Ag (328.068 nm)	0.0001 u	> 100.00	21.8430
	R2407601-020	Al (237.312 nm)	0.0038	35.89	-5.5333
	R2407601-020	As (188.980 nm)	0.0008	> 100.00	-1.0155
	R2407601-020	B (249.772 nm)	0.3388	0.17	15181.3413
	R2407601-020	Ba (230.424 nm)	0.0130	0.37	838.4184
	R2407601-020	Be (313.107 nm)	0.0000 u	> 100.00	-20.2502
	R2407601-020	Ca (317.933 nm)	92.0907 o	0.34	3703107.6376
	R2407601-020	Cd (214.439 nm)	0.0000 u	> 100.00	13.2098
	R2407601-020	Co (230.786 nm)	0.0000 u	> 100.00	1.9177
	R2407601-020	Cr (267.716 nm)	0.0003	44.48	37.9269
	R2407601-020	Cu (327.395 nm)	0.0006	4.27	-114.7899
	R2407601-020	Fe (234.350 nm)	0.0159	0.21	436.4096
	R2407601-020	K (766.491 nm)	3.3230	0.80	4468.7433
	R2407601-020	Mg (279.078 nm)	21.9334	0.28	95673.3164
	R2407601-020	Mn (257.610 nm)	0.0674	0.26	24738.6318
	R2407601-020	Mo (202.032 nm)	0.0139	0.81	161.6274
	R2407601-020	Na (588.995 nm)	8.5210	0.28	134468.2129
	R2407601-020	Ni (230.299 nm)	0.0187	2.17	258.3979
	R2407601-020	Pb (220.353 nm)	-0.0006 u	20.21	0.3056
	R2407601-020	Sb (217.582 nm)	0.0013	62.03	5.5903
	R2407601-020	Se (196.026 nm)	0.0004 u	> 100.00	1.8333
	R2407601-020	Si (252.851 nm)	5.2766	0.20	35124.9433

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407601-020	Sn (189.925 nm)	0.0000 u	> 100.00	7.1201
	R2407601-020	Sr (216.596 nm)	0.6946	0.31	13904.8107
	R2407601-020	Ti (336.122 nm)	0.0000 u	> 100.00	59.6989
	R2407601-020	Tl (190.794 nm)	0.0003 u	> 100.00	-2.4354
	R2407601-020	V (292.401 nm)	0.0001	55.24	13.0972
	R2407601-020	Y (360.074 nm)	0.97	0.22	538340.61
	R2407601-020	Y_R (360.074 nm)	0.97	0.22	538474.36
	R2407601-020	Zn (213.857 nm)	0.0018	4.33	132.0701
8/21/2024 17:42:21	R2407601-022	Ag (328.068 nm)	0.0000 u	> 100.00	17.9565
	R2407601-022	Al (237.312 nm)	0.0039	22.89	-5.0463
	R2407601-022	As (188.980 nm)	-0.0010 u	> 100.00	-4.2325
	R2407601-022	B (249.772 nm)	0.3387	0.24	15173.4240
	R2407601-022	Ba (230.424 nm)	0.0130	0.66	835.9112
	R2407601-022	Be (313.107 nm)	0.0000	27.07	-13.7568
	R2407601-022	Ca (317.933 nm)	92.0213 o	0.29	3700318.7672
	R2407601-022	Cd (214.439 nm)	0.0000 u	> 100.00	13.8070
	R2407601-022	Co (230.786 nm)	0.0000 u	> 100.00	3.0119
	R2407601-022	Cr (267.716 nm)	0.0003	10.18	40.6645
	R2407601-022	Cu (327.395 nm)	0.0006	22.48	-115.5788
	R2407601-022	Fe (234.350 nm)	0.0197	0.26	528.2222
	R2407601-022	K (766.491 nm)	3.3103	0.82	4453.7194
	R2407601-022	Mg (279.078 nm)	21.9141	0.27	95588.8571
	R2407601-022	Mn (257.610 nm)	0.0670	0.20	24571.4525
	R2407601-022	Mo (202.032 nm)	0.0137	2.84	159.4531
	R2407601-022	Na (588.995 nm)	8.5014	0.24	134131.5607
	R2407601-022	Ni (230.299 nm)	0.0186	2.14	256.7704
	R2407601-022	Pb (220.353 nm)	-0.0010 u	54.30	-1.8351
	R2407601-022	Sb (217.582 nm)	0.0006 u	> 100.00	4.0475
	R2407601-022	Se (196.026 nm)	-0.0028 u	> 100.00	-0.8608
	R2407601-022	Si (252.851 nm)	5.2722	0.15	35095.4795
	R2407601-022	Sn (189.925 nm)	-0.0003 u	> 100.00	6.2336
	R2407601-022	Sr (216.596 nm)	0.6949	0.32	13910.6748
	R2407601-022	Ti (336.122 nm)	-0.0001 u	92.52	55.0387
	R2407601-022	Tl (190.794 nm)	0.0001 u	> 100.00	-2.6671
	R2407601-022	V (292.401 nm)	0.0002	82.55	16.0609
	R2407601-022	Y (360.074 nm)	0.97	0.22	538222.77
	R2407601-022	Y_R (360.074 nm)	0.97	0.22	538359.51
	R2407601-022	Zn (213.857 nm)	0.0015	2.50	112.9593
8/21/2024 17:45:35	R2407601-024	Ag (328.068 nm)	0.0001	87.08	20.3958
	R2407601-024	Al (237.312 nm)	0.0015	> 100.00	-11.4903
	R2407601-024	As (188.980 nm)	0.0008 u	> 100.00	-1.0377
	R2407601-024	B (249.772 nm)	3.2591	0.19	145294.7723
	R2407601-024	Ba (230.424 nm)	0.0831	0.35	5275.3994
	R2407601-024	Be (313.107 nm)	0.0000	19.26	-14.8430
	R2407601-024	Ca (317.933 nm)	302.5134 o	0.37	12157571.4702
	R2407601-024	Cd (214.439 nm)	0.0001 u	> 100.00	17.3503
	R2407601-024	Co (230.786 nm)	0.0021	12.74	47.3114
	R2407601-024	Cr (267.716 nm)	0.0005	16.33	52.2922
	R2407601-024	Cu (327.395 nm)	0.0012	15.32	-89.5004
	R2407601-024	Fe (234.350 nm)	0.0484	0.63	1220.0496
	R2407601-024	K (766.491 nm)	2.3534	0.59	3324.4562
	R2407601-024	Mg (279.078 nm)	113.9654 o	0.33	497098.0034
	R2407601-024	Mn (257.610 nm)	0.2399	0.23	88009.0995
	R2407601-024	Mo (202.032 nm)	0.0015	6.24	22.0031
	R2407601-024	Na (588.995 nm)	36.7211	0.12	620975.7664
	R2407601-024	Ni (230.299 nm)	0.0254	1.20	349.0297
	R2407601-024	Pb (220.353 nm)	0.0000 u	> 100.00	3.6092

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407601-024	Sb (217.582 nm)	0.0019	94.83	7.2414
	R2407601-024	Se (196.026 nm)	0.0018 u	> 100.00	3.0846
	R2407601-024	Si (252.851 nm)	6.3366	0.06	42168.3465
	R2407601-024	Sn (189.925 nm)	-0.0008 u	60.41	4.8729
	R2407601-024	Sr (216.596 nm)	1.1653	0.40	23322.3168
	R2407601-024	Ti (336.122 nm)	-0.0003 u	43.63	23.8833
	R2407601-024	Tl (190.794 nm)	0.0021	34.53	-0.7329
	R2407601-024	V (292.401 nm)	0.0004	27.60	24.3863
	R2407601-024	Y (360.074 nm)	0.92	0.17	512219.56
	R2407601-024	Y_R (360.074 nm)	0.92	0.17	512335.43
	R2407601-024	Zn (213.857 nm)	0.0094	0.18	616.6592
8/21/2024 17:48:50	R2407601-026	Ag (328.068 nm)	0.0001 u	> 100.00	20.8592
	R2407601-026	Al (237.312 nm)	0.0137	3.50	21.4218
	R2407601-026	As (188.980 nm)	0.0012 u	> 100.00	-0.2780
	R2407601-026	B (249.772 nm)	0.7040	0.17	31453.5150
	R2407601-026	Ba (230.424 nm)	0.0402	0.34	2560.4902
	R2407601-026	Be (313.107 nm)	0.0000 u	> 100.00	-18.5396
	R2407601-026	Ca (317.933 nm)	68.7400 o	0.28	2764911.7559
	R2407601-026	Cd (214.439 nm)	0.0001	> 100.00	14.8785
	R2407601-026	Co (230.786 nm)	0.0000 u	> 100.00	1.4272
	R2407601-026	Cr (267.716 nm)	0.0003	8.59	40.5757
	R2407601-026	Cu (327.395 nm)	0.0042	9.53	48.4652
	R2407601-026	Fe (234.350 nm)	0.0073	1.61	229.7992
	R2407601-026	K (766.491 nm)	2.3811	0.82	3357.0596
	R2407601-026	Mg (279.078 nm)	26.6765	0.24	116361.5925
	R2407601-026	Mn (257.610 nm)	0.0250	0.14	9185.0873
	R2407601-026	Mo (202.032 nm)	0.0012	25.68	18.6844
	R2407601-026	Na (588.995 nm)	109.6930 o	0.20	1879884.5571
	R2407601-026	Ni (230.299 nm)	0.0138	1.61	191.5375
	R2407601-026	Pb (220.353 nm)	-0.0005 u	89.93	0.6980
	R2407601-026	Sb (217.582 nm)	-0.0005 u	> 100.00	1.4168
	R2407601-026	Se (196.026 nm)	-0.0012 u	> 100.00	0.5192
	R2407601-026	Si (252.851 nm)	3.9205	0.19	26113.8660
	R2407601-026	Sn (189.925 nm)	0.0000 u	> 100.00	7.1287
	R2407601-026	Sr (216.596 nm)	1.6369	0.35	32758.3053
	R2407601-026	Ti (336.122 nm)	-0.0001 u	69.13	48.9580
	R2407601-026	Tl (190.794 nm)	0.0010	36.99	-1.8084
	R2407601-026	V (292.401 nm)	0.0002 u	> 100.00	16.6489
	R2407601-026	Y (360.074 nm)	0.95	0.32	526210.65
	R2407601-026	Y_R (360.074 nm)	0.95	0.32	526326.75
	R2407601-026	Zn (213.857 nm)	0.0007	3.61	59.5926
8/21/2024 17:52:04	R2407601-028	Ag (328.068 nm)	0.0001	88.35	24.1108
	R2407601-028	Al (237.312 nm)	0.0068	36.24	2.6213
	R2407601-028	As (188.980 nm)	-0.0015 u	31.67	-5.1514
	R2407601-028	B (249.772 nm)	0.3833	0.17	17164.0066
	R2407601-028	Ba (230.424 nm)	0.5432	0.21	34394.9586
	R2407601-028	Be (313.107 nm)	0.0000 u	> 100.00	-19.9881
	R2407601-028	Ca (317.933 nm)	20.9993	0.28	846765.5974
	R2407601-028	Cd (214.439 nm)	0.0000 u	> 100.00	9.6950
	R2407601-028	Co (230.786 nm)	0.0002	81.59	6.6725
	R2407601-028	Cr (267.716 nm)	0.0004	37.57	42.9403
	R2407601-028	Cu (327.395 nm)	0.0011	19.12	-92.2574
	R2407601-028	Fe (234.350 nm)	0.0116	3.38	333.9982
	R2407601-028	K (766.491 nm)	1.8903	1.45	2777.9327
	R2407601-028	Mg (279.078 nm)	7.6726	0.25	33470.6472
	R2407601-028	Mn (257.610 nm)	0.0214	0.14	7873.0583
	R2407601-028	Mo (202.032 nm)	0.0009	26.43	15.6543

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407601-028	Na (588.995 nm)	82.8005 o	0.12	1415935.4200
	R2407601-028	Ni (230.299 nm)	0.0110	2.64	153.8209
	R2407601-028	Pb (220.353 nm)	0.0005 u	> 100.00	6.0183
	R2407601-028	Sb (217.582 nm)	0.0010 u	> 100.00	4.9686
	R2407601-028	Se (196.026 nm)	-0.0033 u	43.21	-1.2916
	R2407601-028	Si (252.851 nm)	3.3129	0.18	22075.8576
	R2407601-028	Sn (189.925 nm)	-0.0013 u	31.94	3.3511
	R2407601-028	Sr (216.596 nm)	0.7630	0.38	15274.2746
	R2407601-028	Ti (336.122 nm)	0.0002	37.15	97.9883
	R2407601-028	Tl (190.794 nm)	0.0002 u	> 100.00	-2.5686
	R2407601-028	V (292.401 nm)	0.0001 u	> 100.00	11.6478
	R2407601-028	Y (360.074 nm)	0.97	0.18	538269.59
	R2407601-028	Y_R (360.074 nm)	0.97	0.18	538385.93
	R2407601-028	Zn (213.857 nm)	0.0015	4.52	109.9313
8/21/2024 17:55:18	R2407601-030	Ag (328.068 nm)	0.0001 u	> 100.00	20.8025
	R2407601-030	Al (237.312 nm)	0.0054	18.52	-1.1876
	R2407601-030	As (188.980 nm)	0.0024	21.17	1.7174
	R2407601-030	B (249.772 nm)	0.2294	0.03	10306.2797
	R2407601-030	Ba (230.424 nm)	0.0606	0.19	3848.9147
	R2407601-030	Be (313.107 nm)	0.0000 u	78.89	-21.8040
	R2407601-030	Ca (317.933 nm)	31.4499	0.20	1266655.3217
	R2407601-030	Cd (214.439 nm)	0.0000	54.49	12.8861
	R2407601-030	Co (230.786 nm)	0.0001 u	> 100.00	4.6214
	R2407601-030	Cr (267.716 nm)	0.0004	27.40	44.9386
	R2407601-030	Cu (327.395 nm)	0.0005	12.20	-118.8520
	R2407601-030	Fe (234.350 nm)	0.0230	1.50	609.3755
	R2407601-030	K (766.491 nm)	2.5318	0.53	3534.9284
	R2407601-030	Mg (279.078 nm)	18.4300	0.22	80392.2521
	R2407601-030	Mn (257.610 nm)	0.0945	0.12	34671.9376
	R2407601-030	Mo (202.032 nm)	0.0126	1.09	147.3904
	R2407601-030	Na (588.995 nm)	51.3595	0.14	873516.2353
	R2407601-030	Ni (230.299 nm)	0.0141	3.74	195.7874
	R2407601-030	Pb (220.353 nm)	0.0000 u	> 100.00	3.6487
	R2407601-030	Sb (217.582 nm)	0.0007 u	> 100.00	4.3494
	R2407601-030	Se (196.026 nm)	-0.0033 u	50.28	-1.2307
	R2407601-030	Si (252.851 nm)	4.2129	0.11	28056.4610
	R2407601-030	Sn (189.925 nm)	-0.0002 u	> 100.00	6.4930
	R2407601-030	Sr (216.596 nm)	1.6223	0.29	32465.8112
	R2407601-030	Ti (336.122 nm)	0.0001 u	> 100.00	84.3207
	R2407601-030	Tl (190.794 nm)	0.0017	72.55	-1.1135
	R2407601-030	V (292.401 nm)	0.0001 u	> 100.00	10.1139
	R2407601-030	Y (360.074 nm)	0.97	0.23	539528.05
	R2407601-030	Y_R (360.074 nm)	0.97	0.23	539675.22
	R2407601-030	Zn (213.857 nm)	0.0157	0.91	1023.5807
8/21/2024 17:58:31	Continuing Calibration Verification	Ag (328.068 nm)	0.5085	0.11	32444.0570
	Continuing Calibration Verification	Al (237.312 nm)	9.8595	0.08	26613.5523
	Continuing Calibration Verification	As (188.980 nm)	0.9931	0.16	1752.6886
	Continuing Calibration Verification	B (249.772 nm)	2.3381	0.18	104260.0282
	Continuing Calibration Verification	Ba (230.424 nm)	9.7927	0.36	619878.2808
	Continuing Calibration Verification	Be (313.107 nm)	0.2467	0.24	308666.0884
	Continuing Calibration Verification	Ca (317.933 nm)	24.8915	0.31	1003146.6300
	Continuing Calibration Verification	Cd (214.439 nm)	0.5001	0.28	32431.1752
	Continuing Calibration Verification	Co (230.786 nm)	2.4739	0.19	52759.4133
	Continuing Calibration Verification	Cr (267.716 nm)	0.5144	0.33	29879.0260
	Continuing Calibration Verification	Cu (327.395 nm)	1.2450	0.15	57359.2381
	Continuing Calibration Verification	Fe (234.350 nm)	4.9182	0.26	118375.6538
	Continuing Calibration Verification	K (766.491 nm)	24.5905	0.20	29567.8427

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification	Mg (279.078 nm)	25.4077	0.24	110827.2517
	Continuing Calibration Verification	Mn (257.610 nm)	0.7350	0.29	269646.1250
	Continuing Calibration Verification	Mo (202.032 nm)	2.5788	0.40	29003.4593
	Continuing Calibration Verification	Na (588.995 nm)	25.0439	0.23	419521.7535
	Continuing Calibration Verification	Ni (230.299 nm)	2.0025	0.27	27055.4909
	Continuing Calibration Verification	Pb (220.353 nm)	0.4972	0.23	2707.0051
	Continuing Calibration Verification	Sb (217.582 nm)	4.9604	0.24	11954.8843
	Continuing Calibration Verification	Se (196.026 nm)	0.4887	0.54	415.8164
	Continuing Calibration Verification	Si (252.851 nm)	9.9072	0.70	65894.2435
	Continuing Calibration Verification	Sn (189.925 nm)	4.9739	0.25	14064.9704
	Continuing Calibration Verification	Sr (216.596 nm)	2.5051	0.50	50126.4509
	Continuing Calibration Verification	Ti (336.122 nm)	2.5899	0.23	407615.3986
	Continuing Calibration Verification	Tl (190.794 nm)	0.9983	0.21	969.7421
	Continuing Calibration Verification	V (292.401 nm)	2.5363	0.24	98525.4127
	Continuing Calibration Verification	Y (360.074 nm)	0.96	0.38	533448.97
	Continuing Calibration Verification	Y_R (360.074 nm)	0.96	0.38	533579.76
	Continuing Calibration Verification	Zn (213.857 nm)	0.9895	0.23	63717.8703
8/21/2024 18:01:45	Continuing Calibration Blank	Ag (328.068 nm)	0.0001 u	> 100.00	24.0083
	Continuing Calibration Blank	Al (237.312 nm)	0.0010 u	90.44	-13.0444
	Continuing Calibration Blank	As (188.980 nm)	0.0005	54.53	-1.5363
	Continuing Calibration Blank	B (249.772 nm)	0.0024	1.67	191.3408
	Continuing Calibration Blank	Ba (230.424 nm)	0.0004	11.23	36.8814
	Continuing Calibration Blank	Be (313.107 nm)	0.0000 u	> 100.00	-19.1039
	Continuing Calibration Blank	Ca (317.933 nm)	0.0013	13.66	3096.2619
	Continuing Calibration Blank	Cd (214.439 nm)	0.0000 u	> 100.00	10.0326
	Continuing Calibration Blank	Co (230.786 nm)	0.0002	74.65	7.4337
	Continuing Calibration Blank	Cr (267.716 nm)	0.0001	> 100.00	27.6035
	Continuing Calibration Blank	Cu (327.395 nm)	0.0001 u	> 100.00	-138.9636
	Continuing Calibration Blank	Fe (234.350 nm)	0.0029	22.47	124.0647
	Continuing Calibration Blank	K (766.491 nm)	0.0506	62.26	606.7031
	Continuing Calibration Blank	Mg (279.078 nm)	0.0003 u	> 100.00	5.5490
	Continuing Calibration Blank	Mn (257.610 nm)	0.0000	12.21	23.9504
	Continuing Calibration Blank	Mo (202.032 nm)	0.0036	13.00	45.6817
	Continuing Calibration Blank	Na (588.995 nm)	0.0340	9.01	-11949.0964
	Continuing Calibration Blank	Ni (230.299 nm)	0.0002 u	> 100.00	8.7413
	Continuing Calibration Blank	Pb (220.353 nm)	-0.0008 u	> 100.00	-0.9797
	Continuing Calibration Blank	Sb (217.582 nm)	0.0064	10.94	18.0628
	Continuing Calibration Blank	Se (196.026 nm)	0.0010 u	> 100.00	2.4014
	Continuing Calibration Blank	Si (252.851 nm)	0.0048	14.56	94.2126
	Continuing Calibration Blank	Sn (189.925 nm)	-0.0003 u	> 100.00	6.0631
	Continuing Calibration Blank	Sr (216.596 nm)	0.0001	58.69	10.7125
	Continuing Calibration Blank	Ti (336.122 nm)	0.0043	22.95	744.4588
	Continuing Calibration Blank	Tl (190.794 nm)	0.0028	16.49	-0.0492
	Continuing Calibration Blank	V (292.401 nm)	0.0002	21.62	16.2566
	Continuing Calibration Blank	Y (360.074 nm)	1.00	0.11	556433.39
	Continuing Calibration Blank	Y_R (360.074 nm)	1.00	0.11	556561.83
	Continuing Calibration Blank	Zn (213.857 nm)	0.0000 u	> 100.00	14.5183
8/21/2024 18:04:59	R2407601-032	Ag (328.068 nm)	0.0000 u	> 100.00	19.8201
	R2407601-032	Al (237.312 nm)	0.0410	4.43	95.0019
	R2407601-032	As (188.980 nm)	-0.0015 u	28.75	-5.1604
	R2407601-032	B (249.772 nm)	0.4007	0.22	17937.3451
	R2407601-032	Ba (230.424 nm)	0.0331	0.35	2110.3299
	R2407601-032	Be (313.107 nm)	0.0000 u	> 100.00	-19.2889
	R2407601-032	Ca (317.933 nm)	152.8943 o	0.29	6146105.7000
	R2407601-032	Cd (214.439 nm)	0.0000 u	> 100.00	13.9345
	R2407601-032	Co (230.786 nm)	0.0007	42.29	16.3199
	R2407601-032	Cr (267.716 nm)	0.0006	4.87	58.7998

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407601-032	Cu (327.395 nm)	0.0007	10.92	-110.0969
	R2407601-032	Fe (234.350 nm)	0.0606	0.73	1513.9590
	R2407601-032	K (766.491 nm)	2.5782	0.28	3589.6678
	R2407601-032	Mg (279.078 nm)	59.9835 o	0.25	261639.8744
	R2407601-032	Mn (257.610 nm)	0.0658	0.18	24131.1677
	R2407601-032	Mo (202.032 nm)	0.0019	18.58	27.3447
	R2407601-032	Na (588.995 nm)	71.6273 o	0.21	1223175.9653
	R2407601-032	Ni (230.299 nm)	0.0224	1.48	308.8264
	R2407601-032	Pb (220.353 nm)	0.0005	50.00	6.3750
	R2407601-032	Sb (217.582 nm)	0.0063	38.04	17.7702
	R2407601-032	Se (196.026 nm)	-0.0007 u	> 100.00	0.9040
	R2407601-032	Si (252.851 nm)	5.8604	0.15	39003.8192
	R2407601-032	Sn (189.925 nm)	-0.0008 u	78.82	4.6575
	R2407601-032	Sr (216.596 nm)	0.9811	0.32	19637.3805
	R2407601-032	Ti (336.122 nm)	0.0013	36.40	276.2816
	R2407601-032	Tl (190.794 nm)	0.0024	50.71	-0.4752
	R2407601-032	V (292.401 nm)	0.0004	27.57	23.2615
	R2407601-032	Y (360.074 nm)	0.94	0.33	521856.76
	R2407601-032	Y_R (360.074 nm)	0.94	0.33	521957.55
	R2407601-032	Zn (213.857 nm)	0.0075	0.24	494.9457
8/21/2024 18:08:13	R2407601-034	Ag (328.068 nm)	0.0001	54.44	25.9874
	R2407601-034	Al (237.312 nm)	0.0133	12.08	20.1515
	R2407601-034	As (188.980 nm)	-0.0004 u	> 100.00	-3.1745
	R2407601-034	B (249.772 nm)	0.9939	0.26	44370.0049
	R2407601-034	Ba (230.424 nm)	0.0268	0.34	1711.8854
	R2407601-034	Be (313.107 nm)	0.0000 u	> 100.00	-13.4765
	R2407601-034	Ca (317.933 nm)	135.5891 o	0.28	5450808.1196
	R2407601-034	Cd (214.439 nm)	0.0000 u	> 100.00	13.8954
	R2407601-034	Co (230.786 nm)	0.0000 u	> 100.00	2.3418
	R2407601-034	Cr (267.716 nm)	0.0004	12.71	45.6666
	R2407601-034	Cu (327.395 nm)	0.0019	12.09	-54.7874
	R2407601-034	Fe (234.350 nm)	0.0116	1.03	334.3573
	R2407601-034	K (766.491 nm)	2.6599	1.13	3686.1316
	R2407601-034	Mg (279.078 nm)	55.7341 o	0.28	243104.7968
	R2407601-034	Mn (257.610 nm)	0.0669	0.24	24552.8617
	R2407601-034	Mo (202.032 nm)	0.0008	40.90	14.3805
	R2407601-034	Na (588.995 nm)	107.5429 o	0.12	1842790.0209
	R2407601-034	Ni (230.299 nm)	0.0190	2.00	262.3253
	R2407601-034	Pb (220.353 nm)	0.0000 u	> 100.00	3.6919
	R2407601-034	Sb (217.582 nm)	0.0037	14.24	11.4647
	R2407601-034	Se (196.026 nm)	-0.0008 u	> 100.00	0.8242
	R2407601-034	Si (252.851 nm)	5.4619	0.16	36356.1577
	R2407601-034	Sn (189.925 nm)	-0.0004 u	79.66	5.8764
	R2407601-034	Sr (216.596 nm)	2.2689	0.32	45402.5129
	R2407601-034	Ti (336.122 nm)	0.0004	58.53	131.0397
	R2407601-034	Tl (190.794 nm)	0.0036	17.68	0.7840
	R2407601-034	V (292.401 nm)	0.0004	52.38	21.4532
	R2407601-034	Y (360.074 nm)	0.94	0.30	521034.77
	R2407601-034	Y_R (360.074 nm)	0.94	0.30	521135.57
	R2407601-034	Zn (213.857 nm)	0.0014	1.42	107.3442
8/21/2024 18:11:26	R2407601-036	Ag (328.068 nm)	0.0003	53.97	35.1243
	R2407601-036	Al (237.312 nm)	0.0001 u	> 100.00	-15.3865
	R2407601-036	As (188.980 nm)	0.0001 u	> 100.00	-2.2041
	R2407601-036	B (249.772 nm)	3.6843	0.19	164241.7661
	R2407601-036	Ba (230.424 nm)	0.0103	0.36	666.3437
	R2407601-036	Be (313.107 nm)	0.0000 u	> 100.00	-18.3711
	R2407601-036	Ca (317.933 nm)	342.3776 o	0.29	13759255.4170

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407601-036	Cd (214.439 nm)	0.0000 u	> 100.00	14.2189
	R2407601-036	Co (230.786 nm)	-0.0001 u	13.20	-0.3454
	R2407601-036	Cr (267.716 nm)	0.0006	16.13	54.5225
	R2407601-036	Cu (327.395 nm)	0.0003	47.48	-127.4994
	R2407601-036	Fe (234.350 nm)	0.0997	0.43	2452.9892
	R2407601-036	K (766.491 nm)	3.1462	1.11	4260.0090
	R2407601-036	Mg (279.078 nm)	116.0918 o	0.31	506372.9452
	R2407601-036	Mn (257.610 nm)	0.2278	0.23	83563.8554
	R2407601-036	Mo (202.032 nm)	0.0010	32.91	16.3006
	R2407601-036	Na (588.995 nm)	43.8762	0.27	744415.5002
	R2407601-036	Ni (230.299 nm)	0.0175	2.23	241.7799
	R2407601-036	Pb (220.353 nm)	-0.0009 u	> 100.00	-1.4843
	R2407601-036	Sb (217.582 nm)	0.0024	36.78	8.4055
	R2407601-036	Se (196.026 nm)	-0.0025 u	> 100.00	-0.6060
	R2407601-036	Si (252.851 nm)	5.0145	0.17	33382.9929
	R2407601-036	Sn (189.925 nm)	0.0008	42.74	9.2501
	R2407601-036	Sr (216.596 nm)	1.4814	0.38	29647.0314
	R2407601-036	Ti (336.122 nm)	-0.0001 u	> 100.00	52.6528
	R2407601-036	Tl (190.794 nm)	0.0020	79.06	-0.8613
	R2407601-036	V (292.401 nm)	0.0004	47.87	21.8147
	R2407601-036	Y (360.074 nm)	0.92	0.26	511134.11
	R2407601-036	Y_R (360.074 nm)	0.92	0.26	511236.36
	R2407601-036	Zn (213.857 nm)	0.0031	2.50	211.4089
8/21/2024 18:14:40	R2407601-038	Ag (328.068 nm)	0.0000 u	> 100.00	17.7366
	R2407601-038	Al (237.312 nm)	0.0236	9.13	48.0036
	R2407601-038	As (188.980 nm)	-0.0002 u	> 100.00	-2.8905
	R2407601-038	B (249.772 nm)	4.0393	0.12	180057.9766
	R2407601-038	Ba (230.424 nm)	0.0070	1.19	459.3417
	R2407601-038	Be (313.107 nm)	0.0000 u	> 100.00	-17.2257
	R2407601-038	Ca (317.933 nm)	330.6888 o	0.22	13289617.7105
	R2407601-038	Cd (214.439 nm)	0.0000 u	> 100.00	13.7956
	R2407601-038	Co (230.786 nm)	0.0003	21.86	7.7942
	R2407601-038	Cr (267.716 nm)	0.0005	14.72	51.3319
	R2407601-038	Cu (327.395 nm)	0.0017	20.25	-64.3139
	R2407601-038	Fe (234.350 nm)	0.1847	0.22	4498.9613
	R2407601-038	K (766.491 nm)	2.1241	1.35	3053.7902
	R2407601-038	Mg (279.078 nm)	109.3398 o	0.24	476922.1792
	R2407601-038	Mn (257.610 nm)	0.1640	0.13	60178.4638
	R2407601-038	Mo (202.032 nm)	0.0009	7.29	15.8007
	R2407601-038	Na (588.995 nm)	33.1361	0.24	559128.2786
	R2407601-038	Ni (230.299 nm)	0.0172	2.49	237.9945
	R2407601-038	Pb (220.353 nm)	-0.0001 u	> 100.00	2.9376
	R2407601-038	Sb (217.582 nm)	0.0019 u	> 100.00	7.2507
	R2407601-038	Se (196.026 nm)	0.0014 u	> 100.00	2.6878
	R2407601-038	Si (252.851 nm)	5.3096	0.09	35344.1867
	R2407601-038	Sn (189.925 nm)	-0.0005 u	> 100.00	5.7471
	R2407601-038	Sr (216.596 nm)	0.5782	0.22	11577.1067
	R2407601-038	Ti (336.122 nm)	-0.0001 u	55.21	44.6395
	R2407601-038	Tl (190.794 nm)	0.0042	54.44	1.3526
	R2407601-038	V (292.401 nm)	0.0002	80.78	15.9136
	R2407601-038	Y (360.074 nm)	0.92	0.33	513096.95
	R2407601-038	Y_R (360.074 nm)	0.92	0.33	513207.83
	R2407601-038	Zn (213.857 nm)	0.0054	1.53	360.5264
8/21/2024 18:17:54	R2407601-038L 5X	Ag (328.068 nm)	0.0001	38.18	22.8710
	R2407601-038L 5X	Al (237.312 nm)	0.0062	1.04	1.0253
	R2407601-038L 5X	As (188.980 nm)	0.0003 u	93.79	-2.0153
	R2407601-038L 5X	B (249.772 nm)	0.8172	0.16	36496.4875

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407601-038L 5X	Ba (230.424 nm)	0.0015	2.01	106.3507
	R2407601-038L 5X	Be (313.107 nm)	0.0000 u	> 100.00	-18.2604
	R2407601-038L 5X	Ca (317.933 nm)	73.9984 o	0.19	2976186.4886
	R2407601-038L 5X	Cd (214.439 nm)	-0.0001 u	> 100.00	8.0527
	R2407601-038L 5X	Co (230.786 nm)	0.0000 u	> 100.00	2.0543
	R2407601-038L 5X	Cr (267.716 nm)	0.0002	17.60	34.4479
	R2407601-038L 5X	Cu (327.395 nm)	0.0003	33.24	-129.1984
	R2407601-038L 5X	Fe (234.350 nm)	0.0401	0.47	1020.5730
	R2407601-038L 5X	K (766.491 nm)	0.3967	8.24	1015.1775
	R2407601-038L 5X	Mg (279.078 nm)	22.0507	0.17	96184.9309
	R2407601-038L 5X	Mn (257.610 nm)	0.0341	0.14	12508.1774
	R2407601-038L 5X	Mo (202.032 nm)	0.0003	64.06	8.3133
	R2407601-038L 5X	Na (588.995 nm)	6.4180	0.16	98187.8958
	R2407601-038L 5X	Ni (230.299 nm)	0.0031	4.54	47.0887
	R2407601-038L 5X	Pb (220.353 nm)	0.0000 u	> 100.00	3.5765
	R2407601-038L 5X	Sb (217.582 nm)	0.0016	77.21	6.4303
	R2407601-038L 5X	Se (196.026 nm)	-0.0030 u	7.03	-1.0470
	R2407601-038L 5X	Si (252.851 nm)	1.0774	0.17	7221.5149
	R2407601-038L 5X	Sn (189.925 nm)	-0.0005 u	> 100.00	5.6267
	R2407601-038L 5X	Sr (216.596 nm)	0.1203	0.16	2415.4638
	R2407601-038L 5X	Ti (336.122 nm)	0.0001	69.01	89.6331
	R2407601-038L 5X	Tl (190.794 nm)	0.0032	67.43	0.3688
	R2407601-038L 5X	V (292.401 nm)	0.0000 u	> 100.00	7.2477
	R2407601-038L 5X	Y (360.074 nm)	0.98	0.29	543398.09
	R2407601-038L 5X	Y_R (360.074 nm)	0.98	0.29	543511.42
	R2407601-038L 5X	Zn (213.857 nm)	0.0011	4.20	84.4208
8/21/2024 18:21:08	Continuing Calibration Verification	Ag (328.068 nm)	0.5059	0.11	32279.0724
	Continuing Calibration Verification	Al (237.312 nm)	9.8344	0.06	26545.9563
	Continuing Calibration Verification	As (188.980 nm)	0.9892	0.12	1745.8301
	Continuing Calibration Verification	B (249.772 nm)	2.3327	0.14	104021.0452
	Continuing Calibration Verification	Ba (230.424 nm)	9.7891	0.60	619652.6013
	Continuing Calibration Verification	Be (313.107 nm)	0.2458	0.24	307520.1398
	Continuing Calibration Verification	Ca (317.933 nm)	24.8215	0.34	1000333.6888
	Continuing Calibration Verification	Cd (214.439 nm)	0.4985	0.34	32329.5742
	Continuing Calibration Verification	Co (230.786 nm)	2.4736	0.33	52753.2864
	Continuing Calibration Verification	Cr (267.716 nm)	0.5128	0.30	29783.8324
	Continuing Calibration Verification	Cu (327.395 nm)	1.2403	0.37	57141.4609
	Continuing Calibration Verification	Fe (234.350 nm)	4.9050	0.29	118059.6607
	Continuing Calibration Verification	K (766.491 nm)	24.5092	0.16	29471.8713
	Continuing Calibration Verification	Mg (279.078 nm)	25.3201	0.30	110445.3044
	Continuing Calibration Verification	Mn (257.610 nm)	0.7327	0.24	268828.7324
	Continuing Calibration Verification	Mo (202.032 nm)	2.5702	0.35	28906.8328
	Continuing Calibration Verification	Na (588.995 nm)	24.8781	0.62	416660.2188
	Continuing Calibration Verification	Ni (230.299 nm)	1.9952	0.26	26956.6178
	Continuing Calibration Verification	Pb (220.353 nm)	0.4960	0.14	2700.4628
	Continuing Calibration Verification	Sb (217.582 nm)	4.9414	0.11	11909.1045
	Continuing Calibration Verification	Se (196.026 nm)	0.4856	0.83	413.1484
	Continuing Calibration Verification	Si (252.851 nm)	9.8677	0.65	65631.9068
	Continuing Calibration Verification	Sn (189.925 nm)	4.9597	0.22	14024.8214
	Continuing Calibration Verification	Sr (216.596 nm)	2.5004	0.35	50034.0974
	Continuing Calibration Verification	Ti (336.122 nm)	2.5830	0.20	406522.7530
	Continuing Calibration Verification	Tl (190.794 nm)	0.9949	0.44	966.4828
	Continuing Calibration Verification	V (292.401 nm)	2.5277	0.15	98192.4820
	Continuing Calibration Verification	Y (360.074 nm)	0.96	0.40	533783.26
	Continuing Calibration Verification	Y_R (360.074 nm)	0.96	0.40	533893.25
	Continuing Calibration Verification	Zn (213.857 nm)	0.9857	0.21	63471.2115
8/21/2024 18:24:22	Continuing Calibration Blank	Ag (328.068 nm)	0.0000 u	> 100.00	19.0081

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank	Al (237.312 nm)	0.0013	86.62	-12.2634
	Continuing Calibration Blank	As (188.980 nm)	0.0013 u	> 100.00	-0.0823
	Continuing Calibration Blank	B (249.772 nm)	0.0030	7.91	218.2429
	Continuing Calibration Blank	Ba (230.424 nm)	0.0004	9.82	40.7972
	Continuing Calibration Blank	Be (313.107 nm)	0.0000	56.27	-9.8972
	Continuing Calibration Blank	Ca (317.933 nm)	0.0016	9.72	3110.2556
	Continuing Calibration Blank	Cd (214.439 nm)	0.0000 u	> 100.00	10.1050
	Continuing Calibration Blank	Co (230.786 nm)	0.0003	83.90	7.6787
	Continuing Calibration Blank	Cr (267.716 nm)	0.0001 u	> 100.00	27.4156
	Continuing Calibration Blank	Cu (327.395 nm)	0.0001 u	> 100.00	-139.2389
	Continuing Calibration Blank	Fe (234.350 nm)	0.0027	19.19	120.6396
	Continuing Calibration Blank	K (766.491 nm)	0.0173 u	> 100.00	567.4719
	Continuing Calibration Blank	Mg (279.078 nm)	0.0000 u	> 100.00	4.0640
	Continuing Calibration Blank	Mn (257.610 nm)	0.0001	33.80	30.2475
	Continuing Calibration Blank	Mo (202.032 nm)	0.0037	13.39	47.5948
	Continuing Calibration Blank	Na (588.995 nm)	0.0248	10.12	-12107.3849
	Continuing Calibration Blank	Ni (230.299 nm)	-0.0002 u	56.71	2.9953
	Continuing Calibration Blank	Pb (220.353 nm)	-0.0012 u	66.27	-2.9609
	Continuing Calibration Blank	Sb (217.582 nm)	0.0080	3.67	21.8920
	Continuing Calibration Blank	Se (196.026 nm)	-0.0018 u	> 100.00	0.0004
	Continuing Calibration Blank	Si (252.851 nm)	0.0045	17.87	91.9484
	Continuing Calibration Blank	Sn (189.925 nm)	0.0004	65.31	8.1234
	Continuing Calibration Blank	Sr (216.596 nm)	0.0000 u	> 100.00	8.1491
	Continuing Calibration Blank	Ti (336.122 nm)	0.0044	21.94	758.9675
	Continuing Calibration Blank	Tl (190.794 nm)	-0.0002 u	> 100.00	-2.9258
	Continuing Calibration Blank	V (292.401 nm)	0.0004	35.39	22.8639
	Continuing Calibration Blank	Y (360.074 nm)	1.00	0.15	558041.42
	Continuing Calibration Blank	Y_R (360.074 nm)	1.00	0.15	558171.38
	Continuing Calibration Blank	Zn (213.857 nm)	0.0001 u	94.98	18.0343
8/21/2024 18:27:36	PBW-443447	Ag (328.068 nm)	0.0000 u	59.40	15.2746
	PBW-443447	Al (237.312 nm)	0.0015	46.23	-11.4954
	PBW-443447	As (188.980 nm)	-0.0009 u	54.77	-4.1412
	PBW-443447	B (249.772 nm)	0.0035	2.63	238.3905
	PBW-443447	Ba (230.424 nm)	0.0000 u	> 100.00	13.3361
	PBW-443447	Be (313.107 nm)	0.0000	54.51	-11.6651
	PBW-443447	Ca (317.933 nm)	0.0061	3.09	3288.8011
	PBW-443447	Cd (214.439 nm)	0.0000 u	> 100.00	12.1666
	PBW-443447	Co (230.786 nm)	0.0001 u	> 100.00	4.1019
	PBW-443447	Cr (267.716 nm)	0.0003	13.22	37.6506
	PBW-443447	Cu (327.395 nm)	0.0002	13.72	-133.4472
	PBW-443447	Fe (234.350 nm)	0.0036	5.37	140.7047
	PBW-443447	K (766.491 nm)	-0.0288 u	48.48	513.0704
	PBW-443447	Mg (279.078 nm)	0.0004 u	> 100.00	6.1060
	PBW-443447	Mn (257.610 nm)	0.0001	17.19	37.9535
	PBW-443447	Mo (202.032 nm)	0.0009	3.15	15.7945
	PBW-443447	Na (588.995 nm)	0.0633	3.55	-11442.4582
	PBW-443447	Ni (230.299 nm)	0.0001 u	> 100.00	6.6278
	PBW-443447	Pb (220.353 nm)	-0.0002 u	> 100.00	2.5500
	PBW-443447	Sb (217.582 nm)	0.0083	10.56	22.5917
	PBW-443447	Se (196.026 nm)	0.0008 u	> 100.00	2.2467
	PBW-443447	Si (252.851 nm)	0.0112	17.54	136.8503
	PBW-443447	Sn (189.925 nm)	-0.0003 u	> 100.00	6.2127
	PBW-443447	Sr (216.596 nm)	-0.0001 u	86.08	6.4796
	PBW-443447	Ti (336.122 nm)	0.0016	33.74	323.9010
	PBW-443447	Tl (190.794 nm)	0.0005 u	> 100.00	-2.2784
	PBW-443447	V (292.401 nm)	0.0002	40.32	16.0179
	PBW-443447	Y (360.074 nm)	1.02	0.16	566005.86

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	PBW-443447	Y_R (360.074 nm)	1.02	0.15	566130.60
	PBW-443447	Zn (213.857 nm)	0.0020	1.45	145.5415
8/21/2024 18:30:50	LCSW-443447	Ag (328.068 nm)	0.0483	0.64	3097.1388
	LCSW-443447	Al (237.312 nm)	1.9329	0.11	5204.8332
	LCSW-443447	As (188.980 nm)	0.0386	1.84	65.7008
	LCSW-443447	B (249.772 nm)	0.8977	0.18	40083.6210
	LCSW-443447	Ba (230.424 nm)	1.9204	0.39	121570.7194
	LCSW-443447	Be (313.107 nm)	0.0481	0.23	60118.2154
	LCSW-443447	Ca (317.933 nm)	1.9110	0.28	79824.4967
	LCSW-443447	Cd (214.439 nm)	0.0494	0.44	3216.1109
	LCSW-443447	Co (230.786 nm)	0.4865	0.15	10377.8362
	LCSW-443447	Cr (267.716 nm)	0.1961	0.24	11402.2355
	LCSW-443447	Cu (327.395 nm)	0.2483	0.22	11324.3479
	LCSW-443447	Fe (234.350 nm)	0.9735	0.19	23474.7711
	LCSW-443447	K (766.491 nm)	18.5090	0.27	22390.7274
	LCSW-443447	Mg (279.078 nm)	1.9011	0.17	8296.4070
	LCSW-443447	Mn (257.610 nm)	0.4696	0.21	172285.5797
	LCSW-443447	Mo (202.032 nm)	0.4883	0.55	5496.0130
	LCSW-443447	Na (588.995 nm)	18.9362	0.16	314151.4772
	LCSW-443447	Ni (230.299 nm)	0.4803	0.21	6492.9296
	LCSW-443447	Pb (220.353 nm)	0.4978	0.20	2710.0485
	LCSW-443447	Sb (217.582 nm)	0.4894	0.46	1181.8602
	LCSW-443447	Se (196.026 nm)	0.9760	0.27	828.8468
	LCSW-443447	Si (252.851 nm)	0.3190	0.62	2181.7644
	LCSW-443447	Sn (189.925 nm)	4.7807	0.11	13518.8741
	LCSW-443447	Sr (216.596 nm)	1.9560	0.30	39142.4293
	LCSW-443447	Ti (336.122 nm)	0.4961	0.16	78128.0017
	LCSW-443447	Tl (190.794 nm)	1.9253	0.32	1872.7720
	LCSW-443447	V (292.401 nm)	0.4812	0.20	18697.7527
	LCSW-443447	Y (360.074 nm)	0.99	0.41	551619.96
	LCSW-443447	Y_R (360.074 nm)	0.99	0.41	551745.63
	LCSW-443447	Zn (213.857 nm)	0.4889	0.18	31488.2566
8/21/2024 18:34:04	R2407825-002	Ag (328.068 nm)	0.0001	93.86	25.5936
	R2407825-002	Al (237.312 nm)	0.1070	2.04	273.4001
	R2407825-002	As (188.980 nm)	0.0134	26.83	21.1471
	R2407825-002	B (249.772 nm)	1.2677	0.12	56566.8955
	R2407825-002	Ba (230.424 nm)	0.0093	0.81	600.3594
	R2407825-002	Be (313.107 nm)	0.0000 u	> 100.00	-15.8781
	R2407825-002	Ca (317.933 nm)	255.7530 o LR	0.27	10278811.9930
	R2407825-002	Cd (214.439 nm)	0.0001 u	94.69	16.8582
	R2407825-002	Co (230.786 nm)	0.0004	65.10	9.9594
	R2407825-002	Cr (267.716 nm)	0.0010	11.04	82.6600
	R2407825-002	Cu (327.395 nm)	0.0009	14.58	-102.6420
	R2407825-002	Fe (234.350 nm)	2.6762	0.22	64437.6365
	R2407825-002	K (766.491 nm)	16.4512	0.10	19962.1568
	R2407825-002	Mg (279.078 nm)	202.5320 o	0.25	883407.5718
	R2407825-002	Mn (257.610 nm)	0.1233	0.14	45259.2837
	R2407825-002	Mo (202.032 nm)	0.0079	1.29	94.5003
	R2407825-002	Na (588.995 nm)	198.0682 o	0.26	3404529.2721
	R2407825-002	Ni (230.299 nm)	0.0300	0.35	410.8686
	R2407825-002	Pb (220.353 nm)	-0.0007 u	58.23	-0.3166
	R2407825-002	Sb (217.582 nm)	0.0024	55.56	8.2749
	R2407825-002	Se (196.026 nm)	-0.0026 u	56.41	-0.6293
	R2407825-002	Si (252.851 nm)	8.6636	0.05	57631.1476
	R2407825-002	Sn (189.925 nm)	0.0009	60.96	9.6255
	R2407825-002	Sr (216.596 nm)	8.3559 o	0.41	167183.2946
	R2407825-002	Ti (336.122 nm)	0.0039	12.12	673.4810

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-002	Tl (190.794 nm)	0.0035	69.12	0.6581
	R2407825-002	V (292.401 nm)	0.0006	12.29	32.5952
	R2407825-002	Y (360.074 nm)	0.90	0.33	499257.88
	R2407825-002	Y_R (360.074 nm)	0.90	0.33	499353.28
	R2407825-002	Zn (213.857 nm)	0.0058	1.80	389.0584
8/21/2024 18:37:19	R2407825-003	Ag (328.068 nm)	0.0002	77.52	26.5151
	R2407825-003	Al (237.312 nm)	0.6395	0.50	1711.4474
	R2407825-003	As (188.980 nm)	0.0095	4.24	14.3441
	R2407825-003	B (249.772 nm)	0.8788	0.06	39241.7250
	R2407825-003	Ba (230.424 nm)	0.0130	0.99	836.8605
	R2407825-003	Be (313.107 nm)	0.0000	55.70	-7.8833
	R2407825-003	Ca (317.933 nm)	148.9726 o	0.25	5988537.4156
	R2407825-003	Cd (214.439 nm)	0.0001	79.45	15.2659
	R2407825-003	Co (230.786 nm)	0.0001 u	> 100.00	5.0710
	R2407825-003	Cr (267.716 nm)	0.0012	6.34	91.7428
	R2407825-003	Cu (327.395 nm)	0.0009	24.91	-99.5111
	R2407825-003	Fe (234.350 nm)	0.7673	0.21	18515.6554
	R2407825-003	K (766.491 nm)	8.5517	0.11	10639.4247
	R2407825-003	Mg (279.078 nm)	64.4035 o	0.14	280919.1698
	R2407825-003	Mn (257.610 nm)	0.1470	0.15	53933.1419
	R2407825-003	Mo (202.032 nm)	0.0291	1.10	333.0555
	R2407825-003	Na (588.995 nm)	141.5504 o	0.23	2429486.3961
	R2407825-003	Ni (230.299 nm)	0.0165	0.54	228.1210
	R2407825-003	Pb (220.353 nm)	0.0001 u	> 100.00	4.1609
	R2407825-003	Sb (217.582 nm)	0.0021	84.67	7.6728
	R2407825-003	Se (196.026 nm)	0.0008 u	> 100.00	2.2278
	R2407825-003	Si (252.851 nm)	4.7087	0.09	31351.2642
	R2407825-003	Sn (189.925 nm)	-0.0006 u	> 100.00	5.3481
	R2407825-003	Sr (216.596 nm)	3.3551	0.09	67134.1060
	R2407825-003	Ti (336.122 nm)	0.0152	3.96	2451.1266
	R2407825-003	Tl (190.794 nm)	0.0031	41.50	0.2447
	R2407825-003	V (292.401 nm)	0.0011	4.77	52.3281
	R2407825-003	Y (360.074 nm)	0.93	0.34	517973.60
	R2407825-003	Y_R (360.074 nm)	0.93	0.35	518064.66
	R2407825-003	Zn (213.857 nm)	0.0031	1.55	211.9862
8/21/2024 18:40:33	R2407825-004	Ag (328.068 nm)	0.0006	21.47	52.3013
	R2407825-004	Al (237.312 nm)	0.1221	0.54	313.9890
	R2407825-004	As (188.980 nm)	0.0017	50.13	0.5343
	R2407825-004	B (249.772 nm)	0.0794	0.42	3623.5438
	R2407825-004	Ba (230.424 nm)	0.0427	0.34	2716.7652
	R2407825-004	Be (313.107 nm)	0.0000 u	> 100.00	-15.2389
	R2407825-004	Ca (317.933 nm)	374.5050 o LR	0.36	15050086.8968
	R2407825-004	Cd (214.439 nm)	0.0001	59.89	15.9385
	R2407825-004	Co (230.786 nm)	0.0009	22.44	20.5182
	R2407825-004	Cr (267.716 nm)	0.0010	13.37	78.7549
	R2407825-004	Cu (327.395 nm)	0.0041	2.31	48.3497
	R2407825-004	Fe (234.350 nm)	0.3535	0.14	8560.4216
	R2407825-004	K (766.491 nm)	2.1298	0.64	3060.5084
	R2407825-004	Mg (279.078 nm)	126.8898 o	0.29	553471.8404
	R2407825-004	Mn (257.610 nm)	3.8007 o	0.28	1394359.2935
	R2407825-004	Mo (202.032 nm)	0.0014	3.42	21.3077
	R2407825-004	Na (588.995 nm)	72.1537 o	0.25	1232257.3803
	R2407825-004	Ni (230.299 nm)	0.0287	0.86	393.8488
	R2407825-004	Pb (220.353 nm)	0.0006 u	> 100.00	6.9730
	R2407825-004	Sb (217.582 nm)	0.0014	42.51	5.8363
	R2407825-004	Se (196.026 nm)	0.0020	46.72	3.2601
	R2407825-004	Si (252.851 nm)	7.1471	0.09	47553.6701

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-004	Sn (189.925 nm)	0.0000 u	> 100.00	7.0604
	R2407825-004	Sr (216.596 nm)	1.0900	0.30	21815.6283
	R2407825-004	Ti (336.122 nm)	0.0028	19.23	500.4774
	R2407825-004	Tl (190.794 nm)	0.0030	53.59	0.1520
	R2407825-004	V (292.401 nm)	0.0007	19.86	36.0668
	R2407825-004	Y (360.074 nm)	0.91	0.27	503573.06
	R2407825-004	Y_R (360.074 nm)	0.91	0.27	503664.83
	R2407825-004	Zn (213.857 nm)	0.0065	0.80	434.4545
8/21/2024 18:43:47	R2407825-005	Ag (328.068 nm)	0.0001 u	> 100.00	21.7200
	R2407825-005	Al (237.312 nm)	0.0118	8.07	16.1347
	R2407825-005	As (188.980 nm)	0.0073	13.15	10.4516
	R2407825-005	B (249.772 nm)	0.6647	0.08	29701.9140
	R2407825-005	Ba (230.424 nm)	0.0101	0.83	650.0589
	R2407825-005	Be (313.107 nm)	0.0000 u	42.23	-20.2003
	R2407825-005	Ca (317.933 nm)	122.8975 o	0.12	4940880.9337
	R2407825-005	Cd (214.439 nm)	0.0000 u	> 100.00	11.8183
	R2407825-005	Co (230.786 nm)	0.0000 u	> 100.00	2.1371
	R2407825-005	Cr (267.716 nm)	0.0021	8.74	145.1134
	R2407825-005	Cu (327.395 nm)	0.0008	24.80	-104.0797
	R2407825-005	Fe (234.350 nm)	0.0583	0.35	1456.4881
	R2407825-005	K (766.491 nm)	7.8739	0.51	9839.5088
	R2407825-005	Mg (279.078 nm)	114.4128 o	0.16	499049.5203
	R2407825-005	Mn (257.610 nm)	0.0228	0.17	8362.5327
	R2407825-005	Mo (202.032 nm)	0.0230	0.58	263.8200
	R2407825-005	Na (588.995 nm)	202.9744 o	0.31	3489171.2528
	R2407825-005	Ni (230.299 nm)	0.0130	2.21	181.2058
	R2407825-005	Pb (220.353 nm)	-0.0005 u	> 100.00	0.9883
	R2407825-005	Sb (217.582 nm)	0.0013	64.74	5.6657
	R2407825-005	Se (196.026 nm)	-0.0028 u	99.10	-0.8225
	R2407825-005	Si (252.851 nm)	4.0843	0.07	27202.1554
	R2407825-005	Sn (189.925 nm)	-0.0009 u	16.29	4.3627
	R2407825-005	Sr (216.596 nm)	3.6412	0.36	72857.3342
	R2407825-005	Ti (336.122 nm)	0.0002	56.96	93.3031
	R2407825-005	Tl (190.794 nm)	0.0017	62.30	-1.0720
	R2407825-005	V (292.401 nm)	0.0003	33.96	18.9024
	R2407825-005	Y (360.074 nm)	0.92	0.40	511462.08
	R2407825-005	Y_R (360.074 nm)	0.92	0.40	511543.88
	R2407825-005	Zn (213.857 nm)	0.0133	0.24	867.7651
8/21/2024 18:47:01	R2407825-006	Ag (328.068 nm)	0.0000 u	> 100.00	18.8326
	R2407825-006	Al (237.312 nm)	0.3754	1.08	998.3060
	R2407825-006	As (188.980 nm)	0.0152	17.52	24.3404
	R2407825-006	B (249.772 nm)	1.4688	0.22	65525.8683
	R2407825-006	Ba (230.424 nm)	0.0109	0.20	701.7755
	R2407825-006	Be (313.107 nm)	0.0000	46.23	-11.5393
	R2407825-006	Ca (317.933 nm)	200.2292 o	0.40	8047950.2687
	R2407825-006	Cd (214.439 nm)	0.0001	69.05	19.5665
	R2407825-006	Co (230.786 nm)	0.0003	74.53	8.3334
	R2407825-006	Cr (267.716 nm)	0.0011	3.31	87.5539
	R2407825-006	Cu (327.395 nm)	0.0016	12.35	-67.5907
	R2407825-006	Fe (234.350 nm)	1.3445	0.22	32400.5762
	R2407825-006	K (766.491 nm)	14.8819	0.15	18110.1403
	R2407825-006	Mg (279.078 nm)	96.4749 o	0.34	420807.9021
	R2407825-006	Mn (257.610 nm)	0.2649	0.30	97178.1732
	R2407825-006	Mo (202.032 nm)	0.0138	1.53	160.5951
	R2407825-006	Na (588.995 nm)	259.3864 o LR	0.30	4462389.1592
	R2407825-006	Ni (230.299 nm)	0.0242	0.94	333.2669
	R2407825-006	Pb (220.353 nm)	0.0006 u	93.58	6.7600

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-006	Sb (217.582 nm)	0.0006	> 100.00	3.9239
	R2407825-006	Se (196.026 nm)	-0.0055 u	35.79	-3.1164
	R2407825-006	Si (252.851 nm)	7.0340	0.08	46802.4689
	R2407825-006	Sn (189.925 nm)	-0.0002 u	> 100.00	6.5176
	R2407825-006	Sr (216.596 nm)	5.5029 o	0.47	110103.3037
	R2407825-006	Ti (336.122 nm)	0.0123	3.76	2005.3524
	R2407825-006	Tl (190.794 nm)	0.0020	87.11	-0.7803
	R2407825-006	V (292.401 nm)	0.0010	10.03	45.3301
	R2407825-006	Y (360.074 nm)	0.90	0.23	502766.94
	R2407825-006	Y_R (360.074 nm)	0.90	0.23	502851.91
	R2407825-006	Zn (213.857 nm)	0.0050	2.31	339.0949
8/21/2024 18:50:15	R2407825-007	Ag (328.068 nm)	0.0001	> 100.00	20.7852
	R2407825-007	Al (237.312 nm)	0.0463	2.51	109.4316
	R2407825-007	As (188.980 nm)	0.0013 u	> 100.00	-0.2246
	R2407825-007	B (249.772 nm)	0.0525	0.16	2421.7687
	R2407825-007	Ba (230.424 nm)	0.0180	0.56	1151.1603
	R2407825-007	Be (313.107 nm)	0.0000 u	> 100.00	-18.7366
	R2407825-007	Ca (317.933 nm)	103.6371 o	0.26	4167025.0146
	R2407825-007	Cd (214.439 nm)	0.0001	91.84	15.3670
	R2407825-007	Co (230.786 nm)	-0.0002 u	42.36	-1.4926
	R2407825-007	Cr (267.716 nm)	0.0011	8.67	83.6156
	R2407825-007	Cu (327.395 nm)	0.0011	27.18	-91.1005
	R2407825-007	Fe (234.350 nm)	0.0711	0.61	1766.6228
	R2407825-007	K (766.491 nm)	0.9964	1.93	1722.9823
	R2407825-007	Mg (279.078 nm)	180.1663 o	0.36	785852.8153
	R2407825-007	Mn (257.610 nm)	0.0044	0.59	1628.1305
	R2407825-007	Mo (202.032 nm)	0.0014	4.93	20.9728
	R2407825-007	Na (588.995 nm)	68.8307 o	0.11	1174929.3240
	R2407825-007	Ni (230.299 nm)	0.0229	1.45	315.1379
	R2407825-007	Pb (220.353 nm)	0.0003 u	> 100.00	5.2636
	R2407825-007	Sb (217.582 nm)	0.0005 u	> 100.00	3.7549
	R2407825-007	Se (196.026 nm)	-0.0005 u	> 100.00	1.1513
	R2407825-007	Si (252.851 nm)	6.3955	0.10	42559.6385
	R2407825-007	Sn (189.925 nm)	-0.0007 u	> 100.00	4.9784
	R2407825-007	Sr (216.596 nm)	1.4238	0.31	28493.0839
	R2407825-007	Ti (336.122 nm)	0.0010	3.89	223.6663
	R2407825-007	Tl (190.794 nm)	0.0014	> 100.00	-1.4080
	R2407825-007	V (292.401 nm)	0.0005	6.40	27.8318
	R2407825-007	Y (360.074 nm)	0.93	0.39	516323.60
	R2407825-007	Y_R (360.074 nm)	0.93	0.40	516419.07
	R2407825-007	Zn (213.857 nm)	0.0024	5.10	170.0002
8/21/2024 18:53:29	R2407825-008	Ag (328.068 nm)	0.0000 u	> 100.00	19.3493
	R2407825-008	Al (237.312 nm)	0.0182	8.22	33.4937
	R2407825-008	As (188.980 nm)	0.0001 u	> 100.00	-2.2389
	R2407825-008	B (249.772 nm)	0.1262	0.03	5708.8662
	R2407825-008	Ba (230.424 nm)	0.1693	0.30	10728.2334
	R2407825-008	Be (313.107 nm)	0.0000 u	> 100.00	-14.9922
	R2407825-008	Ca (317.933 nm)	59.9151 o	0.28	2410342.7242
	R2407825-008	Cd (214.439 nm)	0.0000 u	> 100.00	11.5395
	R2407825-008	Co (230.786 nm)	0.0001 u	96.86	4.9042
	R2407825-008	Cr (267.716 nm)	0.0009	7.12	76.9279
	R2407825-008	Cu (327.395 nm)	0.0045	5.65	64.8189
	R2407825-008	Fe (234.350 nm)	0.0610	0.19	1523.4780
	R2407825-008	K (766.491 nm)	4.7072	0.92	6102.2472
	R2407825-008	Mg (279.078 nm)	109.4672 o	0.26	477478.0011
	R2407825-008	Mn (257.610 nm)	0.0464	0.22	17050.0816
	R2407825-008	Mo (202.032 nm)	0.0065	3.71	78.4122

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-008	Na (588.995 nm)	121.4965 o	0.23	2083517.9173
	R2407825-008	Ni (230.299 nm)	0.0230	0.62	316.0474
	R2407825-008	Pb (220.353 nm)	0.0001 u	> 100.00	4.1894
	R2407825-008	Sb (217.582 nm)	0.0008 u	98.84	4.5222
	R2407825-008	Se (196.026 nm)	0.0000 u	> 100.00	1.5336
	R2407825-008	Si (252.851 nm)	6.9745	0.02	46406.9109
	R2407825-008	Sn (189.925 nm)	-0.0004 u	91.84	5.9224
	R2407825-008	Sr (216.596 nm)	1.3571	0.29	27159.3869
	R2407825-008	Ti (336.122 nm)	0.0008	1.63	189.2082
	R2407825-008	Tl (190.794 nm)	0.0018	76.85	-1.0376
	R2407825-008	V (292.401 nm)	0.0006	20.45	31.9960
	R2407825-008	Y (360.074 nm)	0.93	0.24	519617.94
	R2407825-008	Y_R (360.074 nm)	0.93	0.24	519714.46
	R2407825-008	Zn (213.857 nm)	0.0044	1.04	298.1421
8/21/2024 18:56:42	R2407825-008S	Ag (328.068 nm)	0.0500	0.41	3205.2883
	R2407825-008S	Al (237.312 nm)	2.0152	0.18	5427.1198
	R2407825-008S	As (188.980 nm)	0.0408	3.55	69.5586
	R2407825-008S	B (249.772 nm)	1.0760	0.16	48025.7444
	R2407825-008S	Ba (230.424 nm)	2.0927	0.28	132479.8503
	R2407825-008S	Be (313.107 nm)	0.0493	0.17	61673.0691
	R2407825-008S	Ca (317.933 nm)	61.8985 o	0.27	2490032.9920
	R2407825-008S	Cd (214.439 nm)	0.0487	0.47	3169.9547
	R2407825-008S	Co (230.786 nm)	0.4754	0.13	10140.2230
	R2407825-008S	Cr (267.716 nm)	0.1979	0.33	11510.4651
	R2407825-008S	Cu (327.395 nm)	0.2560	0.24	11679.3747
	R2407825-008S	Fe (234.350 nm)	1.0427	0.21	25140.6945
	R2407825-008S	K (766.491 nm)	25.8334	0.10	31034.7185
	R2407825-008S	Mg (279.078 nm)	111.6707 o	0.25	487088.8394
	R2407825-008S	Mn (257.610 nm)	0.5227	0.20	191768.8764
	R2407825-008S	Mo (202.032 nm)	0.5067	0.64	5702.9774
	R2407825-008S	Na (588.995 nm)	140.0055 o	0.23	2402834.5930
	R2407825-008S	Ni (230.299 nm)	0.4879	0.17	6596.2351
	R2407825-008S	Pb (220.353 nm)	0.4860	0.23	2646.3298
	R2407825-008S	Sb (217.582 nm)	0.5085	0.02	1227.7287
	R2407825-008S	Se (196.026 nm)	1.0181	0.69	864.5378
	R2407825-008S	Si (252.851 nm)	7.4365	0.17	49476.8457
	R2407825-008S	Sn (189.925 nm)	4.8576	0.26	13736.2669
	R2407825-008S	Sr (216.596 nm)	3.2829	0.25	65688.8971
	R2407825-008S	Ti (336.122 nm)	0.5064	0.10	79748.9440
	R2407825-008S	Tl (190.794 nm)	1.8880	0.13	1836.4514
	R2407825-008S	V (292.401 nm)	0.4952	0.09	19243.4260
	R2407825-008S	Y (360.074 nm)	0.93	0.34	516958.76
	R2407825-008S	Y_R (360.074 nm)	0.93	0.34	517051.45
	R2407825-008S	Zn (213.857 nm)	0.4981	0.23	32080.5389
8/21/2024 18:59:56	Continuing Calibration Verification	Ag (328.068 nm)	0.5047	0.06	32206.8938
	Continuing Calibration Verification	Al (237.312 nm)	9.8188	0.06	26503.7598
	Continuing Calibration Verification	As (188.980 nm)	0.9850	0.21	1738.4344
	Continuing Calibration Verification	B (249.772 nm)	2.3276	0.21	103791.7766
	Continuing Calibration Verification	Ba (230.424 nm)	9.7367	0.25	616334.7539
	Continuing Calibration Verification	Be (313.107 nm)	0.2457	0.30	307316.6833
	Continuing Calibration Verification	Ca (317.933 nm)	24.8031	0.23	999593.3623
	Continuing Calibration Verification	Cd (214.439 nm)	0.4984	0.29	32322.5140
	Continuing Calibration Verification	Co (230.786 nm)	2.4651	0.45	52571.3274
	Continuing Calibration Verification	Cr (267.716 nm)	0.5122	0.25	29751.1683
	Continuing Calibration Verification	Cu (327.395 nm)	1.2378	0.13	57027.4545
	Continuing Calibration Verification	Fe (234.350 nm)	4.8994	0.23	117923.4804
	Continuing Calibration Verification	K (766.491 nm)	24.5434	0.27	29512.2397

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification	Mg (279.078 nm)	25.3185	0.22	110438.4852
	Continuing Calibration Verification	Mn (257.610 nm)	0.7326	0.21	268760.6629
	Continuing Calibration Verification	Mo (202.032 nm)	2.5654	0.28	28852.7946
	Continuing Calibration Verification	Na (588.995 nm)	24.7863	0.60	415076.9224
	Continuing Calibration Verification	Ni (230.299 nm)	1.9937	0.22	26936.8470
	Continuing Calibration Verification	Pb (220.353 nm)	0.4957	0.05	2698.5456
	Continuing Calibration Verification	Sb (217.582 nm)	4.9429	0.03	11912.7755
	Continuing Calibration Verification	Se (196.026 nm)	0.4852	1.46	412.8427
	Continuing Calibration Verification	Si (252.851 nm)	9.8718	0.67	65659.3888
	Continuing Calibration Verification	Sn (189.925 nm)	4.9512	0.28	14000.6733
	Continuing Calibration Verification	Sr (216.596 nm)	2.4944	0.61	49912.9143
	Continuing Calibration Verification	Ti (336.122 nm)	2.5801	0.21	406068.3010
	Continuing Calibration Verification	Tl (190.794 nm)	0.9889	0.33	960.5707
	Continuing Calibration Verification	V (292.401 nm)	2.5260	0.25	98128.1284
	Continuing Calibration Verification	Y (360.074 nm)	0.96	0.38	535970.38
	Continuing Calibration Verification	Y_R (360.074 nm)	0.96	0.38	536078.29
	Continuing Calibration Verification	Zn (213.857 nm)	0.9838	0.56	63351.4943
8/21/2024 19:03:10	Continuing Calibration Blank	Ag (328.068 nm)	0.0001	12.70	21.4316
	Continuing Calibration Blank	Al (237.312 nm)	0.0021	45.65	-9.8732
	Continuing Calibration Blank	As (188.980 nm)	0.0015	53.75	0.2102
	Continuing Calibration Blank	B (249.772 nm)	0.0022	9.64	182.9127
	Continuing Calibration Blank	Ba (230.424 nm)	0.0005	28.58	46.6809
	Continuing Calibration Blank	Be (313.107 nm)	0.0000 u	> 100.00	-18.4989
	Continuing Calibration Blank	Ca (317.933 nm)	0.0025	3.91	3144.0645
	Continuing Calibration Blank	Cd (214.439 nm)	0.0000 u	> 100.00	10.0520
	Continuing Calibration Blank	Co (230.786 nm)	0.0002 u	91.72	6.4175
	Continuing Calibration Blank	Cr (267.716 nm)	0.0001	53.88	30.4449
	Continuing Calibration Blank	Cu (327.395 nm)	0.0000 u	> 100.00	-142.1860
	Continuing Calibration Blank	Fe (234.350 nm)	0.0027	18.31	120.5696
	Continuing Calibration Blank	K (766.491 nm)	0.0783	48.28	639.4796
	Continuing Calibration Blank	Mg (279.078 nm)	0.0004 u	> 100.00	5.8694
	Continuing Calibration Blank	Mn (257.610 nm)	0.0001	27.89	31.5531
	Continuing Calibration Blank	Mo (202.032 nm)	0.0038	17.37	48.1268
	Continuing Calibration Blank	Na (588.995 nm)	0.0769	7.20	-11208.6649
	Continuing Calibration Blank	Ni (230.299 nm)	-0.0002 u	33.32	2.4193
	Continuing Calibration Blank	Pb (220.353 nm)	-0.0004 u	> 100.00	1.1950
	Continuing Calibration Blank	Sb (217.582 nm)	0.0073	7.81	20.2607
	Continuing Calibration Blank	Se (196.026 nm)	-0.0010 u	> 100.00	0.6607
	Continuing Calibration Blank	Si (252.851 nm)	0.0058	8.56	100.5867
	Continuing Calibration Blank	Sn (189.925 nm)	-0.0002 u	> 100.00	6.3595
	Continuing Calibration Blank	Sr (216.596 nm)	0.0002	77.14	11.2272
	Continuing Calibration Blank	Ti (336.122 nm)	0.0044	23.32	761.9836
	Continuing Calibration Blank	Tl (190.794 nm)	0.0029	25.61	0.0273
	Continuing Calibration Blank	V (292.401 nm)	0.0001 u	> 100.00	13.1277
	Continuing Calibration Blank	Y (360.074 nm)	1.00	0.09	558282.88
	Continuing Calibration Blank	Y_R (360.074 nm)	1.00	0.09	558386.21
	Continuing Calibration Blank	Zn (213.857 nm)	0.0001	14.65	21.7539
8/21/2024 19:06:24	R2407825-008SD	Ag (328.068 nm)	0.0504	0.81	3233.0892
	R2407825-008SD	Al (237.312 nm)	2.0282	0.16	5462.1688
	R2407825-008SD	As (188.980 nm)	0.0408	2.94	69.5853
	R2407825-008SD	B (249.772 nm)	1.0787	0.25	48148.5866
	R2407825-008SD	Ba (230.424 nm)	2.1010	0.40	133001.2384
	R2407825-008SD	Be (313.107 nm)	0.0495	0.23	61905.2838
	R2407825-008SD	Ca (317.933 nm)	61.3795 o	0.31	2469177.9663
	R2407825-008SD	Cd (214.439 nm)	0.0487	0.35	3169.6687
	R2407825-008SD	Co (230.786 nm)	0.4780	0.26	10196.5763
	R2407825-008SD	Cr (267.716 nm)	0.1990	0.19	11570.8568

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-008SD	Cu (327.395 nm)	0.2569	0.06	11721.8381
	R2407825-008SD	Fe (234.350 nm)	1.0513	0.25	25346.5862
	R2407825-008SD	K (766.491 nm)	25.8636	0.14	31070.3011
	R2407825-008SD	Mg (279.078 nm)	110.7008 o	0.27	482858.5814
	R2407825-008SD	Mn (257.610 nm)	0.5241	0.19	192276.5526
	R2407825-008SD	Mo (202.032 nm)	0.5156	0.52	5803.4355
	R2407825-008SD	Na (588.995 nm)	139.8199 o	0.26	2399632.6220
	R2407825-008SD	Ni (230.299 nm)	0.4889	0.17	6609.3342
	R2407825-008SD	Pb (220.353 nm)	0.4861	0.09	2646.6092
	R2407825-008SD	Sb (217.582 nm)	0.5225	0.07	1261.6626
	R2407825-008SD	Se (196.026 nm)	1.0223	0.11	868.1238
	R2407825-008SD	Si (252.851 nm)	7.3831	0.10	49121.9319
	R2407825-008SD	Sn (189.925 nm)	4.8612	0.15	13746.2685
	R2407825-008SD	Sr (216.596 nm)	3.2742	0.45	65514.6178
	R2407825-008SD	Ti (336.122 nm)	0.5161	0.29	81281.2276
	R2407825-008SD	Tl (190.794 nm)	1.8995	0.30	1847.6405
	R2407825-008SD	V (292.401 nm)	0.4969	0.23	19311.1325
	R2407825-008SD	Y (360.074 nm)	0.93	0.30	516828.06
	R2407825-008SD	Y_R (360.074 nm)	0.93	0.29	516908.75
	R2407825-008SD	Zn (213.857 nm)	0.4995	0.19	32174.0619
8/21/2024 19:09:38	R2407825-008A	Ag (328.068 nm)	0.0501	0.17	3214.4622
	R2407825-008A	Al (237.312 nm)	2.0162	0.02	5429.8776
	R2407825-008A	As (188.980 nm)	0.0398	5.13	67.8600
	R2407825-008A	B (249.772 nm)	1.0767	0.26	48055.5052
	R2407825-008A	Ba (230.424 nm)	2.0874	0.42	132144.5337
	R2407825-008A	Be (313.107 nm)	0.0493	0.18	61625.2643
	R2407825-008A	Ca (317.933 nm)	60.0860 o	0.28	2417209.6513
	R2407825-008A	Cd (214.439 nm)	0.0486	0.22	3163.1197
	R2407825-008A	Co (230.786 nm)	0.4762	0.20	10158.0238
	R2407825-008A	Cr (267.716 nm)	0.1982	0.29	11523.2528
	R2407825-008A	Cu (327.395 nm)	0.2560	0.13	11678.6110
	R2407825-008A	Fe (234.350 nm)	1.0435	0.24	25159.8966
	R2407825-008A	K (766.491 nm)	25.6787	0.16	30852.0450
	R2407825-008A	Mg (279.078 nm)	108.1873 o	0.26	471895.0590
	R2407825-008A	Mn (257.610 nm)	0.5217	0.22	191387.9917
	R2407825-008A	Mo (202.032 nm)	0.5072	0.46	5708.8840
	R2407825-008A	Na (588.995 nm)	136.4162 o	0.37	2340911.0511
	R2407825-008A	Ni (230.299 nm)	0.4881	0.22	6598.3682
	R2407825-008A	Pb (220.353 nm)	0.4850	0.28	2640.4312
	R2407825-008A	Sb (217.582 nm)	0.5127	0.33	1237.9023
	R2407825-008A	Se (196.026 nm)	1.0244	0.39	869.8416
	R2407825-008A	Si (252.851 nm)	7.1466	0.05	47550.7689
	R2407825-008A	Sn (189.925 nm)	4.9004	0.30	13857.2918
	R2407825-008A	Sr (216.596 nm)	3.2483	0.57	64996.0766
	R2407825-008A	Ti (336.122 nm)	0.5078	0.18	79969.0713
	R2407825-008A	Tl (190.794 nm)	1.8938	0.16	1842.1558
	R2407825-008A	V (292.401 nm)	0.4950	0.24	19236.1686
	R2407825-008A	Y (360.074 nm)	0.93	0.29	517499.86
	R2407825-008A	Y_R (360.074 nm)	0.93	0.29	517576.25
	R2407825-008A	Zn (213.857 nm)	0.5058	0.20	32575.4965
8/21/2024 19:12:52	R2407825-008L 5X	Ag (328.068 nm)	0.0001	75.47	21.9647
	R2407825-008L 5X	Al (237.312 nm)	0.0053	15.06	-1.2842
	R2407825-008L 5X	As (188.980 nm)	0.0009	48.99	-0.9554
	R2407825-008L 5X	B (249.772 nm)	0.0268	1.01	1276.0570
	R2407825-008L 5X	Ba (230.424 nm)	0.0348	0.29	2219.2277
	R2407825-008L 5X	Be (313.107 nm)	0.0000 u	> 100.00	-21.8646
	R2407825-008L 5X	Ca (317.933 nm)	12.4601	0.21	503673.4541

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-008L 5X	Cd (214.439 nm)	0.0000 u	> 100.00	11.4510
	R2407825-008L 5X	Co (230.786 nm)	-0.0001 u	36.46	0.8667
	R2407825-008L 5X	Cr (267.716 nm)	0.0004	8.65	44.2151
	R2407825-008L 5X	Cu (327.395 nm)	0.0010	14.80	-97.3956
	R2407825-008L 5X	Fe (234.350 nm)	0.0151	2.66	419.4379
	R2407825-008L 5X	K (766.491 nm)	0.9187	3.12	1631.2032
	R2407825-008L 5X	Mg (279.078 nm)	21.8880	0.19	95475.3323
	R2407825-008L 5X	Mn (257.610 nm)	0.0096	0.07	3532.7620
	R2407825-008L 5X	Mo (202.032 nm)	0.0036	12.76	45.7484
	R2407825-008L 5X	Na (588.995 nm)	24.7811	0.61	414986.9410
	R2407825-008L 5X	Ni (230.299 nm)	0.0049	4.23	71.8015
	R2407825-008L 5X	Pb (220.353 nm)	-0.0008 u	46.94	-1.0034
	R2407825-008L 5X	Sb (217.582 nm)	0.0026	22.92	8.7660
	R2407825-008L 5X	Se (196.026 nm)	-0.0033 u	32.47	-1.2659
	R2407825-008L 5X	Si (252.851 nm)	1.4281	0.06	9552.0619
	R2407825-008L 5X	Sn (189.925 nm)	0.0012	76.10	10.3532
	R2407825-008L 5X	Sr (216.596 nm)	0.2788	0.31	5585.5416
	R2407825-008L 5X	Ti (336.122 nm)	0.0018	27.98	344.5227
	R2407825-008L 5X	Tl (190.794 nm)	0.0039	27.35	1.0670
	R2407825-008L 5X	V (292.401 nm)	0.0002	10.64	14.0811
	R2407825-008L 5X	Y (360.074 nm)	0.98	0.21	544843.52
	R2407825-008L 5X	Y_R (360.074 nm)	0.98	0.21	544930.33
	R2407825-008L 5X	Zn (213.857 nm)	0.0009	3.59	73.9650
8/21/2024 19:16:06	R2407825-009	Ag (328.068 nm)	0.0002	65.64	28.1585
	R2407825-009	Al (237.312 nm)	0.1327	1.15	342.6267
	R2407825-009	As (188.980 nm)	-0.0014 u	43.01	-4.8901
	R2407825-009	B (249.772 nm)	0.2165	0.20	9728.7625
	R2407825-009	Ba (230.424 nm)	0.0110	1.64	710.2469
	R2407825-009	Be (313.107 nm)	0.0000 u	> 100.00	-19.8144
	R2407825-009	Ca (317.933 nm)	391.2434 o LR	0.33	15722610.9395
	R2407825-009	Cd (214.439 nm)	0.0001	28.03	18.7211
	R2407825-009	Co (230.786 nm)	0.0005	29.88	12.0735
	R2407825-009	Cr (267.716 nm)	0.0017	5.97	120.8030
	R2407825-009	Cu (327.395 nm)	0.0037	4.77	28.0649
	R2407825-009	Fe (234.350 nm)	0.1478	0.31	3611.4685
	R2407825-009	K (766.491 nm)	7.9447	0.99	9923.0978
	R2407825-009	Mg (279.078 nm)	261.6701 o	0.32	1141355.8380
	R2407825-009	Mn (257.610 nm)	0.0290	0.25	10655.3455
	R2407825-009	Mo (202.032 nm)	0.0020	6.78	27.9807
	R2407825-009	Na (588.995 nm)	108.7365 o	0.14	1863383.3106
	R2407825-009	Ni (230.299 nm)	0.0247	1.38	339.4121
	R2407825-009	Pb (220.353 nm)	0.0004 u	> 100.00	5.8343
	R2407825-009	Sb (217.582 nm)	0.0024	73.02	8.3970
	R2407825-009	Se (196.026 nm)	0.0004 u	> 100.00	1.9105
	R2407825-009	Si (252.851 nm)	5.9949	0.17	39897.8942
	R2407825-009	Sn (189.925 nm)	-0.0003 u	> 100.00	6.2901
	R2407825-009	Sr (216.596 nm)	3.5471	0.56	70975.1904
	R2407825-009	Ti (336.122 nm)	0.0036	5.91	637.2804
	R2407825-009	Tl (190.794 nm)	0.0037	19.96	0.7933
	R2407825-009	V (292.401 nm)	0.0007	16.08	35.1925
	R2407825-009	Y (360.074 nm)	0.89	0.23	495692.84
	R2407825-009	Y_R (360.074 nm)	0.89	0.23	495762.25
	R2407825-009	Zn (213.857 nm)	0.0073	1.19	483.6570
8/21/2024 19:19:21	R2407825-010	Ag (328.068 nm)	0.0001	> 100.00	25.2194
	R2407825-010	Al (237.312 nm)	0.0056	14.26	-0.6524
	R2407825-010	As (188.980 nm)	0.0003 u	> 100.00	-1.9177
	R2407825-010	B (249.772 nm)	3.1960	0.19	142483.4535

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-010	Ba (230.424 nm)	0.0077	0.88	502.8628
	R2407825-010	Be (313.107 nm)	0.0000	32.33	-14.0707
	R2407825-010	Ca (317.933 nm)	417.6922 o LR	0.31	16785283.3466
	R2407825-010	Cd (214.439 nm)	0.0001	75.17	15.5951
	R2407825-010	Co (230.786 nm)	0.0000 u	> 100.00	2.3616
	R2407825-010	Cr (267.716 nm)	0.0013	11.89	100.0361
	R2407825-010	Cu (327.395 nm)	0.0002 u	> 100.00	-133.1083
	R2407825-010	Fe (234.350 nm)	3.2290	0.23	77737.4112
	R2407825-010	K (766.491 nm)	44.6485	0.11	53239.5495
	R2407825-010	Mg (279.078 nm)	142.6431 o	0.21	622184.1350
	R2407825-010	Mn (257.610 nm)	0.5429	0.18	199195.3451
	R2407825-010	Mo (202.032 nm)	0.0081	2.76	97.0485
	R2407825-010	Na (588.995 nm)	479.1065 o LR	0.59	8252991.4511
	R2407825-010	Ni (230.299 nm)	0.0129	3.65	179.9534
	R2407825-010	Pb (220.353 nm)	0.0000 u	> 100.00	3.2321
	R2407825-010	Sb (217.582 nm)	0.0016 u	> 100.00	6.3175
	R2407825-010	Se (196.026 nm)	-0.0048 u	51.61	-2.5695
	R2407825-010	Si (252.851 nm)	3.9017	0.20	25988.5167
	R2407825-010	Sn (189.925 nm)	-0.0015 u	41.89	2.9008
	R2407825-010	Sr (216.596 nm)	9.4603 o	0.33	189279.3746
	R2407825-010	Ti (336.122 nm)	-0.0001 u	> 100.00	56.7687
	R2407825-010	Tl (190.794 nm)	0.0037	21.60	0.8587
	R2407825-010	V (292.401 nm)	0.0004	20.42	24.6416
	R2407825-010	Y (360.074 nm)	0.86	0.27	478428.16
	R2407825-010	Y_R (360.074 nm)	0.86	0.27	478491.51
	R2407825-010	Zn (213.857 nm)	0.0031	2.22	216.6483
8/21/2024 19:22:35	R2407825-011	Ag (328.068 nm)	0.0002 u	> 100.00	30.1275
	R2407825-011	Al (237.312 nm)	0.0815	1.15	204.5523
	R2407825-011	As (188.980 nm)	0.0065	18.52	9.0608
	R2407825-011	B (249.772 nm)	1.1374	0.16	50760.1398
	R2407825-011	Ba (230.424 nm)	0.0074	0.94	479.9929
	R2407825-011	Be (313.107 nm)	0.0000 u	> 100.00	-18.9382
	R2407825-011	Ca (317.933 nm)	284.5701 o	0.20	11436638.4279
	R2407825-011	Cd (214.439 nm)	0.0001 u	99.57	17.3217
	R2407825-011	Co (230.786 nm)	0.0005	35.70	11.8653
	R2407825-011	Cr (267.716 nm)	0.0009	4.43	74.1659
	R2407825-011	Cu (327.395 nm)	0.0010	5.69	-94.9064
	R2407825-011	Fe (234.350 nm)	2.2997	0.28	55381.7790
	R2407825-011	K (766.491 nm)	17.2089	0.05	20856.3818
	R2407825-011	Mg (279.078 nm)	531.4712 o	0.30	2318173.3710
	R2407825-011	Mn (257.610 nm)	0.1043	0.19	38284.1027
	R2407825-011	Mo (202.032 nm)	0.0051	3.85	62.8809
	R2407825-011	Na (588.995 nm)	295.1097 o	0.59	5078685.5940
	R2407825-011	Ni (230.299 nm)	0.0280	4.62	384.1364
	R2407825-011	Pb (220.353 nm)	0.0003 u	> 100.00	4.8716
	R2407825-011	Sb (217.582 nm)	0.0006	94.04	4.0518
	R2407825-011	Se (196.026 nm)	-0.0034 u	62.56	-1.3669
	R2407825-011	Si (252.851 nm)	7.7407	2.54	51498.1957
	R2407825-011	Sn (189.925 nm)	0.0001 u	> 100.00	7.3236
	R2407825-011	Sr (216.596 nm)	8.8296 o	0.34	176661.4881
	R2407825-011	Ti (336.122 nm)	0.0020	18.73	386.9030
	R2407825-011	Tl (190.794 nm)	0.0032	44.60	0.3316
	R2407825-011	V (292.401 nm)	0.0005	20.72	28.0123
	R2407825-011	Y (360.074 nm)	0.86	0.29	479776.13
	R2407825-011	Y_R (360.074 nm)	0.86	0.29	479842.37
	R2407825-011	Zn (213.857 nm)	0.0106	0.99	694.9501
8/21/2024 19:25:49	R2407825-012	Ag (328.068 nm)	0.0002	80.63	26.6432

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-012	Al (237.312 nm)	0.8384	0.43	2248.8682
	R2407825-012	As (188.980 nm)	0.0133	6.48	20.9926
	R2407825-012	B (249.772 nm)	0.6397	0.23	28585.4172
	R2407825-012	Ba (230.424 nm)	0.0191	0.55	1223.7827
	R2407825-012	Be (313.107 nm)	0.0000	23.55	-3.9677
	R2407825-012	Ca (317.933 nm)	122.8166 o	0.34	4937628.6537
	R2407825-012	Cd (214.439 nm)	0.0000	76.99	14.8177
	R2407825-012	Co (230.786 nm)	0.0002	53.70	6.4092
	R2407825-012	Cr (267.716 nm)	0.0017	3.72	123.0986
	R2407825-012	Cu (327.395 nm)	0.0119	1.57	405.6840
	R2407825-012	Fe (234.350 nm)	0.9637	0.29	23238.4937
	R2407825-012	K (766.491 nm)	5.4142	0.85	6936.6734
	R2407825-012	Mg (279.078 nm)	91.2416 o	0.33	397981.5941
	R2407825-012	Mn (257.610 nm)	0.1307	0.30	47973.8178
	R2407825-012	Mo (202.032 nm)	0.0255	1.43	292.5095
	R2407825-012	Na (588.995 nm)	195.4805 o	0.16	3359887.5855
	R2407825-012	Ni (230.299 nm)	0.0185	1.44	255.8292
	R2407825-012	Pb (220.353 nm)	0.0004	> 100.00	5.6791
	R2407825-012	Sb (217.582 nm)	0.0015	33.14	6.1878
	R2407825-012	Se (196.026 nm)	-0.0010 u	> 100.00	0.6516
	R2407825-012	Si (252.851 nm)	5.0877	0.22	33869.5826
	R2407825-012	Sn (189.925 nm)	-0.0005 u	43.21	5.5363
	R2407825-012	Sr (216.596 nm)	3.3895	0.19	67821.9280
	R2407825-012	Ti (336.122 nm)	0.0344	1.60	5481.9537
	R2407825-012	Tl (190.794 nm)	0.0038	26.08	0.9535
	R2407825-012	V (292.401 nm)	0.0017	13.75	72.5557
	R2407825-012	Y (360.074 nm)	0.93	0.21	514549.34
	R2407825-012	Y_R (360.074 nm)	0.93	0.21	514627.73
	R2407825-012	Zn (213.857 nm)	0.0062	1.54	414.7390
8/21/2024 19:29:03	R2407825-013	Ag (328.068 nm)	0.0001	> 100.00	24.7747
	R2407825-013	Al (237.312 nm)	0.8018	0.36	2149.9792
	R2407825-013	As (188.980 nm)	0.0000 u	> 100.00	-2.5493
	R2407825-013	B (249.772 nm)	0.1032	0.15	4680.2954
	R2407825-013	Ba (230.424 nm)	0.0146	0.51	934.8504
	R2407825-013	Be (313.107 nm)	0.0000 u	> 100.00	-12.5826
	R2407825-013	Ca (317.933 nm)	165.2427 o	0.34	6642243.8745
	R2407825-013	Cd (214.439 nm)	0.0001 u	> 100.00	15.0903
	R2407825-013	Co (230.786 nm)	0.0005	44.61	12.8814
	R2407825-013	Cr (267.716 nm)	0.0016	4.00	112.4569
	R2407825-013	Cu (327.395 nm)	0.0014	11.99	-80.3733
	R2407825-013	Fe (234.350 nm)	0.8269	0.22	19947.3815
	R2407825-013	K (766.491 nm)	4.3709	1.27	5705.4274
	R2407825-013	Mg (279.078 nm)	271.9813 o	0.28	1186331.4099
	R2407825-013	Mn (257.610 nm)	0.0339	0.17	12461.3050
	R2407825-013	Mo (202.032 nm)	0.0022	6.87	29.8500
	R2407825-013	Na (588.995 nm)	149.7562 o	0.17	2571053.1514
	R2407825-013	Ni (230.299 nm)	0.0271	0.50	372.3158
	R2407825-013	Pb (220.353 nm)	-0.0001 u	> 100.00	2.7826
	R2407825-013	Sb (217.582 nm)	0.0012 u	> 100.00	5.3765
	R2407825-013	Se (196.026 nm)	-0.0024 u	> 100.00	-0.5281
	R2407825-013	Si (252.851 nm)	7.3802	0.11	49103.1429
	R2407825-013	Sn (189.925 nm)	-0.0006 u	> 100.00	5.2249
	R2407825-013	Sr (216.596 nm)	2.9611	0.61	59250.5076
	R2407825-013	Ti (336.122 nm)	0.0271	1.60	4329.0201
	R2407825-013	Tl (190.794 nm)	0.0012 u	> 100.00	-1.6010
	R2407825-013	V (292.401 nm)	0.0018	8.95	76.3091
	R2407825-013	Y (360.074 nm)	0.91	0.31	507595.41

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-013	Y_R (360.074 nm)	0.91	0.31	507633.91
	R2407825-013	Zn (213.857 nm)	0.0082	0.32	541.5238
8/21/2024 19:32:16	R2407825-014	Ag (328.068 nm)	0.0001 u	> 100.00	22.7561
	R2407825-014	Al (237.312 nm)	1.0326	0.24	2773.3210
	R2407825-014	As (188.980 nm)	0.0060	35.26	8.2254
	R2407825-014	B (249.772 nm)	0.4832	0.25	21614.8251
	R2407825-014	Ba (230.424 nm)	0.0171	0.86	1098.1030
	R2407825-014	Be (313.107 nm)	0.0000	23.46	0.7291
	R2407825-014	Ca (317.933 nm)	151.6797 o	0.33	6097304.3294
	R2407825-014	Cd (214.439 nm)	0.0001	31.71	16.7829
	R2407825-014	Co (230.786 nm)	0.0012	7.00	28.7081
	R2407825-014	Cr (267.716 nm)	0.0018	2.25	126.4701
	R2407825-014	Cu (327.395 nm)	0.0009	13.25	-102.9342
	R2407825-014	Fe (234.350 nm)	1.8743	0.25	45146.2335
	R2407825-014	K (766.491 nm)	11.7028	0.27	14358.2353
	R2407825-014	Mg (279.078 nm)	206.2151 o	0.36	899472.3000
	R2407825-014	Mn (257.610 nm)	0.1323	0.23	48552.9927
	R2407825-014	Mo (202.032 nm)	0.0064	4.67	77.7476
	R2407825-014	Na (588.995 nm)	144.1147 o	0.15	2473726.2690
	R2407825-014	Ni (230.299 nm)	0.0358	2.46	489.8947
	R2407825-014	Pb (220.353 nm)	0.0004	54.50	5.4819
	R2407825-014	Sb (217.582 nm)	-0.0001 u	> 100.00	2.3481
	R2407825-014	Se (196.026 nm)	-0.0020 u	> 100.00	-0.1419
	R2407825-014	Si (252.851 nm)	9.8099	0.10	65248.2819
	R2407825-014	Sn (189.925 nm)	-0.0011 u	88.68	4.0344
	R2407825-014	Sr (216.596 nm)	3.5112	0.17	70256.4110
	R2407825-014	Ti (336.122 nm)	0.0297	1.99	4737.7481
	R2407825-014	Tl (190.794 nm)	0.0011	33.06	-1.6946
	R2407825-014	V (292.401 nm)	0.0027	10.57	111.3609
	R2407825-014	Y (360.074 nm)	0.91	0.23	508539.50
	R2407825-014	Y_R (360.074 nm)	0.91	0.23	508620.03
	R2407825-014	Zn (213.857 nm)	0.0055	0.78	369.9741
8/21/2024 19:35:30	R2407825-015	Ag (328.068 nm)	0.0000 u	> 100.00	19.9577
	R2407825-015	Al (237.312 nm)	0.0818	2.30	205.3732
	R2407825-015	As (188.980 nm)	0.0214	5.93	35.3771
	R2407825-015	B (249.772 nm)	1.4092	0.24	62874.0044
	R2407825-015	Ba (230.424 nm)	0.1076	0.31	6826.5243
	R2407825-015	Be (313.107 nm)	0.0000 u	> 100.00	-18.4632
	R2407825-015	Ca (317.933 nm)	229.0194 o	0.28	9204695.0771
	R2407825-015	Cd (214.439 nm)	0.0002	21.33	24.6497
	R2407825-015	Co (230.786 nm)	0.0011	13.58	26.6055
	R2407825-015	Cr (267.716 nm)	0.0019	1.89	130.6830
	R2407825-015	Cu (327.395 nm)	0.0021	8.75	-47.6357
	R2407825-015	Fe (234.350 nm)	0.5448	0.24	13161.4339
	R2407825-015	K (766.491 nm)	13.0309	0.63	15925.5787
	R2407825-015	Mg (279.078 nm)	62.7499 o	0.28	273706.3812
	R2407825-015	Mn (257.610 nm)	0.0849	0.23	31147.9098
	R2407825-015	Mo (202.032 nm)	0.0142	2.76	164.7297
	R2407825-015	Na (588.995 nm)	234.4368 o	0.25	4031959.7331
	R2407825-015	Ni (230.299 nm)	0.0140	2.42	194.4803
	R2407825-015	Pb (220.353 nm)	0.0004	90.28	5.6158
	R2407825-015	Sb (217.582 nm)	-0.0006 u	17.53	1.1031
	R2407825-015	Se (196.026 nm)	-0.0043 u	26.83	-2.1248
	R2407825-015	Si (252.851 nm)	3.3435	0.29	22279.3582
	R2407825-015	Sn (189.925 nm)	-0.0008 u	44.21	4.6977
	R2407825-015	Sr (216.596 nm)	8.8380 o	0.36	176828.2937
	R2407825-015	Ti (336.122 nm)	0.0016	20.09	318.0317

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-015	Tl (190.794 nm)	0.0020	33.79	-0.7860
	R2407825-015	V (292.401 nm)	0.0005	53.65	27.0972
	R2407825-015	Y (360.074 nm)	0.91	0.34	506892.23
	R2407825-015	Y_R (360.074 nm)	0.91	0.34	506948.35
	R2407825-015	Zn (213.857 nm)	0.0035	0.32	241.2398
8/21/2024 19:38:44	Continuing Calibration Verification	Ag (328.068 nm)	0.5057	0.25	32267.0355
	Continuing Calibration Verification	Al (237.312 nm)	9.8270	0.15	26525.9094
	Continuing Calibration Verification	As (188.980 nm)	0.9874	0.29	1742.6941
	Continuing Calibration Verification	B (249.772 nm)	2.3316	0.34	103972.5318
	Continuing Calibration Verification	Ba (230.424 nm)	9.7710	0.70	618509.2110
	Continuing Calibration Verification	Be (313.107 nm)	0.2458	0.32	307477.0409
	Continuing Calibration Verification	Ca (317.933 nm)	24.8485	0.39	1001420.8906
	Continuing Calibration Verification	Cd (214.439 nm)	0.4990	0.33	32361.4985
	Continuing Calibration Verification	Co (230.786 nm)	2.4728	0.14	52735.4510
	Continuing Calibration Verification	Cr (267.716 nm)	0.5133	0.35	29815.8327
	Continuing Calibration Verification	Cu (327.395 nm)	1.2379	0.28	57033.6532
	Continuing Calibration Verification	Fe (234.350 nm)	4.9080	0.39	118130.0989
	Continuing Calibration Verification	K (766.491 nm)	24.6579	0.19	29647.4398
	Continuing Calibration Verification	Mg (279.078 nm)	25.3617	0.35	110626.8132
	Continuing Calibration Verification	Mn (257.610 nm)	0.7326	0.35	268784.6219
	Continuing Calibration Verification	Mo (202.032 nm)	2.5664	0.49	28864.6397
	Continuing Calibration Verification	Na (588.995 nm)	24.8042	0.17	415386.2556
	Continuing Calibration Verification	Ni (230.299 nm)	1.9914	0.28	26905.6942
	Continuing Calibration Verification	Pb (220.353 nm)	0.4952	0.36	2696.3080
	Continuing Calibration Verification	Sb (217.582 nm)	4.9376	0.25	11899.9251
	Continuing Calibration Verification	Se (196.026 nm)	0.4829	0.24	410.8746
	Continuing Calibration Verification	Si (252.851 nm)	9.9178	0.94	65965.2882
	Continuing Calibration Verification	Sn (189.925 nm)	4.9599	0.36	14025.2744
	Continuing Calibration Verification	Sr (216.596 nm)	2.5058	0.52	50141.0933
	Continuing Calibration Verification	Ti (336.122 nm)	2.5813	0.33	406253.3549
	Continuing Calibration Verification	Tl (190.794 nm)	0.9883	0.35	959.9964
	Continuing Calibration Verification	V (292.401 nm)	2.5279	0.29	98202.2571
	Continuing Calibration Verification	Y (360.074 nm)	0.96	0.29	535488.04
	Continuing Calibration Verification	Y_R (360.074 nm)	0.96	0.29	535549.91
	Continuing Calibration Verification	Zn (213.857 nm)	0.9848	0.45	63415.4424
8/21/2024 19:41:57	Continuing Calibration Blank	Ag (328.068 nm)	0.0001	11.53	25.0734
	Continuing Calibration Blank	Al (237.312 nm)	0.0006 u	> 100.00	-14.0049
	Continuing Calibration Blank	As (188.980 nm)	-0.0003 u	> 100.00	-2.9869
	Continuing Calibration Blank	B (249.772 nm)	0.0023	10.19	187.1831
	Continuing Calibration Blank	Ba (230.424 nm)	0.0006	5.67	53.9449
	Continuing Calibration Blank	Be (313.107 nm)	0.0000 u	> 100.00	-14.3000
	Continuing Calibration Blank	Ca (317.933 nm)	0.0029	5.45	3162.5663
	Continuing Calibration Blank	Cd (214.439 nm)	0.0000 u	> 100.00	10.0046
	Continuing Calibration Blank	Co (230.786 nm)	0.0002	50.57	5.6341
	Continuing Calibration Blank	Cr (267.716 nm)	0.0000 u	> 100.00	23.5783
	Continuing Calibration Blank	Cu (327.395 nm)	0.0000 u	> 100.00	-141.4709
	Continuing Calibration Blank	Fe (234.350 nm)	0.0029	17.22	124.4124
	Continuing Calibration Blank	K (766.491 nm)	0.0764	46.11	637.2295
	Continuing Calibration Blank	Mg (279.078 nm)	0.0014	84.10	10.3150
	Continuing Calibration Blank	Mn (257.610 nm)	0.0001	24.22	33.5469
	Continuing Calibration Blank	Mo (202.032 nm)	0.0037	10.46	47.6146
	Continuing Calibration Blank	Na (588.995 nm)	0.1202	6.99	-10460.8349
	Continuing Calibration Blank	Ni (230.299 nm)	-0.0002 u	> 100.00	3.3093
	Continuing Calibration Blank	Pb (220.353 nm)	0.0000 u	> 100.00	3.7277
	Continuing Calibration Blank	Sb (217.582 nm)	0.0069	34.78	19.2121
	Continuing Calibration Blank	Se (196.026 nm)	-0.0003 u	> 100.00	1.2805
	Continuing Calibration Blank	Si (252.851 nm)	0.0073	22.46	111.0951

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank	Sn (189.925 nm)	-0.0003 u	53.32	6.2196
	Continuing Calibration Blank	Sr (216.596 nm)	0.0000 u	> 100.00	7.3513
	Continuing Calibration Blank	Ti (336.122 nm)	0.0043	21.60	743.8556
	Continuing Calibration Blank	Tl (190.794 nm)	0.0027	35.29	-0.1248
	Continuing Calibration Blank	V (292.401 nm)	0.0003	43.37	17.8429
	Continuing Calibration Blank	Y (360.074 nm)	1.00	0.02	557110.86
	Continuing Calibration Blank	Y_R (360.074 nm)	1.00	0.02	557202.31
	Continuing Calibration Blank	Zn (213.857 nm)	0.0001	17.28	19.1197
8/21/2024 19:45:11	R2407825-016	Ag (328.068 nm)	0.0000 u	> 100.00	17.7517
	R2407825-016	Al (237.312 nm)	0.0437	4.68	102.3092
	R2407825-016	As (188.980 nm)	0.0080	9.02	11.7158
	R2407825-016	B (249.772 nm)	1.0554	0.39	47108.3557
	R2407825-016	Ba (230.424 nm)	0.0071	2.08	465.8129
	R2407825-016	Be (313.107 nm)	0.0000 u	> 100.00	-18.3703
	R2407825-016	Ca (317.933 nm)	132.5659 o	0.55	5329340.1855
	R2407825-016	Cd (214.439 nm)	0.0001	45.82	17.0208
	R2407825-016	Co (230.786 nm)	-0.0001 u	18.26	0.3091
	R2407825-016	Cr (267.716 nm)	0.0008	19.04	67.2907
	R2407825-016	Cu (327.395 nm)	0.0005	26.85	-121.1509
	R2407825-016	Fe (234.350 nm)	0.2936	0.45	7117.5837
	R2407825-016	K (766.491 nm)	7.1816	0.35	9022.5384
	R2407825-016	Mg (279.078 nm)	80.8202 o	0.51	352525.5562
	R2407825-016	Mn (257.610 nm)	0.0870	0.48	31934.6700
	R2407825-016	Mo (202.032 nm)	0.0181	1.83	209.5432
	R2407825-016	Na (588.995 nm)	197.1775 o	0.17	3389163.6929
	R2407825-016	Ni (230.299 nm)	0.0129	1.52	179.6406
	R2407825-016	Pb (220.353 nm)	-0.0003 u	> 100.00	1.8236
	R2407825-016	Sb (217.582 nm)	0.0072	11.41	19.9260
	R2407825-016	Se (196.026 nm)	0.0003 u	> 100.00	1.7596
	R2407825-016	Si (252.851 nm)	3.6268	0.42	24162.0481
	R2407825-016	Sn (189.925 nm)	-0.0012 u	79.65	3.6085
	R2407825-016	Sr (216.596 nm)	3.6530	0.37	73093.3920
	R2407825-016	Ti (336.122 nm)	0.0021	12.92	404.6583
	R2407825-016	Tl (190.794 nm)	0.0037	24.09	0.8489
	R2407825-016	V (292.401 nm)	0.0003	26.93	20.2553
	R2407825-016	Y (360.074 nm)	0.92	0.10	512427.63
	R2407825-016	Y_R (360.074 nm)	0.92	0.10	512472.71
	R2407825-016	Zn (213.857 nm)	0.0058	0.66	385.2558
8/21/2024 19:48:25	R2407825-017	Ag (328.068 nm)	0.0001 u	> 100.00	20.7002
	R2407825-017	Al (237.312 nm)	0.3424	0.93	909.1390
	R2407825-017	As (188.980 nm)	0.0097	24.98	14.7068
	R2407825-017	B (249.772 nm)	0.8890	0.11	39694.5471
	R2407825-017	Ba (230.424 nm)	0.0131	0.32	844.2865
	R2407825-017	Be (313.107 nm)	0.0000	15.34	-10.4031
	R2407825-017	Ca (317.933 nm)	155.3325 o	0.36	6244067.6295
	R2407825-017	Cd (214.439 nm)	0.0000 u	> 100.00	12.9244
	R2407825-017	Co (230.786 nm)	0.0002 u	> 100.00	6.8401
	R2407825-017	Cr (267.716 nm)	0.0012	5.26	91.3069
	R2407825-017	Cu (327.395 nm)	0.0005	44.20	-122.0366
	R2407825-017	Fe (234.350 nm)	0.5209	0.41	12587.7029
	R2407825-017	K (766.491 nm)	8.9418	0.44	11099.8436
	R2407825-017	Mg (279.078 nm)	81.8109 o	0.40	356846.7675
	R2407825-017	Mn (257.610 nm)	0.1113	0.28	40855.2796
	R2407825-017	Mo (202.032 nm)	0.0153	0.26	177.9375
	R2407825-017	Na (588.995 nm)	147.7840 o	0.18	2537029.2506
	R2407825-017	Ni (230.299 nm)	0.0194	2.96	267.7062
	R2407825-017	Pb (220.353 nm)	-0.0001 u	> 100.00	3.0237

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-017	Sb (217.582 nm)	0.0027	23.61	9.0202
	R2407825-017	Se (196.026 nm)	-0.0005 u	> 100.00	1.1373
	R2407825-017	Si (252.851 nm)	5.5171	0.28	36722.8450
	R2407825-017	Sn (189.925 nm)	0.0000 u	> 100.00	7.1182
	R2407825-017	Sr (216.596 nm)	4.3887	0.35	87812.9441
	R2407825-017	Ti (336.122 nm)	0.0115	6.95	1881.1881
	R2407825-017	Tl (190.794 nm)	0.0003 u	> 100.00	-2.5000
	R2407825-017	V (292.401 nm)	0.0009	28.97	41.0074
	R2407825-017	Y (360.074 nm)	0.93	0.25	515802.69
	R2407825-017	Y_R (360.074 nm)	0.93	0.26	515871.17
	R2407825-017	Zn (213.857 nm)	0.0028	0.72	196.1002
8/21/2024 19:51:39	R2407825-018	Ag (328.068 nm)	0.0001 u	> 100.00	22.2235
	R2407825-018	Al (237.312 nm)	0.4206	0.43	1120.3384
	R2407825-018	As (188.980 nm)	0.0125	3.71	19.7156
	R2407825-018	B (249.772 nm)	0.8043	0.34	35920.8022
	R2407825-018	Ba (230.424 nm)	0.0127	0.66	818.2685
	R2407825-018	Be (313.107 nm)	0.0000	35.49	-6.6737
	R2407825-018	Ca (317.933 nm)	185.8274 o	0.48	7469305.0262
	R2407825-018	Cd (214.439 nm)	0.0001	35.11	18.5681
	R2407825-018	Co (230.786 nm)	0.0007	16.35	18.0607
	R2407825-018	Cr (267.716 nm)	0.0013	3.56	97.2073
	R2407825-018	Cu (327.395 nm)	0.0007	27.68	-110.3982
	R2407825-018	Fe (234.350 nm)	3.1371	0.37	75526.5867
	R2407825-018	K (766.491 nm)	14.4626	0.57	17615.2866
	R2407825-018	Mg (279.078 nm)	275.0394 o	0.44	1199669.9771
	R2407825-018	Mn (257.610 nm)	0.1266	0.34	46458.1105
	R2407825-018	Mo (202.032 nm)	0.0071	3.76	84.8733
	R2407825-018	Na (588.995 nm)	289.5182 o LR	0.12	4982222.1239
	R2407825-018	Ni (230.299 nm)	0.0357	1.29	487.3409
	R2407825-018	Pb (220.353 nm)	0.0001 u	> 100.00	3.8607
	R2407825-018	Sb (217.582 nm)	0.0029	59.51	9.6455
	R2407825-018	Se (196.026 nm)	0.0007 u	> 100.00	2.1693
	R2407825-018	Si (252.851 nm)	9.7243	1.16	64679.3574
	R2407825-018	Sn (189.925 nm)	-0.0004 u	> 100.00	5.7849
	R2407825-018	Sr (216.596 nm)	5.7377 o	0.53	114801.3369
	R2407825-018	Ti (336.122 nm)	0.0153	5.68	2478.3938
	R2407825-018	Tl (190.794 nm)	0.0010	> 100.00	-1.7627
	R2407825-018	V (292.401 nm)	0.0009	9.02	42.8440
	R2407825-018	Y (360.074 nm)	0.89	0.23	494022.80
	R2407825-018	Y_R (360.074 nm)	0.89	0.23	494078.18
	R2407825-018	Zn (213.857 nm)	0.0041	1.05	281.0960
8/21/2024 19:54:52	R2407825-019	Ag (328.068 nm)	0.0001 u	> 100.00	24.7051
	R2407825-019	Al (237.312 nm)	0.8079	0.25	2166.3518
	R2407825-019	As (188.980 nm)	0.0211	5.80	34.7693
	R2407825-019	B (249.772 nm)	1.9838	0.27	88472.4223
	R2407825-019	Ba (230.424 nm)	0.0167	1.23	1068.9472
	R2407825-019	Be (313.107 nm)	0.0000	30.81	-6.5787
	R2407825-019	Ca (317.933 nm)	272.7263 o LR	0.40	10960773.1106
	R2407825-019	Cd (214.439 nm)	0.0002	25.53	23.7941
	R2407825-019	Co (230.786 nm)	0.0005	40.46	13.0813
	R2407825-019	Cr (267.716 nm)	0.0021	4.22	141.0275
	R2407825-019	Cu (327.395 nm)	0.0041	4.60	46.1037
	R2407825-019	Fe (234.350 nm)	2.2349	0.39	53820.8774
	R2407825-019	K (766.491 nm)	19.7951	0.18	23908.5029
	R2407825-019	Mg (279.078 nm)	275.2704 o	0.46	1200677.6269
	R2407825-019	Mn (257.610 nm)	0.1377	0.34	50534.2862
	R2407825-019	Mo (202.032 nm)	0.0069	4.44	83.5196

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-019	Na (588.995 nm)	226.9667 o	0.16	3903084.9176
	R2407825-019	Ni (230.299 nm)	0.0429	2.91	584.7822
	R2407825-019	Pb (220.353 nm)	0.0033	17.88	21.6989
	R2407825-019	Sb (217.582 nm)	0.0005 u	> 100.00	3.7049
	R2407825-019	Se (196.026 nm)	-0.0003 u	> 100.00	1.3194
	R2407825-019	Si (252.851 nm)	11.6447	2.51	77440.1463
	R2407825-019	Sn (189.925 nm)	-0.0006 u	> 100.00	5.2075
	R2407825-019	Sr (216.596 nm)	9.4746 o	0.60	189564.9223
	R2407825-019	Ti (336.122 nm)	0.0248	1.49	3972.6583
	R2407825-019	Tl (190.794 nm)	0.0018	81.72	-1.0330
	R2407825-019	V (292.401 nm)	0.0021	3.66	88.4859
	R2407825-019	Y (360.074 nm)	0.89	0.07	495228.29
	R2407825-019	Y_R (360.074 nm)	0.89	0.07	495267.54
	R2407825-019	Zn (213.857 nm)	0.0140	0.54	916.2718
8/21/2024 19:58:06	R2407825-020	Ag (328.068 nm)	0.0003 u	> 100.00	33.4132
	R2407825-020	Al (237.312 nm)	0.3775	0.68	1003.9236
	R2407825-020	As (188.980 nm)	0.0088	10.54	13.1217
	R2407825-020	B (249.772 nm)	1.2210	0.36	54487.8318
	R2407825-020	Ba (230.424 nm)	0.0102	0.67	659.3805
	R2407825-020	Be (313.107 nm)	0.0000 u	> 100.00	-15.7983
	R2407825-020	Ca (317.933 nm)	247.3262 o	0.46	9940236.1674
	R2407825-020	Cd (214.439 nm)	0.0001	42.14	19.8374
	R2407825-020	Co (230.786 nm)	0.0000 u	> 100.00	3.1862
	R2407825-020	Cr (267.716 nm)	0.0012	16.00	94.4573
	R2407825-020	Cu (327.395 nm)	0.0008	0.81	-105.1906
	R2407825-020	Fe (234.350 nm)	2.8752	0.44	69226.4463
	R2407825-020	K (766.491 nm)	20.8091	0.23	25105.1354
	R2407825-020	Mg (279.078 nm)	458.0920 o	0.51	1998108.0376
	R2407825-020	Mn (257.610 nm)	0.1830	0.36	67145.6206
	R2407825-020	Mo (202.032 nm)	0.0094	1.36	111.1722
	R2407825-020	Na (588.995 nm)	405.5856 o LR	0.28	6984612.2446
	R2407825-020	Ni (230.299 nm)	0.0324	0.76	442.8018
	R2407825-020	Pb (220.353 nm)	0.0004 u	> 100.00	5.7848
	R2407825-020	Sb (217.582 nm)	0.0014	43.24	5.8347
	R2407825-020	Se (196.026 nm)	-0.0006 u	> 100.00	1.0586
	R2407825-020	Si (252.851 nm)	8.9367	0.34	59445.4900
	R2407825-020	Sn (189.925 nm)	-0.0007 u	36.91	5.1427
	R2407825-020	Sr (216.596 nm)	8.1207 o	0.62	162477.9450
	R2407825-020	Ti (336.122 nm)	0.0119	6.15	1941.3591
	R2407825-020	Tl (190.794 nm)	0.0025 u	> 100.00	-0.3058
	R2407825-020	V (292.401 nm)	0.0011	12.14	52.0012
	R2407825-020	Y (360.074 nm)	0.86	0.12	480115.66
	R2407825-020	Y_R (360.074 nm)	0.86	0.12	480150.21
	R2407825-020	Zn (213.857 nm)	0.0125	0.83	819.1670
8/21/2024 20:01:20	R2407825-001	Ag (328.068 nm)	0.0000 u	> 100.00	17.1345
	R2407825-001	Al (237.312 nm)	0.0132	7.38	20.1068
	R2407825-001	As (188.980 nm)	0.0094	10.20	14.1620
	R2407825-001	B (249.772 nm)	0.7083	0.35	31645.2109
	R2407825-001	Ba (230.424 nm)	0.0204	0.23	1302.4483
	R2407825-001	Be (313.107 nm)	0.0000 u	> 100.00	-19.2315
	R2407825-001	Ca (317.933 nm)	188.9001 o	0.49	7592764.3784
	R2407825-001	Cd (214.439 nm)	0.0001	76.63	14.9617
	R2407825-001	Co (230.786 nm)	0.0000 u	> 100.00	2.8857
	R2407825-001	Cr (267.716 nm)	0.0007	15.25	59.7756
	R2407825-001	Cu (327.395 nm)	0.0010	10.66	-98.3851
	R2407825-001	Fe (234.350 nm)	0.2031	0.54	4940.4274
	R2407825-001	K (766.491 nm)	9.3371	0.29	11566.3431

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-001	Mg (279.078 nm)	232.0400 o	0.47	1012115.3925
	R2407825-001	Mn (257.610 nm)	0.2444	0.38	89679.3417
	R2407825-001	Mo (202.032 nm)	0.0205	0.39	235.9453
	R2407825-001	Na (588.995 nm)	227.3962 o	0.10	3910494.9380
	R2407825-001	Ni (230.299 nm)	0.0159	5.16	220.3644
	R2407825-001	Pb (220.353 nm)	0.0013	32.14	10.6521
	R2407825-001	Sb (217.582 nm)	0.0013	26.22	5.7017
	R2407825-001	Se (196.026 nm)	-0.0021 u	99.69	-0.2857
	R2407825-001	Si (252.851 nm)	4.3085	0.48	28692.0361
	R2407825-001	Sn (189.925 nm)	-0.0008 u	> 100.00	4.8905
	R2407825-001	Sr (216.596 nm)	5.5109 o	0.36	110264.1817
	R2407825-001	Ti (336.122 nm)	0.0003	14.99	106.3826
	R2407825-001	Tl (190.794 nm)	0.0036	38.15	0.7182
	R2407825-001	V (292.401 nm)	0.0006	26.15	30.8378
	R2407825-001	Y (360.074 nm)	0.90	0.16	502328.47
	R2407825-001	Y_R (360.074 nm)	0.90	0.16	502390.76
	R2407825-001	Zn (213.857 nm)	0.0031	2.17	215.9097
8/21/2024 20:04:34	Continuing Calibration Verification	Ag (328.068 nm)	0.5059	0.29	32281.3227
	Continuing Calibration Verification	Al (237.312 nm)	9.8180	0.17	26501.6538
	Continuing Calibration Verification	As (188.980 nm)	0.9866	0.06	1741.3001
	Continuing Calibration Verification	B (249.772 nm)	2.3323	0.34	104004.2419
	Continuing Calibration Verification	Ba (230.424 nm)	9.7710	0.20	618507.9802
	Continuing Calibration Verification	Be (313.107 nm)	0.2459	0.43	307654.3001
	Continuing Calibration Verification	Ca (317.933 nm)	24.8440	0.43	1001237.4629
	Continuing Calibration Verification	Cd (214.439 nm)	0.4993	0.46	32380.5437
	Continuing Calibration Verification	Co (230.786 nm)	2.4674	0.29	52621.3008
	Continuing Calibration Verification	Cr (267.716 nm)	0.5129	0.43	29790.0932
	Continuing Calibration Verification	Cu (327.395 nm)	1.2389	0.28	57079.9387
	Continuing Calibration Verification	Fe (234.350 nm)	4.9082	0.41	118135.4457
	Continuing Calibration Verification	K (766.491 nm)	24.6469	0.08	29634.4617
	Continuing Calibration Verification	Mg (279.078 nm)	25.3920	0.36	110759.0954
	Continuing Calibration Verification	Mn (257.610 nm)	0.7326	0.41	268781.6066
	Continuing Calibration Verification	Mo (202.032 nm)	2.5660	0.42	28859.7500
	Continuing Calibration Verification	Na (588.995 nm)	24.7935	0.21	415200.7425
	Continuing Calibration Verification	Ni (230.299 nm)	1.9923	0.41	26917.2950
	Continuing Calibration Verification	Pb (220.353 nm)	0.4962	0.35	2701.7682
	Continuing Calibration Verification	Sb (217.582 nm)	4.9384	0.18	11901.9502
	Continuing Calibration Verification	Se (196.026 nm)	0.4821	0.61	410.1537
	Continuing Calibration Verification	Si (252.851 nm)	10.0180	1.26	66630.9320
	Continuing Calibration Verification	Sn (189.925 nm)	4.9657	0.34	14041.6978
	Continuing Calibration Verification	Sr (216.596 nm)	2.5060	0.51	50145.5126
	Continuing Calibration Verification	Ti (336.122 nm)	2.5821	0.38	406379.2720
	Continuing Calibration Verification	Tl (190.794 nm)	0.9886	0.72	960.3444
	Continuing Calibration Verification	V (292.401 nm)	2.5286	0.39	98227.4912
	Continuing Calibration Verification	Y (360.074 nm)	0.96	0.26	534941.11
	Continuing Calibration Verification	Y_R (360.074 nm)	0.96	0.26	535022.01
	Continuing Calibration Verification	Zn (213.857 nm)	0.9852	0.43	63441.1545
8/21/2024 20:07:48	Continuing Calibration Blank	Ag (328.068 nm)	0.0001 u	> 100.00	22.7901
	Continuing Calibration Blank	Al (237.312 nm)	0.0019	48.97	-10.5571
	Continuing Calibration Blank	As (188.980 nm)	-0.0019 u	19.00	-5.9056
	Continuing Calibration Blank	B (249.772 nm)	0.0026	10.75	200.5622
	Continuing Calibration Blank	Ba (230.424 nm)	0.0006	13.30	53.5371
	Continuing Calibration Blank	Be (313.107 nm)	0.0000	77.49	-12.8282
	Continuing Calibration Blank	Ca (317.933 nm)	0.0035	1.94	3186.6624
	Continuing Calibration Blank	Cd (214.439 nm)	0.0000 u	> 100.00	12.4655
	Continuing Calibration Blank	Co (230.786 nm)	0.0003	17.80	7.6178
	Continuing Calibration Blank	Cr (267.716 nm)	0.0002	1.74	32.2895

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank	Cu (327.395 nm)	-0.0001 u	> 100.00	-147.3525
	Continuing Calibration Blank	Fe (234.350 nm)	0.0032	12.30	131.4283
	Continuing Calibration Blank	K (766.491 nm)	0.0953	26.56	659.4717
	Continuing Calibration Blank	Mg (279.078 nm)	0.0019	67.89	12.5691
	Continuing Calibration Blank	Mn (257.610 nm)	0.0001	7.69	38.6841
	Continuing Calibration Blank	Mo (202.032 nm)	0.0038	11.55	47.7030
	Continuing Calibration Blank	Na (588.995 nm)	0.1327	8.01	-10245.9600
	Continuing Calibration Blank	Ni (230.299 nm)	0.0003 u	> 100.00	9.6457
	Continuing Calibration Blank	Pb (220.353 nm)	-0.0013 u	32.53	-3.7010
	Continuing Calibration Blank	Sb (217.582 nm)	0.0088	12.36	23.8750
	Continuing Calibration Blank	Se (196.026 nm)	-0.0004 u	> 100.00	1.2348
	Continuing Calibration Blank	Si (252.851 nm)	0.0112	13.79	136.6974
	Continuing Calibration Blank	Sn (189.925 nm)	-0.0009 u	16.90	4.5033
	Continuing Calibration Blank	Sr (216.596 nm)	0.0001	77.53	10.2757
	Continuing Calibration Blank	Ti (336.122 nm)	0.0044	22.47	753.1226
	Continuing Calibration Blank	Tl (190.794 nm)	0.0005 u	> 100.00	-2.3051
	Continuing Calibration Blank	V (292.401 nm)	0.0004	36.02	21.6851
	Continuing Calibration Blank	Y (360.074 nm)	1.00	0.10	556992.12
	Continuing Calibration Blank	Y_R (360.074 nm)	1.00	0.10	557058.53
	Continuing Calibration Blank	Zn (213.857 nm)	0.0001	44.51	19.4557
8/21/2024 20:11:02	PBW-443446	Ag (328.068 nm)	0.0000 u	95.01	16.7161
	PBW-443446	Al (237.312 nm)	0.0014	68.87	-11.9832
	PBW-443446	As (188.980 nm)	-0.0008 u	40.05	-3.8521
	PBW-443446	B (249.772 nm)	0.0027	0.99	202.9904
	PBW-443446	Ba (230.424 nm)	0.0000 u	> 100.00	15.8775
	PBW-443446	Be (313.107 nm)	0.0000	> 100.00	-13.9919
	PBW-443446	Ca (317.933 nm)	0.0068	0.89	3318.4947
	PBW-443446	Cd (214.439 nm)	0.0000 u	> 100.00	11.6704
	PBW-443446	Co (230.786 nm)	0.0000 u	27.34	1.3228
	PBW-443446	Cr (267.716 nm)	0.0004	5.20	42.3103
	PBW-443446	Cu (327.395 nm)	-0.0001 u	53.72	-146.9606
	PBW-443446	Fe (234.350 nm)	0.0037	7.27	144.5207
	PBW-443446	K (766.491 nm)	0.0355 u	> 100.00	588.8791
	PBW-443446	Mg (279.078 nm)	-0.0003 u	> 100.00	2.8020
	PBW-443446	Mn (257.610 nm)	0.0001	13.28	33.0180
	PBW-443446	Mo (202.032 nm)	0.0011	52.61	18.0859
	PBW-443446	Na (588.995 nm)	0.1199	8.69	-10465.9425
	PBW-443446	Ni (230.299 nm)	0.0001	84.39	7.0710
	PBW-443446	Pb (220.353 nm)	-0.0004 u	64.02	1.3279
	PBW-443446	Sb (217.582 nm)	0.0088	8.85	23.8525
	PBW-443446	Se (196.026 nm)	0.0000 u	> 100.00	1.5164
	PBW-443446	Si (252.851 nm)	0.0193	11.05	190.5016
	PBW-443446	Sn (189.925 nm)	0.0000 u	> 100.00	6.9895
	PBW-443446	Sr (216.596 nm)	-0.0001 u	> 100.00	5.7223
	PBW-443446	Ti (336.122 nm)	0.0015	33.76	309.2118
	PBW-443446	Tl (190.794 nm)	0.0015	> 100.00	-1.2902
	PBW-443446	V (292.401 nm)	0.0000 u	> 100.00	9.3495
	PBW-443446	Y (360.074 nm)	1.02	0.10	565705.51
	PBW-443446	Y_R (360.074 nm)	1.02	0.10	565797.76
	PBW-443446	Zn (213.857 nm)	0.0002	18.58	28.0019
8/21/2024 20:14:15	LCSW-443446	Ag (328.068 nm)	0.0476	0.39	3055.5449
	LCSW-443446	Al (237.312 nm)	1.8973	0.30	5108.8374
	LCSW-443446	As (188.980 nm)	0.0372	3.73	63.2237
	LCSW-443446	B (249.772 nm)	0.8835	0.45	39448.0866
	LCSW-443446	Ba (230.424 nm)	1.8832	0.25	119215.0281
	LCSW-443446	Be (313.107 nm)	0.0473	0.43	59102.6640
	LCSW-443446	Ca (317.933 nm)	1.8835	0.51	78720.0896

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	LCSW-443446	Cd (214.439 nm)	0.0487	0.33	3167.1925
	LCSW-443446	Co (230.786 nm)	0.4785	0.43	10207.5555
	LCSW-443446	Cr (267.716 nm)	0.1932	0.49	11232.9079
	LCSW-443446	Cu (327.395 nm)	0.2442	0.31	11137.7437
	LCSW-443446	Fe (234.350 nm)	0.9583	0.45	23109.6290
	LCSW-443446	K (766.491 nm)	18.2481	0.06	22082.7794
	LCSW-443446	Mg (279.078 nm)	1.8786	0.38	8198.2068
	LCSW-443446	Mn (257.610 nm)	0.4620	0.46	169497.1040
	LCSW-443446	Mo (202.032 nm)	0.4775	0.80	5374.8792
	LCSW-443446	Na (588.995 nm)	18.6518	0.08	309245.5135
	LCSW-443446	Ni (230.299 nm)	0.4713	0.47	6372.0036
	LCSW-443446	Pb (220.353 nm)	0.4904	0.34	2669.9969
	LCSW-443446	Sb (217.582 nm)	0.4773	0.50	1152.6759
	LCSW-443446	Se (196.026 nm)	0.9518	0.35	808.2981
	LCSW-443446	Si (252.851 nm)	0.3204	1.21	2191.0538
	LCSW-443446	Sn (189.925 nm)	4.6693	0.56	13204.0305
	LCSW-443446	Sr (216.596 nm)	1.9107	0.55	38235.1754
	LCSW-443446	Ti (336.122 nm)	0.4853	0.38	76439.9149
	LCSW-443446	Tl (190.794 nm)	1.8911	0.76	1839.4638
	LCSW-443446	V (292.401 nm)	0.4735	0.42	18401.6438
	LCSW-443446	Y (360.074 nm)	0.99	0.08	551564.67
	LCSW-443446	Y_R (360.074 nm)	0.99	0.08	551652.84
	LCSW-443446	Zn (213.857 nm)	0.4815	0.41	31012.1248
8/21/2024 20:17:28	R2407573-002	Ag (328.068 nm)	0.0001 u	> 100.00	20.1446
	R2407573-002	Al (237.312 nm)	0.0456	2.85	107.4254
	R2407573-002	As (188.980 nm)	-0.0005 u	> 100.00	-3.4122
	R2407573-002	B (249.772 nm)	0.0564	0.16	2596.5399
	R2407573-002	Ba (230.424 nm)	0.2047	0.30	12970.6582
	R2407573-002	Be (313.107 nm)	0.0000 u	> 100.00	-21.1786
	R2407573-002	Ca (317.933 nm)	163.5763 o	0.34	6575290.9010
	R2407573-002	Cd (214.439 nm)	0.0000	> 100.00	14.7632
	R2407573-002	Co (230.786 nm)	0.0003	47.74	8.0807
	R2407573-002	Cr (267.716 nm)	0.0007	9.58	63.7020
	R2407573-002	Cu (327.395 nm)	0.0015	22.41	-74.8551
	R2407573-002	Fe (234.350 nm)	0.0435	1.08	1100.6358
	R2407573-002	K (766.491 nm)	5.1623	0.37	6639.4202
	R2407573-002	Mg (279.078 nm)	31.7555	0.25	138515.0856
	R2407573-002	Mn (257.610 nm)	0.0031	0.47	1154.5880
	R2407573-002	Mo (202.032 nm)	0.0026	20.57	34.8983
	R2407573-002	Na (588.995 nm)	50.3141	0.25	855481.1535
	R2407573-002	Ni (230.299 nm)	0.0122	2.52	170.1901
	R2407573-002	Pb (220.353 nm)	-0.0005 u	27.88	0.5726
	R2407573-002	Sb (217.582 nm)	0.0021 u	> 100.00	7.6682
	R2407573-002	Se (196.026 nm)	0.0007 u	> 100.00	2.1174
	R2407573-002	Si (252.851 nm)	2.4132	0.13	16097.8747
	R2407573-002	Sn (189.925 nm)	0.0008 u	> 100.00	9.4217
	R2407573-002	Sr (216.596 nm)	13.0738 o	0.28	261572.8698
	R2407573-002	Ti (336.122 nm)	0.0022	21.91	416.4180
	R2407573-002	Tl (190.794 nm)	0.0034	52.36	0.5235
	R2407573-002	V (292.401 nm)	0.0003	92.56	18.2871
	R2407573-002	Y (360.074 nm)	0.94	0.22	523540.36
	R2407573-002	Y_R (360.074 nm)	0.94	0.22	523625.44
	R2407573-002	Zn (213.857 nm)	0.0040	1.67	272.8840
8/21/2024 20:20:42	R2407573-004	Ag (328.068 nm)	0.0000 u	> 100.00	19.5361
	R2407573-004	Al (237.312 nm)	1.0210	0.40	2742.0014
	R2407573-004	As (188.980 nm)	0.0011	77.13	-0.5619
	R2407573-004	B (249.772 nm)	0.0479	0.61	2217.8264

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407573-004	Ba (230.424 nm)	0.1556	0.55	9864.8343
	R2407573-004	Be (313.107 nm)	0.0000	99.49	-5.4176
	R2407573-004	Ca (317.933 nm)	198.5656 o	0.73	7981108.8806
	R2407573-004	Cd (214.439 nm)	0.0001	51.36	19.2351
	R2407573-004	Co (230.786 nm)	0.0012	17.44	27.0778
	R2407573-004	Cr (267.716 nm)	0.0025	5.82	167.0732
	R2407573-004	Cu (327.395 nm)	0.0047	2.47	72.5399
	R2407573-004	Fe (234.350 nm)	1.5740	0.64	37922.7740
	R2407573-004	K (766.491 nm)	4.5073	0.56	5866.3715
	R2407573-004	Mg (279.078 nm)	32.5274	0.63	141882.0308
	R2407573-004	Mn (257.610 nm)	0.0887	0.59	32547.1464
	R2407573-004	Mo (202.032 nm)	0.0013	11.79	20.6147
	R2407573-004	Na (588.995 nm)	35.1821	0.04	594425.6941
	R2407573-004	Ni (230.299 nm)	0.0209	1.11	288.6216
	R2407573-004	Pb (220.353 nm)	0.0008	29.16	7.8822
	R2407573-004	Sb (217.582 nm)	0.0031	36.06	10.0679
	R2407573-004	Se (196.026 nm)	-0.0013 u	41.75	0.4016
	R2407573-004	Si (252.851 nm)	4.6750	0.40	31126.9188
	R2407573-004	Sn (189.925 nm)	-0.0003 u	> 100.00	6.0626
	R2407573-004	Sr (216.596 nm)	6.9535 o	0.39	139126.4613
	R2407573-004	Ti (336.122 nm)	0.0268	3.59	4285.4791
	R2407573-004	Tl (190.794 nm)	0.0009 u	> 100.00	-1.8949
	R2407573-004	V (292.401 nm)	0.0023	7.48	97.1350
	R2407573-004	Y (360.074 nm)	0.94	0.08	521822.93
	R2407573-004	Y_R (360.074 nm)	0.94	0.08	521902.84
	R2407573-004	Zn (213.857 nm)	0.0173	0.92	1128.9589
8/21/2024 20:23:56	R2407573-004S	Ag (328.068 nm)	0.0498	0.40	3194.7278
	R2407573-004S	Al (237.312 nm)	2.9852	0.06	8046.8685
	R2407573-004S	As (188.980 nm)	0.0405	3.68	69.0754
	R2407573-004S	B (249.772 nm)	0.9902	0.33	44204.4753
	R2407573-004S	Ba (230.424 nm)	2.0547	0.42	130072.8269
	R2407573-004S	Be (313.107 nm)	0.0489	0.35	61171.0182
	R2407573-004S	Ca (317.933 nm)	195.8222 o	0.45	7870881.8907
	R2407573-004S	Cd (214.439 nm)	0.0483	0.47	3140.8940
	R2407573-004S	Co (230.786 nm)	0.4728	0.43	10084.9682
	R2407573-004S	Cr (267.716 nm)	0.1984	0.31	11540.0669
	R2407573-004S	Cu (327.395 nm)	0.2545	0.10	11612.7245
	R2407573-004S	Fe (234.350 nm)	2.4867	0.36	59880.2091
	R2407573-004S	K (766.491 nm)	25.0155	0.05	30069.4171
	R2407573-004S	Mg (279.078 nm)	33.7332	0.44	147141.6738
	R2407573-004S	Mn (257.610 nm)	0.5592	0.37	205158.7211
	R2407573-004S	Mo (202.032 nm)	0.4889	0.71	5502.9733
	R2407573-004S	Na (588.995 nm)	53.9330	0.10	917914.8354
	R2407573-004S	Ni (230.299 nm)	0.4833	0.51	6534.2138
	R2407573-004S	Pb (220.353 nm)	0.4858	0.53	2645.0601
	R2407573-004S	Sb (217.582 nm)	0.4985	0.26	1203.8290
	R2407573-004S	Se (196.026 nm)	1.0092	0.57	856.9885
	R2407573-004S	Si (252.851 nm)	4.8697	0.16	32421.1276
	R2407573-004S	Sn (189.925 nm)	4.8119	0.47	13607.0517
	R2407573-004S	Sr (216.596 nm)	8.6950 o	0.31	173968.2077
	R2407573-004S	Ti (336.122 nm)	0.5165	0.33	81345.6576
	R2407573-004S	Tl (190.794 nm)	1.8912	0.27	1839.6364
	R2407573-004S	V (292.401 nm)	0.4938	0.40	19187.5931
	R2407573-004S	Y (360.074 nm)	0.93	0.19	519719.27
	R2407573-004S	Y_R (360.074 nm)	0.93	0.19	519800.96
	R2407573-004S	Zn (213.857 nm)	0.5066	0.30	32629.6880
8/21/2024 20:27:09	R2407573-004SD	Ag (328.068 nm)	0.0494	0.42	3164.3486

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407573-004SD	Al (237.312 nm)	2.9256	0.11	7886.0015
	R2407573-004SD	As (188.980 nm)	0.0393	2.89	66.9431
	R2407573-004SD	B (249.772 nm)	0.9787	0.16	43690.8345
	R2407573-004SD	Ba (230.424 nm)	2.0367	0.31	128931.3891
	R2407573-004SD	Be (313.107 nm)	0.0482	0.22	60329.2644
	R2407573-004SD	Ca (317.933 nm)	196.8729 o	0.38	7913097.8246
	R2407573-004SD	Cd (214.439 nm)	0.0477	0.44	3103.6084
	R2407573-004SD	Co (230.786 nm)	0.4666	0.29	9952.7432
	R2407573-004SD	Cr (267.716 nm)	0.1957	0.36	11382.8268
	R2407573-004SD	Cu (327.395 nm)	0.2510	0.09	11451.2208
	R2407573-004SD	Fe (234.350 nm)	2.4535	0.26	59080.5557
	R2407573-004SD	K (766.491 nm)	24.7480	0.07	29753.7350
	R2407573-004SD	Mg (279.078 nm)	33.8567	0.32	147680.2337
	R2407573-004SD	Mn (257.610 nm)	0.5535	0.25	203063.9184
	R2407573-004SD	Mo (202.032 nm)	0.4823	0.77	5428.5901
	R2407573-004SD	Na (588.995 nm)	53.7425	0.26	914628.3350
	R2407573-004SD	Ni (230.299 nm)	0.4772	0.34	6452.3324
	R2407573-004SD	Pb (220.353 nm)	0.4806	0.14	2616.7800
	R2407573-004SD	Sb (217.582 nm)	0.4890	0.37	1180.8358
	R2407573-004SD	Se (196.026 nm)	1.0051	0.38	853.5317
	R2407573-004SD	Si (252.851 nm)	4.8150	0.11	32057.5239
	R2407573-004SD	Sn (189.925 nm)	4.7966	0.41	13563.9206
	R2407573-004SD	Sr (216.596 nm)	8.7301 o	0.45	174670.6379
	R2407573-004SD	Ti (336.122 nm)	0.5066	0.20	79787.3446
	R2407573-004SD	Tl (190.794 nm)	1.8638	0.29	1812.9453
	R2407573-004SD	V (292.401 nm)	0.4876	0.27	18949.4427
	R2407573-004SD	Y (360.074 nm)	0.93	0.11	519838.56
	R2407573-004SD	Y_R (360.074 nm)	0.93	0.11	519898.59
	R2407573-004SD	Zn (213.857 nm)	0.5005	0.28	32235.5872
8/21/2024 20:30:23	R2407573-004A	Ag (328.068 nm)	0.0502	0.72	3215.7658
	R2407573-004A	Al (237.312 nm)	2.9999	0.28	8086.7407
	R2407573-004A	As (188.980 nm)	0.0400	6.19	68.2785
	R2407573-004A	B (249.772 nm)	0.9980	0.49	44552.2454
	R2407573-004A	Ba (230.424 nm)	2.0669	0.60	130843.7606
	R2407573-004A	Be (313.107 nm)	0.0491	0.57	61413.3417
	R2407573-004A	Ca (317.933 nm)	194.3664 o	0.65	7812389.5741
	R2407573-004A	Cd (214.439 nm)	0.0484	0.72	3150.0590
	R2407573-004A	Co (230.786 nm)	0.4746	0.41	10123.0223
	R2407573-004A	Cr (267.716 nm)	0.1990	0.54	11572.7698
	R2407573-004A	Cu (327.395 nm)	0.2553	0.36	11649.6993
	R2407573-004A	Fe (234.350 nm)	2.5025	0.53	60259.4164
	R2407573-004A	K (766.491 nm)	25.1414	0.12	30218.0481
	R2407573-004A	Mg (279.078 nm)	33.4822	0.62	146046.8336
	R2407573-004A	Mn (257.610 nm)	0.5603	0.57	205580.1168
	R2407573-004A	Mo (202.032 nm)	0.5080	0.83	5717.6851
	R2407573-004A	Na (588.995 nm)	53.6757	0.07	913476.5387
	R2407573-004A	Ni (230.299 nm)	0.4850	0.52	6556.4890
	R2407573-004A	Pb (220.353 nm)	0.4872	0.63	2652.4166
	R2407573-004A	Sb (217.582 nm)	0.5154	0.54	1244.4613
	R2407573-004A	Se (196.026 nm)	1.0331	0.82	877.2103
	R2407573-004A	Si (252.851 nm)	4.9319	0.36	32834.0855
	R2407573-004A	Sn (189.925 nm)	4.9678	0.56	14047.5556
	R2407573-004A	Sr (216.596 nm)	8.6953 o	0.48	173974.5109
	R2407573-004A	Ti (336.122 nm)	0.5403	0.33	85085.0948
	R2407573-004A	Tl (190.794 nm)	1.8978	0.39	1846.0641
	R2407573-004A	V (292.401 nm)	0.4962	0.57	19283.0285
	R2407573-004A	Y (360.074 nm)	0.93	0.05	519171.22

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407573-004A	Y_R (360.074 nm)	0.93	0.05	519235.73
	R2407573-004A	Zn (213.857 nm)	0.5111	0.48	32916.4734
8/21/2024 20:33:36	R2407573-004L 5X	Ag (328.068 nm)	0.0001 u	> 100.00	21.0914
	R2407573-004L 5X	Al (237.312 nm)	0.2123	1.45	557.6574
	R2407573-004L 5X	As (188.980 nm)	-0.0012 u	> 100.00	-4.6002
	R2407573-004L 5X	B (249.772 nm)	0.0105	1.26	550.8414
	R2407573-004L 5X	Ba (230.424 nm)	0.0317	0.08	2019.5880
	R2407573-004L 5X	Be (313.107 nm)	0.0000 u	> 100.00	-17.2537
	R2407573-004L 5X	Ca (317.933 nm)	42.2508	0.06	1700616.0983
	R2407573-004L 5X	Cd (214.439 nm)	0.0000 u	> 100.00	11.1952
	R2407573-004L 5X	Co (230.786 nm)	0.0003	82.61	9.4807
	R2407573-004L 5X	Cr (267.716 nm)	0.0006	16.15	54.8351
	R2407573-004L 5X	Cu (327.395 nm)	0.0008	3.99	-107.1205
	R2407573-004L 5X	Fe (234.350 nm)	0.3254	0.06	7882.8236
	R2407573-004L 5X	K (766.491 nm)	0.8689	2.84	1572.4065
	R2407573-004L 5X	Mg (279.078 nm)	6.6685	0.08	29090.9445
	R2407573-004L 5X	Mn (257.610 nm)	0.0181	0.04	6655.0241
	R2407573-004L 5X	Mo (202.032 nm)	0.0024	24.15	32.3786
	R2407573-004L 5X	Na (588.995 nm)	6.9368	0.30	107138.5115
	R2407573-004L 5X	Ni (230.299 nm)	0.0040	5.85	60.0429
	R2407573-004L 5X	Pb (220.353 nm)	0.0002	> 100.00	4.4938
	R2407573-004L 5X	Sb (217.582 nm)	0.0010 u	> 100.00	4.9040
	R2407573-004L 5X	Se (196.026 nm)	0.0033	32.47	4.3177
	R2407573-004L 5X	Si (252.851 nm)	0.9603	0.37	6443.6518
	R2407573-004L 5X	Sn (189.925 nm)	0.0007	15.00	9.1491
	R2407573-004L 5X	Sr (216.596 nm)	1.4336	0.02	28689.9125
	R2407573-004L 5X	Ti (336.122 nm)	0.0072	4.32	1204.3423
	R2407573-004L 5X	Tl (190.794 nm)	0.0024	51.89	-0.4242
	R2407573-004L 5X	V (292.401 nm)	0.0004	32.27	25.1920
	R2407573-004L 5X	Y (360.074 nm)	0.98	0.31	547391.74
	R2407573-004L 5X	Y_R (360.074 nm)	0.98	0.32	547477.80
	R2407573-004L 5X	Zn (213.857 nm)	0.0034	1.61	234.8104
8/21/2024 20:36:50	R2407573-006	Ag (328.068 nm)	0.0000 u	> 100.00	17.1313
	R2407573-006	Al (237.312 nm)	0.1639	0.21	427.1305
	R2407573-006	As (188.980 nm)	0.0003 u	> 100.00	-2.0022
	R2407573-006	B (249.772 nm)	0.1176	0.58	5323.2283
	R2407573-006	Ba (230.424 nm)	0.1144	0.53	7254.7667
	R2407573-006	Be (313.107 nm)	0.0000 u	> 100.00	-21.4648
	R2407573-006	Ca (317.933 nm)	239.2253 o	0.67	9614753.6252
	R2407573-006	Cd (214.439 nm)	0.0001	55.19	16.3260
	R2407573-006	Co (230.786 nm)	0.0003	81.14	9.6146
	R2407573-006	Cr (267.716 nm)	0.0010	13.11	82.3791
	R2407573-006	Cu (327.395 nm)	0.0005	33.67	-117.8530
	R2407573-006	Fe (234.350 nm)	0.1382	0.74	3379.0458
	R2407573-006	K (766.491 nm)	13.6554	0.51	16662.6670
	R2407573-006	Mg (279.078 nm)	71.5603 o	0.63	312135.5447
	R2407573-006	Mn (257.610 nm)	0.0320	0.71	11740.5941
	R2407573-006	Mo (202.032 nm)	0.0034	9.82	43.4877
	R2407573-006	Na (588.995 nm)	114.3457 o	0.24	1960151.9793
	R2407573-006	Ni (230.299 nm)	0.0167	1.27	231.0729
	R2407573-006	Pb (220.353 nm)	0.0000 u	> 100.00	3.5978
	R2407573-006	Sb (217.582 nm)	0.0006 u	> 100.00	3.9345
	R2407573-006	Se (196.026 nm)	-0.0006 u	> 100.00	1.0167
	R2407573-006	Si (252.851 nm)	3.7540	0.53	25006.9927
	R2407573-006	Sn (189.925 nm)	-0.0002 u	61.32	6.5818
	R2407573-006	Sr (216.596 nm)	28.7365 o	0.66	574935.7489
	R2407573-006	Ti (336.122 nm)	0.0039	15.59	687.9396

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407573-006	Tl (190.794 nm)	0.0037	58.61	0.8148
	R2407573-006	V (292.401 nm)	0.0004	23.61	23.4231
	R2407573-006	Y (360.074 nm)	0.92	0.10	508993.84
	R2407573-006	Y_R (360.074 nm)	0.92	0.10	509061.86
	R2407573-006	Zn (213.857 nm)	0.0030	2.26	204.8201
8/21/2024 20:40:04	R2407573-008	Ag (328.068 nm)	0.0001 u	> 100.00	25.8374
	R2407573-008	Al (237.312 nm)	1.1809	0.18	3173.8101
	R2407573-008	As (188.980 nm)	0.0006	7.40	-1.3819
	R2407573-008	B (249.772 nm)	0.0807	0.40	3681.1866
	R2407573-008	Ba (230.424 nm)	0.3516	0.46	22272.1315
	R2407573-008	Be (313.107 nm)	0.0000	49.57	-5.9002
	R2407573-008	Ca (317.933 nm)	120.1657 o	0.40	4831117.9220
	R2407573-008	Cd (214.439 nm)	0.0003	32.06	30.9643
	R2407573-008	Co (230.786 nm)	0.0043	2.25	93.3875
	R2407573-008	Cr (267.716 nm)	0.0031	0.60	203.8743
	R2407573-008	Cu (327.395 nm)	0.0061	0.85	137.9942
	R2407573-008	Fe (234.350 nm)	1.6470	0.46	39678.5566
	R2407573-008	K (766.491 nm)	5.6605	0.34	7227.3287
	R2407573-008	Mg (279.078 nm)	25.5264	0.45	111345.0894
	R2407573-008	Mn (257.610 nm)	0.0735	0.42	26988.3530
	R2407573-008	Mo (202.032 nm)	0.0021	7.38	28.9840
	R2407573-008	Na (588.995 nm)	53.9666	0.10	918495.0213
	R2407573-008	Ni (230.299 nm)	0.0189	1.86	261.3631
	R2407573-008	Pb (220.353 nm)	0.0020	20.78	14.3678
	R2407573-008	Sb (217.582 nm)	-0.0008 u	63.49	0.6090
	R2407573-008	Se (196.026 nm)	-0.0028 u	63.69	-0.8569
	R2407573-008	Si (252.851 nm)	3.9584	0.25	26365.3921
	R2407573-008	Sn (189.925 nm)	0.0007	92.62	9.0129
	R2407573-008	Sr (216.596 nm)	18.5472 o	0.55	371078.4305
	R2407573-008	Ti (336.122 nm)	0.0292	1.30	4659.2004
	R2407573-008	Tl (190.794 nm)	0.0025	45.82	-0.3311
	R2407573-008	V (292.401 nm)	0.0024	12.46	100.0085
	R2407573-008	Y (360.074 nm)	0.95	0.17	527212.37
	R2407573-008	Y_R (360.074 nm)	0.95	0.17	527261.80
	R2407573-008	Zn (213.857 nm)	0.0319	0.51	2068.0701
8/21/2024 20:43:18	Continuing Calibration Verification1	Ag (328.068 nm)	0.5117	0.08	32650.4194
	Continuing Calibration Verification1	Al (237.312 nm)	9.9771	0.17	26931.3208
	Continuing Calibration Verification1	As (188.980 nm)	1.0014	0.17	1767.4712
	Continuing Calibration Verification1	B (249.772 nm)	2.3624	0.38	105344.8750
	Continuing Calibration Verification1	Ba (230.424 nm)	9.8774	0.67	625241.4165
	Continuing Calibration Verification1	Be (313.107 nm)	0.2493	0.43	311829.9348
	Continuing Calibration Verification1	Ca (317.933 nm)	25.1601	0.48	1013939.5603
	Continuing Calibration Verification1	Cd (214.439 nm)	0.5050	0.50	32751.6879
	Continuing Calibration Verification1	Co (230.786 nm)	2.5028	0.58	53375.2415
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5197	0.48	30189.0671
	Continuing Calibration Verification1	Cu (327.395 nm)	1.2586	0.30	57988.6427
	Continuing Calibration Verification1	Fe (234.350 nm)	4.9739	0.50	119716.8571
	Continuing Calibration Verification1	K (766.491 nm)	25.0443	0.04	30103.4173
	Continuing Calibration Verification1	Mg (279.078 nm)	25.6409	0.49	111844.5989
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7425	0.47	272425.0981
	Continuing Calibration Verification1	Mo (202.032 nm)	2.6000	0.55	29241.7713
	Continuing Calibration Verification1	Na (588.995 nm)	25.1357	0.24	421104.4445
	Continuing Calibration Verification1	Ni (230.299 nm)	2.0175	0.55	27258.4132
	Continuing Calibration Verification1	Pb (220.353 nm)	0.5020	0.47	2732.8434
	Continuing Calibration Verification1	Sb (217.582 nm)	5.0284	0.40	12118.8720
	Continuing Calibration Verification1	Se (196.026 nm)	0.4910	1.55	417.7234
	Continuing Calibration Verification1	Si (252.851 nm)	10.0871	1.29	67090.0533

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification1	Sn (189.925 nm)	5.0300	0.41	14223.5472
	Continuing Calibration Verification1	Sr (216.596 nm)	2.5419	0.68	50864.1543
	Continuing Calibration Verification1	Ti (336.122 nm)	2.6203	0.48	412390.1237
	Continuing Calibration Verification1	Tl (190.794 nm)	1.0026	0.13	973.9528
	Continuing Calibration Verification1	V (292.401 nm)	2.5631	0.47	99569.4946
	Continuing Calibration Verification1	Y (360.074 nm)	0.96	0.24	533736.14
	Continuing Calibration Verification1	Y_R (360.074 nm)	0.96	0.24	533777.62
	Continuing Calibration Verification1	Zn (213.857 nm)	1.0003	0.52	64411.7437
8/21/2024 20:46:32	Continuing Calibration Blank1	Ag (328.068 nm)	0.0002	48.44	26.7036
	Continuing Calibration Blank1	Al (237.312 nm)	0.0001 u	> 100.00	-15.3544
	Continuing Calibration Blank1	As (188.980 nm)	0.0010	94.78	-0.6270
	Continuing Calibration Blank1	B (249.772 nm)	0.0021	14.36	176.5818
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0001	44.71	18.2041
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000	19.02	-13.1445
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0027	8.08	3152.6409
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0000 u	> 100.00	11.0773
	Continuing Calibration Blank1	Co (230.786 nm)	0.0002	75.97	7.1656
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0002	26.68	33.4287
	Continuing Calibration Blank1	Cu (327.395 nm)	0.0004	40.14	-125.1851
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0028	13.27	121.9405
	Continuing Calibration Blank1	K (766.491 nm)	0.0597	76.25	617.4825
	Continuing Calibration Blank1	Mg (279.078 nm)	-0.0003 u	> 100.00	2.6999
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0000	17.45	22.2348
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0032	6.21	41.2545
	Continuing Calibration Blank1	Na (588.995 nm)	0.0578	6.39	-11537.0401
	Continuing Calibration Blank1	Ni (230.299 nm)	-0.0001 u	41.57	3.9828
	Continuing Calibration Blank1	Pb (220.353 nm)	0.0001 u	> 100.00	4.0509
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0065	7.98	18.3263
	Continuing Calibration Blank1	Se (196.026 nm)	0.0004 u	> 100.00	1.8688
	Continuing Calibration Blank1	Si (252.851 nm)	0.0074	20.84	111.6731
	Continuing Calibration Blank1	Sn (189.925 nm)	-0.0004 u	> 100.00	5.8948
	Continuing Calibration Blank1	Sr (216.596 nm)	-0.0001 u	> 100.00	7.0363
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0041	23.33	711.7592
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0036	9.97	0.6916
	Continuing Calibration Blank1	V (292.401 nm)	0.0001	59.13	13.6458
	Continuing Calibration Blank1	Y (360.074 nm)	1.00	0.21	557267.70
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.00	0.21	557307.91
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0004	26.19	37.2400
8/21/2024 20:49:46	R2407573-010	Ag (328.068 nm)	0.0001 u	> 100.00	21.9180
	R2407573-010	Al (237.312 nm)	0.1788	0.59	467.2505
	R2407573-010	As (188.980 nm)	-0.0004 u	> 100.00	-3.1279
	R2407573-010	B (249.772 nm)	0.1476	0.55	6662.2441
	R2407573-010	Ba (230.424 nm)	0.0167	0.62	1069.7603
	R2407573-010	Be (313.107 nm)	0.0000	20.97	-9.9706
	R2407573-010	Ca (317.933 nm)	322.5973 o LR	0.56	12964515.4544
	R2407573-010	Cd (214.439 nm)	0.0001 u	97.18	14.8649
	R2407573-010	Co (230.786 nm)	0.0000 u	> 100.00	1.3097
	R2407573-010	Cr (267.716 nm)	0.0015	9.80	109.2600
	R2407573-010	Cu (327.395 nm)	0.0013	9.76	-82.8111
	R2407573-010	Fe (234.350 nm)	0.1825	0.72	4445.8913
	R2407573-010	K (766.491 nm)	13.6336	0.45	16636.8508
	R2407573-010	Mg (279.078 nm)	84.5220 o	0.53	368671.8073
	R2407573-010	Mn (257.610 nm)	0.0165	0.52	6067.0570
	R2407573-010	Mo (202.032 nm)	0.0020	21.14	28.4583
	R2407573-010	Na (588.995 nm)	10.6482	0.17	171166.4701
	R2407573-010	Ni (230.299 nm)	0.0316	1.36	432.1505
	R2407573-010	Pb (220.353 nm)	0.0002 u	> 100.00	4.4619

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407573-010	Sb (217.582 nm)	0.0050	28.26	14.6684
	R2407573-010	Se (196.026 nm)	0.0034	> 100.00	4.4152
	R2407573-010	Si (252.851 nm)	8.8876	0.36	59119.2940
	R2407573-010	Sn (189.925 nm)	-0.0003 u	85.72	6.1019
	R2407573-010	Sr (216.596 nm)	16.8489 o	0.70	337102.4271
	R2407573-010	Ti (336.122 nm)	0.0053	11.28	898.5056
	R2407573-010	Tl (190.794 nm)	0.0030	74.10	0.1843
	R2407573-010	V (292.401 nm)	0.0009	10.84	41.4301
	R2407573-010	Y (360.074 nm)	0.92	0.07	513651.86
	R2407573-010	Y_R (360.074 nm)	0.92	0.07	513671.62
	R2407573-010	Zn (213.857 nm)	0.0027	3.08	187.8382
8/21/2024 20:53:00	R2407573-011	Ag (328.068 nm)	0.0002	83.57	28.5741
	R2407573-011	Al (237.312 nm)	0.0920	0.79	232.7113
	R2407573-011	As (188.980 nm)	-0.0009 u	91.05	-4.1367
	R2407573-011	B (249.772 nm)	0.0320	0.97	1510.5922
	R2407573-011	Ba (230.424 nm)	0.1162	0.55	7371.9468
	R2407573-011	Be (313.107 nm)	0.0000 u	> 100.00	-15.8322
	R2407573-011	Ca (317.933 nm)	83.5717 o	0.54	3360827.7969
	R2407573-011	Cd (214.439 nm)	0.0001	67.76	15.3172
	R2407573-011	Co (230.786 nm)	0.0003	77.19	8.0256
	R2407573-011	Cr (267.716 nm)	0.0008	15.86	70.2149
	R2407573-011	Cu (327.395 nm)	0.0025	10.38	-29.8705
	R2407573-011	Fe (234.350 nm)	0.2042	0.46	4967.8970
	R2407573-011	K (766.491 nm)	1.3865	0.58	2183.2841
	R2407573-011	Mg (279.078 nm)	19.5196	0.53	85144.6701
	R2407573-011	Mn (257.610 nm)	0.0284	0.48	10427.5583
	R2407573-011	Mo (202.032 nm)	0.0010	31.17	16.4516
	R2407573-011	Na (588.995 nm)	42.4280	0.14	719431.9679
	R2407573-011	Ni (230.299 nm)	0.0147	0.93	203.9564
	R2407573-011	Pb (220.353 nm)	0.0003 u	> 100.00	5.1801
	R2407573-011	Sb (217.582 nm)	0.0042	3.47	12.6265
	R2407573-011	Se (196.026 nm)	-0.0029 u	> 100.00	-0.8965
	R2407573-011	Si (252.851 nm)	4.1623	0.32	27720.5791
	R2407573-011	Sn (189.925 nm)	-0.0013 u	32.80	3.4331
	R2407573-011	Sr (216.596 nm)	0.6358	0.61	12729.3641
	R2407573-011	Ti (336.122 nm)	0.0018	20.38	345.5268
	R2407573-011	Tl (190.794 nm)	0.0010 u	> 100.00	-1.7488
	R2407573-011	V (292.401 nm)	0.0004	83.93	23.9832
	R2407573-011	Y (360.074 nm)	0.97	0.09	537154.04
	R2407573-011	Y_R (360.074 nm)	0.97	0.09	537173.52
	R2407573-011	Zn (213.857 nm)	0.0066	1.04	438.3673
8/21/2024 20:56:14	R2407573-012	Ag (328.068 nm)	0.0002	25.63	27.8447
	R2407573-012	Al (237.312 nm)	0.0976	1.54	248.0338
	R2407573-012	As (188.980 nm)	-0.0005 u	> 100.00	-3.3951
	R2407573-012	B (249.772 nm)	0.0577	0.28	2656.3515
	R2407573-012	Ba (230.424 nm)	0.0520	0.38	3304.0349
	R2407573-012	Be (313.107 nm)	0.0000 u	> 100.00	-16.5953
	R2407573-012	Ca (317.933 nm)	172.8559 o	0.64	6948132.4437
	R2407573-012	Cd (214.439 nm)	0.0001	31.40	17.3659
	R2407573-012	Co (230.786 nm)	0.0000 u	> 100.00	2.1159
	R2407573-012	Cr (267.716 nm)	0.0008	6.68	70.7753
	R2407573-012	Cu (327.395 nm)	0.0006	13.67	-116.6853
	R2407573-012	Fe (234.350 nm)	0.0902	0.80	2225.6175
	R2407573-012	K (766.491 nm)	2.3324	1.44	3299.6460
	R2407573-012	Mg (279.078 nm)	27.5694	0.56	120256.1107
	R2407573-012	Mn (257.610 nm)	0.0039	0.48	1422.5631
	R2407573-012	Mo (202.032 nm)	0.0012	8.23	19.0057

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407573-012	Na (588.995 nm)	54.5928	0.16	929297.0293
	R2407573-012	Ni (230.299 nm)	0.0073	3.59	104.3706
	R2407573-012	Pb (220.353 nm)	0.0001 u	> 100.00	4.1577
	R2407573-012	Sb (217.582 nm)	0.0014	99.30	5.8678
	R2407573-012	Se (196.026 nm)	0.0005 u	> 100.00	1.9289
	R2407573-012	Si (252.851 nm)	2.0743	0.53	13845.7265
	R2407573-012	Sn (189.925 nm)	-0.0005 u	> 100.00	5.4879
	R2407573-012	Sr (216.596 nm)	3.4133	0.45	68297.3873
	R2407573-012	Ti (336.122 nm)	0.0018	19.92	342.2522
	R2407573-012	Tl (190.794 nm)	0.0027	43.84	-0.1261
	R2407573-012	V (292.401 nm)	0.0005	18.67	26.7579
	R2407573-012	Y (360.074 nm)	0.94	0.19	525457.95
	R2407573-012	Y_R (360.074 nm)	0.94	0.19	525481.10
	R2407573-012	Zn (213.857 nm)	0.0030	3.88	206.2580
8/21/2024 20:59:27	R2407573-013	Ag (328.068 nm)	0.0001	53.71	24.7674
	R2407573-013	Al (237.312 nm)	0.0781	1.92	195.2273
	R2407573-013	As (188.980 nm)	0.0016 u	> 100.00	0.3508
	R2407573-013	B (249.772 nm)	0.0565	0.53	2603.2309
	R2407573-013	Ba (230.424 nm)	0.0508	0.31	3229.0591
	R2407573-013	Be (313.107 nm)	0.0000 u	> 100.00	-14.8337
	R2407573-013	Ca (317.933 nm)	169.8917 o	0.23	6829034.4008
	R2407573-013	Cd (214.439 nm)	0.0000	37.21	14.5544
	R2407573-013	Co (230.786 nm)	0.0002 u	> 100.00	5.5758
	R2407573-013	Cr (267.716 nm)	0.0007	15.53	62.7138
	R2407573-013	Cu (327.395 nm)	0.0012	8.75	-86.6196
	R2407573-013	Fe (234.350 nm)	0.0688	0.10	1711.1368
	R2407573-013	K (766.491 nm)	2.2558	0.19	3209.2896
	R2407573-013	Mg (279.078 nm)	27.0357	0.21	117928.2229
	R2407573-013	Mn (257.610 nm)	0.0032	0.97	1196.6424
	R2407573-013	Mo (202.032 nm)	0.0012	16.60	18.6323
	R2407573-013	Na (588.995 nm)	53.6938	0.20	913787.5400
	R2407573-013	Ni (230.299 nm)	0.0071	1.12	101.7349
	R2407573-013	Pb (220.353 nm)	0.0002 u	> 100.00	4.3244
	R2407573-013	Sb (217.582 nm)	0.0013	36.03	5.5958
	R2407573-013	Se (196.026 nm)	-0.0006 u	> 100.00	0.9955
	R2407573-013	Si (252.851 nm)	2.0109	0.18	13424.7124
	R2407573-013	Sn (189.925 nm)	-0.0010 u	54.23	4.2488
	R2407573-013	Sr (216.596 nm)	3.3519	0.27	67069.1735
	R2407573-013	Ti (336.122 nm)	0.0009	14.20	205.3086
	R2407573-013	Tl (190.794 nm)	0.0017 u	> 100.00	-1.0712
	R2407573-013	V (292.401 nm)	0.0005	25.69	26.2049
	R2407573-013	Y (360.074 nm)	0.95	0.28	529668.28
	R2407573-013	Y_R (360.074 nm)	0.95	0.28	529695.49
	R2407573-013	Zn (213.857 nm)	0.0039	1.24	263.7693
8/21/2024 21:02:41	R2407596-001	Ag (328.068 nm)	0.0002	57.68	30.6119
	R2407596-001	Al (237.312 nm)	4.7067	0.46	12696.4180
	R2407596-001	As (188.980 nm)	0.0188	6.88	30.8353
	R2407596-001	B (249.772 nm)	0.0891	0.39	4055.7073
	R2407596-001	Ba (230.424 nm)	0.4335	0.36	27450.7196
	R2407596-001	Be (313.107 nm)	0.0001	5.01	105.9031
	R2407596-001	Ca (317.933 nm)	200.9389 o	0.54	8076464.1067
	R2407596-001	Cd (214.439 nm)	0.0012	2.28	86.2655
	R2407596-001	Co (230.786 nm)	0.0058	3.50	125.4428
	R2407596-001	Cr (267.716 nm)	0.0078	0.87	472.2463
	R2407596-001	Cu (327.395 nm)	0.0086	1.10	253.1624
	R2407596-001	Fe (234.350 nm)	47.3762 o	0.51	1139821.5381
	R2407596-001	K (766.491 nm)	13.9529	0.67	17013.7622

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407596-001	Mg (279.078 nm)	20.2402	0.47	88287.9823
	R2407596-001	Mn (257.610 nm)	2.9783 o	0.51	1092661.7776
	R2407596-001	Mo (202.032 nm)	0.0044	6.54	54.7837
	R2407596-001	Na (588.995 nm)	927.1314 o	1.61	15982298.3159
	R2407596-001	Ni (230.299 nm)	0.0534	2.30	726.7464
	R2407596-001	Pb (220.353 nm)	0.0147	4.85	83.6044
	R2407596-001	Sb (217.582 nm)	-0.0004 u	71.55	1.5059
	R2407596-001	Se (196.026 nm)	0.0028	31.57	3.9174
	R2407596-001	Si (252.851 nm)	14.8811	2.54	98945.5839
	R2407596-001	Sn (189.925 nm)	0.0604	1.03	177.7921
	R2407596-001	Sr (216.596 nm)	0.6432	0.50	12875.8506
	R2407596-001	Ti (336.122 nm)	0.1080	3.19	17061.5722
	R2407596-001	Tl (190.794 nm)	0.0041	67.73	1.2186
	R2407596-001	V (292.401 nm)	0.0091	1.59	360.2041
	R2407596-001	Y (360.074 nm)	0.83	0.24	462232.25
	R2407596-001	Y_R (360.074 nm)	0.83	0.24	462223.76
	R2407596-001	Zn (213.857 nm)	0.0677	0.34	4369.8776
8/21/2024 21:05:54	R2407601-021	Ag (328.068 nm)	0.0001 u	> 100.00	23.3804
	R2407601-021	Al (237.312 nm)	0.0029	77.22	-7.9691
	R2407601-021	As (188.980 nm)	0.0013	> 100.00	-0.1414
	R2407601-021	B (249.772 nm)	0.3346	0.43	14992.9596
	R2407601-021	Ba (230.424 nm)	0.0129	0.75	830.6271
	R2407601-021	Be (313.107 nm)	0.0000 u	> 100.00	-16.0937
	R2407601-021	Ca (317.933 nm)	91.2006 o	0.51	3667346.6418
	R2407601-021	Cd (214.439 nm)	0.0000 u	> 100.00	13.6340
	R2407601-021	Co (230.786 nm)	0.0002	96.29	7.1725
	R2407601-021	Cr (267.716 nm)	0.0006	8.50	59.5984
	R2407601-021	Cu (327.395 nm)	0.0003	75.96	-130.5254
	R2407601-021	Fe (234.350 nm)	0.0324	5.93	835.3694
	R2407601-021	K (766.491 nm)	3.4734	0.94	4646.2019
	R2407601-021	Mg (279.078 nm)	21.7120	0.49	94707.3903
	R2407601-021	Mn (257.610 nm)	0.0673	0.46	24690.9946
	R2407601-021	Mo (202.032 nm)	0.0129	3.30	150.5901
	R2407601-021	Na (588.995 nm)	8.6379	0.25	136486.3908
	R2407601-021	Ni (230.299 nm)	0.0186	2.10	257.6551
	R2407601-021	Pb (220.353 nm)	-0.0012 u	36.17	-2.8734
	R2407601-021	Sb (217.582 nm)	0.0006 u	> 100.00	3.9001
	R2407601-021	Se (196.026 nm)	-0.0025 u	90.73	-0.6235
	R2407601-021	Si (252.851 nm)	5.2783	0.44	35135.7174
	R2407601-021	Sn (189.925 nm)	-0.0010 u	67.55	4.2596
	R2407601-021	Sr (216.596 nm)	0.6905	0.58	13822.1832
	R2407601-021	Ti (336.122 nm)	0.0002	32.79	96.9609
	R2407601-021	Tl (190.794 nm)	0.0017 u	> 100.00	-1.1221
	R2407601-021	V (292.401 nm)	0.0002	19.43	15.9123
	R2407601-021	Y (360.074 nm)	0.98	0.03	542724.70
	R2407601-021	Y_R (360.074 nm)	0.98	0.03	542767.86
	R2407601-021	Zn (213.857 nm)	0.0020	1.03	143.4160
8/21/2024 21:09:08	R2407624-001	Ag (328.068 nm)	0.0000 u	> 100.00	15.1110
	R2407624-001	Al (237.312 nm)	0.0112	26.81	14.6798
	R2407624-001	As (188.980 nm)	0.0032	60.19	3.2102
	R2407624-001	B (249.772 nm)	0.7947	0.41	35493.1008
	R2407624-001	Ba (230.424 nm)	0.4384	0.45	27764.7661
	R2407624-001	Be (313.107 nm)	0.0000 u	> 100.00	-20.2392
	R2407624-001	Ca (317.933 nm)	108.4689 o	0.44	4361160.5451
	R2407624-001	Cd (214.439 nm)	0.0002	14.21	26.5041
	R2407624-001	Co (230.786 nm)	0.0018	2.11	41.1855
	R2407624-001	Cr (267.716 nm)	0.0010	6.89	77.6144

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407624-001	Cu (327.395 nm)	0.0003	53.73	-127.9571
	R2407624-001	Fe (234.350 nm)	9.4429	0.49	227230.8483
	R2407624-001	K (766.491 nm)	53.4230	0.22	63594.9445
	R2407624-001	Mg (279.078 nm)	37.1084	0.45	161863.4995
	R2407624-001	Mn (257.610 nm)	1.1557	0.42	424011.8648
	R2407624-001	Mo (202.032 nm)	0.0003	96.98	9.1385
	R2407624-001	Na (588.995 nm)	74.6707 o	0.29	1275681.6193
	R2407624-001	Ni (230.299 nm)	0.0299	1.31	409.6216
	R2407624-001	Pb (220.353 nm)	0.0001 u	> 100.00	3.8715
	R2407624-001	Sb (217.582 nm)	0.0006 u	> 100.00	4.0430
	R2407624-001	Se (196.026 nm)	0.0003 u	> 100.00	1.8227
	R2407624-001	Si (252.851 nm)	4.8144	0.51	32053.6941
	R2407624-001	Sn (189.925 nm)	-0.0001 u	> 100.00	6.6096
	R2407624-001	Sr (216.596 nm)	0.4803	0.41	9618.1373
	R2407624-001	Ti (336.122 nm)	0.0008	6.44	186.2902
	R2407624-001	Tl (190.794 nm)	0.0032	44.36	0.3385
	R2407624-001	V (292.401 nm)	0.0008	20.41	39.9946
	R2407624-001	Y (360.074 nm)	0.95	0.12	527662.29
	R2407624-001	Y_R (360.074 nm)	0.95	0.11	527607.97
	R2407624-001	Zn (213.857 nm)	0.0026	1.97	181.4197
8/21/2024 21:12:21	R2407624-002	Ag (328.068 nm)	0.0001 u	> 100.00	25.8384
	R2407624-002	Al (237.312 nm)	0.0467	3.06	110.5202
	R2407624-002	As (188.980 nm)	-0.0016 u	91.67	-5.3321
	R2407624-002	B (249.772 nm)	0.0125	0.48	639.5819
	R2407624-002	Ba (230.424 nm)	0.0093	0.83	600.1360
	R2407624-002	Be (313.107 nm)	0.0000 u	> 100.00	-14.2635
	R2407624-002	Ca (317.933 nm)	19.1054	0.23	770669.1427
	R2407624-002	Cd (214.439 nm)	0.0000	77.15	14.7870
	R2407624-002	Co (230.786 nm)	0.0001 u	> 100.00	5.0326
	R2407624-002	Cr (267.716 nm)	0.0009	5.87	75.2912
	R2407624-002	Cu (327.395 nm)	0.0003	22.02	-128.2620
	R2407624-002	Fe (234.350 nm)	0.0625	2.10	1558.8617
	R2407624-002	K (766.491 nm)	1.5490	3.69	2375.0636
	R2407624-002	Mg (279.078 nm)	4.4128	0.21	19252.0622
	R2407624-002	Mn (257.610 nm)	0.0018	1.45	656.8703
	R2407624-002	Mo (202.032 nm)	0.0003	36.65	9.2918
	R2407624-002	Na (588.995 nm)	2.8137	0.48	36006.2739
	R2407624-002	Ni (230.299 nm)	0.0097	5.03	137.3380
	R2407624-002	Pb (220.353 nm)	-0.0004 u	99.82	1.3338
	R2407624-002	Sb (217.582 nm)	0.0005 u	> 100.00	3.8738
	R2407624-002	Se (196.026 nm)	0.0002 u	> 100.00	1.6832
	R2407624-002	Si (252.851 nm)	2.9314	0.24	19541.3538
	R2407624-002	Sn (189.925 nm)	-0.0001 u	> 100.00	6.7012
	R2407624-002	Sr (216.596 nm)	0.1110	0.28	2229.6880
	R2407624-002	Ti (336.122 nm)	0.0021	5.85	401.2659
	R2407624-002	Tl (190.794 nm)	0.0017 u	> 100.00	-1.1519
	R2407624-002	V (292.401 nm)	0.0003	7.43	20.6393
	R2407624-002	Y (360.074 nm)	1.01	0.36	562527.19
	R2407624-002	Y_R (360.074 nm)	1.01	0.36	562496.45
	R2407624-002	Zn (213.857 nm)	0.0017	2.14	125.3131
8/21/2024 21:15:35	R2407624-003	Ag (328.068 nm)	0.0001	53.19	22.6999
	R2407624-003	Al (237.312 nm)	0.1968	0.65	515.8486
	R2407624-003	As (188.980 nm)	-0.0013 u	97.08	-4.7317
	R2407624-003	B (249.772 nm)	0.0736	0.39	3362.4996
	R2407624-003	Ba (230.424 nm)	0.0227	0.37	1451.8621
	R2407624-003	Be (313.107 nm)	0.0000 u	> 100.00	-16.8782
	R2407624-003	Ca (317.933 nm)	25.2393	0.54	1017121.0178

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407624-003	Cd (214.439 nm)	0.0000	67.00	13.0564
	R2407624-003	Co (230.786 nm)	0.0001 u	> 100.00	4.5691
	R2407624-003	Cr (267.716 nm)	0.0007	3.47	62.9521
	R2407624-003	Cu (327.395 nm)	0.0005	13.36	-121.3466
	R2407624-003	Fe (234.350 nm)	0.7527	0.53	18163.7067
	R2407624-003	K (766.491 nm)	3.1881	0.21	4309.4991
	R2407624-003	Mg (279.078 nm)	6.6313	0.49	28928.6857
	R2407624-003	Mn (257.610 nm)	0.5689	0.47	208734.0781
	R2407624-003	Mo (202.032 nm)	0.0005	50.77	10.5661
	R2407624-003	Na (588.995 nm)	12.3469	0.11	200472.6742
	R2407624-003	Ni (230.299 nm)	0.0105	4.00	147.0674
	R2407624-003	Pb (220.353 nm)	0.0002 u	> 100.00	4.4740
	R2407624-003	Sb (217.582 nm)	-0.0009 u	39.30	0.4520
	R2407624-003	Se (196.026 nm)	0.0001 u	> 100.00	1.6062
	R2407624-003	Si (252.851 nm)	2.5899	0.59	17271.6136
	R2407624-003	Sn (189.925 nm)	-0.0005 u	96.26	5.5977
	R2407624-003	Sr (216.596 nm)	0.1351	0.63	2710.4312
	R2407624-003	Ti (336.122 nm)	0.0067	4.05	1116.9454
	R2407624-003	Tl (190.794 nm)	0.0022	> 100.00	-0.6210
	R2407624-003	V (292.401 nm)	0.0006	44.05	29.9585
	R2407624-003	Y (360.074 nm)	1.00	0.08	553499.30
	R2407624-003	Y_R (360.074 nm)	1.00	0.08	553499.63
	R2407624-003	Zn (213.857 nm)	0.0031	1.67	211.0188
8/21/2024 21:18:48	R2407624-004	Ag (328.068 nm)	0.0000 u	> 100.00	17.3533
	R2407624-004	Al (237.312 nm)	0.0053	18.71	-1.2879
	R2407624-004	As (188.980 nm)	0.0070	38.83	9.8933
	R2407624-004	B (249.772 nm)	0.5312	0.40	23752.9807
	R2407624-004	Ba (230.424 nm)	0.0706	0.35	4485.5539
	R2407624-004	Be (313.107 nm)	0.0000 u	> 100.00	-15.9456
	R2407624-004	Ca (317.933 nm)	83.4826 o	0.46	3357248.4612
	R2407624-004	Cd (214.439 nm)	0.0002	34.31	22.9230
	R2407624-004	Co (230.786 nm)	0.0031	12.06	67.4891
	R2407624-004	Cr (267.716 nm)	0.0015	7.69	111.5442
	R2407624-004	Cu (327.395 nm)	0.0003	43.72	-127.2696
	R2407624-004	Fe (234.350 nm)	10.0340	0.47	241451.0072
	R2407624-004	K (766.491 nm)	47.9788	0.07	57169.8661
	R2407624-004	Mg (279.078 nm)	30.5262	0.45	133153.0994
	R2407624-004	Mn (257.610 nm)	0.9573	0.40	351225.3318
	R2407624-004	Mo (202.032 nm)	0.0009	31.56	15.5422
	R2407624-004	Na (588.995 nm)	59.2888 o	0.10	1010313.0673
	R2407624-004	Ni (230.299 nm)	0.0286	1.65	392.2728
	R2407624-004	Pb (220.353 nm)	0.0004 u	> 100.00	5.4753
	R2407624-004	Sb (217.582 nm)	0.0011 u	> 100.00	5.1249
	R2407624-004	Se (196.026 nm)	0.0010 u	> 100.00	2.3897
	R2407624-004	Si (252.851 nm)	5.8977	0.33	39252.0877
	R2407624-004	Sn (189.925 nm)	-0.0005 u	> 100.00	5.6052
	R2407624-004	Sr (216.596 nm)	0.4356	0.55	8723.7821
	R2407624-004	Ti (336.122 nm)	0.0002	41.01	102.1463
	R2407624-004	Tl (190.794 nm)	0.0027 u	88.00	-0.1824
	R2407624-004	V (292.401 nm)	0.0011	15.75	50.7887
	R2407624-004	Y (360.074 nm)	0.96	0.16	531642.06
	R2407624-004	Y_R (360.074 nm)	0.96	0.16	531642.67
	R2407624-004	Zn (213.857 nm)	0.0030	1.52	210.0998
8/21/2024 21:22:02	Continuing Calibration Verification1	Ag (328.068 nm)	0.5128	0.21	32723.9350
	Continuing Calibration Verification1	Al (237.312 nm)	9.9621	0.19	26890.8081
	Continuing Calibration Verification1	As (188.980 nm)	1.0012	0.62	1767.0880
	Continuing Calibration Verification1	B (249.772 nm)	2.3641	0.37	105420.0498

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification1	Ba (230.424 nm)	9.8931	0.58	626235.9394
	Continuing Calibration Verification1	Be (313.107 nm)	0.2491	0.50	311630.5939
	Continuing Calibration Verification1	Ca (317.933 nm)	25.1260	0.52	1012567.0782
	Continuing Calibration Verification1	Cd (214.439 nm)	0.5055	0.59	32779.5728
	Continuing Calibration Verification1	Co (230.786 nm)	2.5078	0.66	53482.7196
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5202	0.53	30216.1903
	Continuing Calibration Verification1	Cu (327.395 nm)	1.2631	0.08	58194.5703
	Continuing Calibration Verification1	Fe (234.350 nm)	4.9856	0.51	119998.4973
	Continuing Calibration Verification1	K (766.491 nm)	25.0697	0.06	30133.3313
	Continuing Calibration Verification1	Mg (279.078 nm)	25.6306	0.53	111799.6046
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7433	0.44	272705.9673
	Continuing Calibration Verification1	Mo (202.032 nm)	2.5955	0.55	29191.7406
	Continuing Calibration Verification1	Na (588.995 nm)	25.0739	0.26	420038.1297
	Continuing Calibration Verification1	Ni (230.299 nm)	2.0150	0.43	27223.6009
	Continuing Calibration Verification1	Pb (220.353 nm)	0.5023	0.43	2734.9054
	Continuing Calibration Verification1	Sb (217.582 nm)	5.0170	0.30	12091.3173
	Continuing Calibration Verification1	Se (196.026 nm)	0.4892	0.44	416.2322
	Continuing Calibration Verification1	Si (252.851 nm)	10.1631	1.47	67594.8419
	Continuing Calibration Verification1	Sn (189.925 nm)	5.0304	0.49	14224.5639
	Continuing Calibration Verification1	Sr (216.596 nm)	2.5367	0.62	50759.2357
	Continuing Calibration Verification1	Ti (336.122 nm)	2.6191	0.41	412202.2537
	Continuing Calibration Verification1	Tl (190.794 nm)	0.9995	0.54	970.9321
	Continuing Calibration Verification1	V (292.401 nm)	2.5636	0.45	99587.8751
	Continuing Calibration Verification1	Y (360.074 nm)	0.96	0.19	534802.98
	Continuing Calibration Verification1	Y_R (360.074 nm)	0.96	0.19	534794.22
	Continuing Calibration Verification1	Zn (213.857 nm)	0.9988	0.31	64316.5680
8/21/2024 21:25:16	Continuing Calibration Blank1	Ag (328.068 nm)	0.0000 u	> 100.00	18.9674
	Continuing Calibration Blank1	Al (237.312 nm)	0.0013	> 100.00	-12.1294
	Continuing Calibration Blank1	As (188.980 nm)	0.0008 u	> 100.00	-1.1229
	Continuing Calibration Blank1	B (249.772 nm)	0.0018	16.29	162.1046
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0002	34.45	23.5591
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000 u	> 100.00	-13.8016
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0037	7.57	3193.9135
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0000	82.65	12.9133
	Continuing Calibration Blank1	Co (230.786 nm)	0.0002	95.78	7.0265
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0001	34.21	29.0952
	Continuing Calibration Blank1	Cu (327.395 nm)	0.0001	84.64	-138.3733
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0031	12.73	128.5717
	Continuing Calibration Blank1	K (766.491 nm)	0.0573	54.11	614.6112
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0005 u	> 100.00	6.3787
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0000	37.56	23.3614
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0035	6.05	44.9258
	Continuing Calibration Blank1	Na (588.995 nm)	0.0847	9.03	-11073.8558
	Continuing Calibration Blank1	Ni (230.299 nm)	-0.0002 u	> 100.00	3.5162
	Continuing Calibration Blank1	Pb (220.353 nm)	-0.0006 u	47.75	0.4376
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0070	17.83	19.3676
	Continuing Calibration Blank1	Se (196.026 nm)	-0.0002 u	> 100.00	1.3385
	Continuing Calibration Blank1	Si (252.851 nm)	0.0103	17.67	130.3750
	Continuing Calibration Blank1	Sn (189.925 nm)	-0.0001 u	> 100.00	6.8746
	Continuing Calibration Blank1	Sr (216.596 nm)	-0.0002 u	37.61	5.1232
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0041	23.13	715.3960
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0019	65.12	-0.9119
	Continuing Calibration Blank1	V (292.401 nm)	0.0002	31.69	16.2393
	Continuing Calibration Blank1	Y (360.074 nm)	1.00	0.12	558766.97
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.00	0.12	558712.10
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0003	17.47	34.3532
8/21/2024 21:28:30	R2407624-005	Ag (328.068 nm)	0.0000 u	> 100.00	19.5083

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407624-005	Al (237.312 nm)	0.0022	> 100.00	-9.7860
	R2407624-005	As (188.980 nm)	0.0008 u	> 100.00	-1.0643
	R2407624-005	B (249.772 nm)	0.0330	0.41	1555.3951
	R2407624-005	Ba (230.424 nm)	0.0271	0.62	1730.6925
	R2407624-005	Be (313.107 nm)	0.0000 u	> 100.00	-17.2346
	R2407624-005	Ca (317.933 nm)	24.1059	0.53	971582.7459
	R2407624-005	Cd (214.439 nm)	0.0001	72.16	20.0541
	R2407624-005	Co (230.786 nm)	0.0007	22.77	17.4008
	R2407624-005	Cr (267.716 nm)	0.0017	3.42	120.8352
	R2407624-005	Cu (327.395 nm)	0.0004	70.41	-124.8631
	R2407624-005	Fe (234.350 nm)	4.1934	0.54	100939.8811
	R2407624-005	K (766.491 nm)	2.4906	1.28	3486.3474
	R2407624-005	Mg (279.078 nm)	5.1011	0.49	22253.9814
	R2407624-005	Mn (257.610 nm)	0.2190	0.53	80347.6859
	R2407624-005	Mo (202.032 nm)	0.0009	39.68	15.9121
	R2407624-005	Na (588.995 nm)	3.9857	0.15	56225.6930
	R2407624-005	Ni (230.299 nm)	0.0112	2.98	157.6075
	R2407624-005	Pb (220.353 nm)	0.0003 u	> 100.00	5.1992
	R2407624-005	Sb (217.582 nm)	0.0046	19.79	13.6014
	R2407624-005	Se (196.026 nm)	-0.0010 u	> 100.00	0.6476
	R2407624-005	Si (252.851 nm)	3.0113	0.45	20072.3572
	R2407624-005	Sn (189.925 nm)	-0.0008 u	29.84	4.8159
	R2407624-005	Sr (216.596 nm)	0.0877	0.44	1763.0608
	R2407624-005	Ti (336.122 nm)	0.0014	32.15	287.4231
	R2407624-005	Tl (190.794 nm)	0.0021	45.07	-0.7037
	R2407624-005	V (292.401 nm)	0.0003	77.83	18.2406
	R2407624-005	Y (360.074 nm)	1.00	0.15	555212.17
	R2407624-005	Y_R (360.074 nm)	1.00	0.16	555191.94
	R2407624-005	Zn (213.857 nm)	0.0028	4.02	194.4880
8/21/2024 21:31:44	R2407624-006	Ag (328.068 nm)	0.0000 u	> 100.00	14.2469
	R2407624-006	Al (237.312 nm)	0.0192	10.38	36.2418
	R2407624-006	As (188.980 nm)	0.0064	21.23	8.9021
	R2407624-006	B (249.772 nm)	0.2155	0.31	9685.1757
	R2407624-006	Ba (230.424 nm)	0.1540	0.47	9762.9725
	R2407624-006	Be (313.107 nm)	0.0000 u	> 100.00	-17.1065
	R2407624-006	Ca (317.933 nm)	68.0264 o	0.45	2736242.6292
	R2407624-006	Cd (214.439 nm)	0.0003	17.04	29.2107
	R2407624-006	Co (230.786 nm)	0.0054	3.17	118.3264
	R2407624-006	Cr (267.716 nm)	0.0009	8.01	74.7260
	R2407624-006	Cu (327.395 nm)	0.0004	38.22	-125.5726
	R2407624-006	Fe (234.350 nm)	13.2725 o	0.42	319361.2470
	R2407624-006	K (766.491 nm)	11.8138	0.65	14489.2069
	R2407624-006	Mg (279.078 nm)	22.7095	0.34	99058.4227
	R2407624-006	Mn (257.610 nm)	0.5645	0.34	207113.9285
	R2407624-006	Mo (202.032 nm)	0.0009	16.77	16.1037
	R2407624-006	Na (588.995 nm)	30.3413	0.22	510911.7176
	R2407624-006	Ni (230.299 nm)	0.0516	0.64	703.4024
	R2407624-006	Pb (220.353 nm)	-0.0004 u	> 100.00	1.5078
	R2407624-006	Sb (217.582 nm)	0.0008 u	> 100.00	4.5718
	R2407624-006	Se (196.026 nm)	-0.0019 u	75.27	-0.0818
	R2407624-006	Si (252.851 nm)	11.0795	0.38	73684.4350
	R2407624-006	Sn (189.925 nm)	-0.0010 u	68.55	4.2221
	R2407624-006	Sr (216.596 nm)	0.5109	0.46	10228.8932
	R2407624-006	Ti (336.122 nm)	0.0012	17.17	258.5027
	R2407624-006	Tl (190.794 nm)	0.0010 u	> 100.00	-1.8359
	R2407624-006	V (292.401 nm)	0.0006	29.79	32.1874
	R2407624-006	Y (360.074 nm)	0.97	0.15	539916.27

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407624-006	Y_R (360.074 nm)	0.97	0.15	539883.91
	R2407624-006	Zn (213.857 nm)	0.0049	1.92	330.8041
8/21/2024 21:34:58	R2407624-007	Ag (328.068 nm)	0.0000 u	> 100.00	19.7125
	R2407624-007	Al (237.312 nm)	4.2969	0.27	11589.6529
	R2407624-007	As (188.980 nm)	0.0008 u	> 100.00	-1.1316
	R2407624-007	B (249.772 nm)	0.0230	0.48	1108.0829
	R2407624-007	Ba (230.424 nm)	0.0390	0.37	2480.0839
	R2407624-007	Be (313.107 nm)	0.0001	5.81	97.1289
	R2407624-007	Ca (317.933 nm)	19.1673	0.47	773159.1653
	R2407624-007	Cd (214.439 nm)	0.0003	12.49	28.7618
	R2407624-007	Co (230.786 nm)	0.0015	11.45	33.8906
	R2407624-007	Cr (267.716 nm)	0.0052	1.94	321.7580
	R2407624-007	Cu (327.395 nm)	0.0028	5.32	-13.5447
	R2407624-007	Fe (234.350 nm)	4.0480	0.51	97440.3847
	R2407624-007	K (766.491 nm)	2.7676	1.31	3813.1984
	R2407624-007	Mg (279.078 nm)	3.7238	0.48	16246.6830
	R2407624-007	Mn (257.610 nm)	0.9949	0.43	365008.5437
	R2407624-007	Mo (202.032 nm)	0.0002	40.53	8.1924
	R2407624-007	Na (588.995 nm)	5.7000	0.14	85801.5611
	R2407624-007	Ni (230.299 nm)	0.0354	0.74	484.3589
	R2407624-007	Pb (220.353 nm)	0.0008	51.31	7.7315
	R2407624-007	Sb (217.582 nm)	0.0009 u	> 100.00	4.7040
	R2407624-007	Se (196.026 nm)	-0.0012 u	> 100.00	0.5279
	R2407624-007	Si (252.851 nm)	9.5487	0.35	63512.5591
	R2407624-007	Sn (189.925 nm)	0.0000 u	> 100.00	6.9673
	R2407624-007	Sr (216.596 nm)	0.0851	0.83	1710.0018
	R2407624-007	Ti (336.122 nm)	0.2202	1.25	34712.6303
	R2407624-007	Tl (190.794 nm)	0.0017 u	> 100.00	-1.1289
	R2407624-007	V (292.401 nm)	0.0068	1.27	270.9033
	R2407624-007	Y (360.074 nm)	1.01	0.11	559441.93
	R2407624-007	Y_R (360.074 nm)	1.01	0.11	559428.42
	R2407624-007	Zn (213.857 nm)	0.0104	1.60	681.8326
8/21/2024 21:38:13	R2407624-008	Ag (328.068 nm)	0.0001 u	> 100.00	21.1857
	R2407624-008	Al (237.312 nm)	0.0348	1.79	78.3333
	R2407624-008	As (188.980 nm)	0.0014	50.92	-0.0601
	R2407624-008	B (249.772 nm)	0.2166	0.55	9736.1636
	R2407624-008	Ba (230.424 nm)	0.0649	0.58	4124.0062
	R2407624-008	Be (313.107 nm)	0.0000 u	> 100.00	-16.1852
	R2407624-008	Ca (317.933 nm)	125.4769 o	0.65	5044517.2109
	R2407624-008	Cd (214.439 nm)	0.0000 u	94.41	13.9572
	R2407624-008	Co (230.786 nm)	0.0000 u	> 100.00	2.0084
	R2407624-008	Cr (267.716 nm)	0.0009	14.80	71.4360
	R2407624-008	Cu (327.395 nm)	0.0016	7.68	-69.9885
	R2407624-008	Fe (234.350 nm)	0.1673	0.82	4079.4545
	R2407624-008	K (766.491 nm)	3.4745	0.49	4647.4579
	R2407624-008	Mg (279.078 nm)	34.8919	0.57	152195.7414
	R2407624-008	Mn (257.610 nm)	0.0117	0.73	4314.1427
	R2407624-008	Mo (202.032 nm)	0.0036	6.87	46.2491
	R2407624-008	Na (588.995 nm)	19.1493	0.12	317828.5321
	R2407624-008	Ni (230.299 nm)	0.0055	4.02	80.0460
	R2407624-008	Pb (220.353 nm)	0.0002 u	> 100.00	4.6962
	R2407624-008	Sb (217.582 nm)	0.0012	44.66	5.4147
	R2407624-008	Se (196.026 nm)	-0.0025 u	> 100.00	-0.5647
	R2407624-008	Si (252.851 nm)	1.2553	0.64	8403.3407
	R2407624-008	Sn (189.925 nm)	-0.0005 u	> 100.00	5.7263
	R2407624-008	Sr (216.596 nm)	0.5146	0.50	10304.5337
	R2407624-008	Ti (336.122 nm)	0.0015	5.32	299.1173

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407624-008	Tl (190.794 nm)	0.0014 u	> 100.00	-1.3733
	R2407624-008	V (292.401 nm)	0.0003	21.96	21.1286
	R2407624-008	Y (360.074 nm)	0.96	0.04	534249.14
	R2407624-008	Y_R (360.074 nm)	0.96	0.04	534223.88
	R2407624-008	Zn (213.857 nm)	0.0063	1.51	421.6213
8/21/2024 21:41:27	R2407624-009	Ag (328.068 nm)	0.0000	> 100.00	19.4483
	R2407624-009	Al (237.312 nm)	1.1408	0.47	3065.3601
	R2407624-009	As (188.980 nm)	0.0072	20.58	10.3302
	R2407624-009	B (249.772 nm)	0.3052	0.46	13683.2799
	R2407624-009	Ba (230.424 nm)	0.2663	0.52	16871.3664
	R2407624-009	Be (313.107 nm)	0.0000	32.56	4.2460
	R2407624-009	Ca (317.933 nm)	100.5586 o	0.61	4043337.9130
	R2407624-009	Cd (214.439 nm)	0.0010	2.81	75.2159
	R2407624-009	Co (230.786 nm)	0.0059	1.86	128.0742
	R2407624-009	Cr (267.716 nm)	0.0019	5.97	133.8792
	R2407624-009	Cu (327.395 nm)	0.0007	25.86	-109.2491
	R2407624-009	Fe (234.350 nm)	44.9671 o	0.59	1081864.4037
	R2407624-009	K (766.491 nm)	23.5446	0.11	28333.5210
	R2407624-009	Mg (279.078 nm)	28.6330	0.56	124895.5982
	R2407624-009	Mn (257.610 nm)	3.2675 o	0.53	1198742.9219
	R2407624-009	Mo (202.032 nm)	0.0004	19.27	9.8513
	R2407624-009	Na (588.995 nm)	46.3033	0.15	786288.3954
	R2407624-009	Ni (230.299 nm)	0.0324	0.66	443.5787
	R2407624-009	Pb (220.353 nm)	0.0006	32.64	6.4949
	R2407624-009	Sb (217.582 nm)	-0.0007 u	15.31	0.8493
	R2407624-009	Se (196.026 nm)	0.0012 u	> 100.00	2.5113
	R2407624-009	Si (252.851 nm)	8.4957	0.40	56515.2269
	R2407624-009	Sn (189.925 nm)	-0.0014 u	6.78	3.0624
	R2407624-009	Sr (216.596 nm)	0.4208	0.76	8426.3831
	R2407624-009	Ti (336.122 nm)	0.0987	0.11	15591.7196
	R2407624-009	Tl (190.794 nm)	0.0028	19.82	-0.0806
	R2407624-009	V (292.401 nm)	0.0035	2.17	142.7587
	R2407624-009	Y (360.074 nm)	0.96	0.08	533193.79
	R2407624-009	Y_R (360.074 nm)	0.96	0.08	533163.10
	R2407624-009	Zn (213.857 nm)	0.0083	0.40	548.6414
8/21/2024 21:44:40	R2407624-010	Ag (328.068 nm)	0.0001	55.11	23.5124
	R2407624-010	Al (237.312 nm)	2.8905	0.08	7791.2724
	R2407624-010	As (188.980 nm)	0.0003 u	> 100.00	-1.8595
	R2407624-010	B (249.772 nm)	0.2326	0.59	10448.9421
	R2407624-010	Ba (230.424 nm)	0.1335	0.58	8461.1495
	R2407624-010	Be (313.107 nm)	0.0000	5.22	30.6796
	R2407624-010	Ca (317.933 nm)	138.6873 o	0.52	5575289.9321
	R2407624-010	Cd (214.439 nm)	0.0003	13.79	28.8728
	R2407624-010	Co (230.786 nm)	0.0022	15.02	49.4860
	R2407624-010	Cr (267.716 nm)	0.0051	2.15	319.8032
	R2407624-010	Cu (327.395 nm)	0.0055	4.17	112.9161
	R2407624-010	Fe (234.350 nm)	4.7583	0.46	114529.3321
	R2407624-010	K (766.491 nm)	20.2945	0.06	24497.8360
	R2407624-010	Mg (279.078 nm)	35.3040	0.52	153993.1881
	R2407624-010	Mn (257.610 nm)	0.1285	0.47	47163.6719
	R2407624-010	Mo (202.032 nm)	0.0003	26.58	8.8397
	R2407624-010	Na (588.995 nm)	23.7899	0.02	397887.6376
	R2407624-010	Ni (230.299 nm)	0.0344	0.80	470.0374
	R2407624-010	Pb (220.353 nm)	0.0010	31.52	8.9147
	R2407624-010	Sb (217.582 nm)	0.0003	75.38	3.4008
	R2407624-010	Se (196.026 nm)	-0.0009 u	75.48	0.7304
	R2407624-010	Si (252.851 nm)	8.1364	0.08	54127.9194

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407624-010	Sn (189.925 nm)	-0.0007 u	> 100.00	4.9334
	R2407624-010	Sr (216.596 nm)	0.5905	0.62	11823.1300
	R2407624-010	Ti (336.122 nm)	0.1494	1.29	23571.0879
	R2407624-010	Tl (190.794 nm)	0.0014	30.09	-1.4016
	R2407624-010	V (292.401 nm)	0.0054	4.24	216.8542
	R2407624-010	Y (360.074 nm)	0.95	0.03	531064.47
	R2407624-010	Y_R (360.074 nm)	0.95	0.03	531048.06
	R2407624-010	Zn (213.857 nm)	0.0126	1.04	825.7003
8/21/2024 21:47:54	R2407596-001 5X	Ag (328.068 nm)	0.0001 u	> 100.00	20.5437
	R2407596-001 5X	Al (237.312 nm)	0.8967	1.10	2406.2880
	R2407596-001 5X	As (188.980 nm)	0.0042	21.48	4.9745
	R2407596-001 5X	B (249.772 nm)	0.0179	0.89	883.6501
	R2407596-001 5X	Ba (230.424 nm)	0.0879	0.12	5577.7267
	R2407596-001 5X	Be (313.107 nm)	0.0000	72.65	-10.1770
	R2407596-001 5X	Ca (317.933 nm)	42.7907	0.03	1722307.8059
	R2407596-001 5X	Cd (214.439 nm)	0.0001	21.99	18.7474
	R2407596-001 5X	Co (230.786 nm)	0.0012	15.93	28.4966
	R2407596-001 5X	Cr (267.716 nm)	0.0017	6.12	118.5093
	R2407596-001 5X	Cu (327.395 nm)	0.0015	6.61	-75.4998
	R2407596-001 5X	Fe (234.350 nm)	9.8887	0.09	237955.8115
	R2407596-001 5X	K (766.491 nm)	2.2722	2.32	3228.6419
	R2407596-001 5X	Mg (279.078 nm)	4.2586	0.21	18579.3310
	R2407596-001 5X	Mn (257.610 nm)	0.6112	0.05	224225.0939
	R2407596-001 5X	Mo (202.032 nm)	0.0010	13.87	16.7556
	R2407596-001 5X	Na (588.995 nm)	265.5759 o	0.57	4569169.7807
	R2407596-001 5X	Ni (230.299 nm)	0.0106	6.47	148.6840
	R2407596-001 5X	Pb (220.353 nm)	0.0021	25.76	14.9583
	R2407596-001 5X	Sb (217.582 nm)	-0.0008 u	57.23	0.6201
	R2407596-001 5X	Se (196.026 nm)	0.0011 u	> 100.00	2.4969
	R2407596-001 5X	Si (252.851 nm)	2.8565	2.95	19043.6836
	R2407596-001 5X	Sn (189.925 nm)	0.0116	8.56	39.8806
	R2407596-001 5X	Sr (216.596 nm)	0.1328	0.33	2664.8013
	R2407596-001 5X	Ti (336.122 nm)	0.0183	1.97	2946.5342
	R2407596-001 5X	Tl (190.794 nm)	0.0013	72.47	-1.4875
	R2407596-001 5X	V (292.401 nm)	0.0019	7.47	81.4095
	R2407596-001 5X	Y (360.074 nm)	0.94	0.48	520033.84
	R2407596-001 5X	Y_R (360.074 nm)	0.93	0.48	520007.82
	R2407596-001 5X	Zn (213.857 nm)	0.0135	0.75	886.4772
8/21/2024 21:51:07	Continuing Calibration Verification1	Ag (328.068 nm)	0.5117	0.28	32651.0424
	Continuing Calibration Verification1	Al (237.312 nm)	9.9610	0.33	26887.8796
	Continuing Calibration Verification1	As (188.980 nm)	1.0025	0.58	1769.3135
	Continuing Calibration Verification1	B (249.772 nm)	2.3658	0.53	105494.4870
	Continuing Calibration Verification1	Ba (230.424 nm)	9.8743	1.30	625043.0408
	Continuing Calibration Verification1	Be (313.107 nm)	0.2492	0.61	311810.0195
	Continuing Calibration Verification1	Ca (317.933 nm)	25.1851	0.70	1014942.9328
	Continuing Calibration Verification1	Cd (214.439 nm)	0.5065	0.64	32845.6755
	Continuing Calibration Verification1	Co (230.786 nm)	2.5098	0.60	53525.4688
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5210	0.64	30260.0002
	Continuing Calibration Verification1	Cu (327.395 nm)	1.2598	0.42	58044.5157
	Continuing Calibration Verification1	Fe (234.350 nm)	4.9964	0.62	120258.5713
	Continuing Calibration Verification1	K (766.491 nm)	24.9075	0.12	29941.9772
	Continuing Calibration Verification1	Mg (279.078 nm)	25.6795	0.66	112012.9317
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7444	0.62	273086.2236
	Continuing Calibration Verification1	Mo (202.032 nm)	2.5998	0.74	29239.7528
	Continuing Calibration Verification1	Na (588.995 nm)	25.0375	0.26	419411.1611
	Continuing Calibration Verification1	Ni (230.299 nm)	2.0189	0.45	27277.4583
	Continuing Calibration Verification1	Pb (220.353 nm)	0.5038	0.54	2743.0652

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification1	Sb (217.582 nm)	5.0115	0.38	12078.1496
	Continuing Calibration Verification1	Se (196.026 nm)	0.4930	0.89	419.4151
	Continuing Calibration Verification1	Si (252.851 nm)	10.1586	1.59	67564.8715
	Continuing Calibration Verification1	Sn (189.925 nm)	5.0285	0.67	14219.2369
	Continuing Calibration Verification1	Sr (216.596 nm)	2.5424	0.58	50872.6115
	Continuing Calibration Verification1	Ti (336.122 nm)	2.6232	0.52	412844.9286
	Continuing Calibration Verification1	Tl (190.794 nm)	1.0026	0.93	973.9804
	Continuing Calibration Verification1	V (292.401 nm)	2.5678	0.57	99751.3785
	Continuing Calibration Verification1	Y (360.074 nm)	0.96	0.28	534013.52
	Continuing Calibration Verification1	Y_R (360.074 nm)	0.96	0.28	534006.97
	Continuing Calibration Verification1	Zn (213.857 nm)	0.9991	0.64	64338.4889
8/21/2024 21:54:22	Continuing Calibration Blank1	Ag (328.068 nm)	0.0000 u	58.84	14.6900
	Continuing Calibration Blank1	Al (237.312 nm)	0.0019	45.16	-10.5144
	Continuing Calibration Blank1	As (188.980 nm)	0.0012 u	97.86	-0.4305
	Continuing Calibration Blank1	B (249.772 nm)	0.0019	12.03	168.3601
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0003	7.42	35.0578
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000	31.88	-11.9459
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0038	1.44	3196.8128
	Continuing Calibration Blank1	Cd (214.439 nm)	-0.0001 u	40.74	7.5746
	Continuing Calibration Blank1	Co (230.786 nm)	0.0000 u	> 100.00	2.2864
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0001	38.64	28.5311
	Continuing Calibration Blank1	Cu (327.395 nm)	0.0004	60.04	-124.1105
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0032	18.75	131.5694
	Continuing Calibration Blank1	K (766.491 nm)	0.0703	7.50	629.9588
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0001 u	> 100.00	4.5060
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0000	6.84	25.6933
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0034	14.99	43.3088
	Continuing Calibration Blank1	Na (588.995 nm)	0.0722	5.29	-11289.6580
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0000 u	> 100.00	6.2634
	Continuing Calibration Blank1	Pb (220.353 nm)	-0.0011 u	30.33	-2.5844
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0050	29.87	14.5258
	Continuing Calibration Blank1	Se (196.026 nm)	0.0011 u	> 100.00	2.4534
	Continuing Calibration Blank1	Si (252.851 nm)	0.0093	26.33	123.8017
	Continuing Calibration Blank1	Sn (189.925 nm)	-0.0004 u	41.84	6.0154
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0000 u	> 100.00	8.4462
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0040	24.72	703.3314
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0009 u	98.25	-1.8468
	Continuing Calibration Blank1	V (292.401 nm)	0.0002	12.62	16.6678
	Continuing Calibration Blank1	Y (360.074 nm)	1.01	0.26	559488.20
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.01	0.26	559512.73
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0003	1.77	35.7847
8/21/2024 21:57:35	PBW-443448	Ag (328.068 nm)	0.0001 u	93.81	25.7435
	PBW-443448	Al (237.312 nm)	0.0009 u	> 100.00	-13.1704
	PBW-443448	As (188.980 nm)	-0.0001 u	> 100.00	-2.5949
	PBW-443448	B (249.772 nm)	0.0021	3.91	178.8044
	PBW-443448	Ba (230.424 nm)	0.0000 u	> 100.00	15.3119
	PBW-443448	Be (313.107 nm)	0.0000 u	> 100.00	-14.0623
	PBW-443448	Ca (317.933 nm)	0.0077	3.35	3353.1455
	PBW-443448	Cd (214.439 nm)	0.0000 u	76.09	10.5390
	PBW-443448	Co (230.786 nm)	0.0001	93.78	5.1773
	PBW-443448	Cr (267.716 nm)	0.0003	29.72	36.8846
	PBW-443448	Cu (327.395 nm)	0.0000 u	> 100.00	-144.3980
	PBW-443448	Fe (234.350 nm)	0.0035	6.04	140.4179
	PBW-443448	K (766.491 nm)	0.0174 u	> 100.00	567.5229
	PBW-443448	Mg (279.078 nm)	0.0001 u	> 100.00	4.7088
	PBW-443448	Mn (257.610 nm)	0.0001	29.83	34.5829
	PBW-443448	Mo (202.032 nm)	0.0010	19.14	16.7542

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	PBW-443448	Na (588.995 nm)	0.0646	8.60	-11420.6598
	PBW-443448	Ni (230.299 nm)	0.0005	76.60	12.5953
	PBW-443448	Pb (220.353 nm)	-0.0001 u	> 100.00	3.0390
	PBW-443448	Sb (217.582 nm)	0.0071	20.25	19.7218
	PBW-443448	Se (196.026 nm)	0.0005 u	> 100.00	1.9170
	PBW-443448	Si (252.851 nm)	0.0161	16.06	169.4250
	PBW-443448	Sn (189.925 nm)	-0.0002 u	> 100.00	6.3779
	PBW-443448	Sr (216.596 nm)	-0.0002 u	49.82	4.7441
	PBW-443448	Ti (336.122 nm)	0.0014	33.56	294.4245
	PBW-443448	Tl (190.794 nm)	0.0014 u	> 100.00	-1.3962
	PBW-443448	V (292.401 nm)	0.0001	13.53	12.1074
	PBW-443448	Y (360.074 nm)	1.02	0.05	565898.50
	PBW-443448	Y_R (360.074 nm)	1.02	0.05	565940.43
	PBW-443448	Zn (213.857 nm)	0.0004	20.58	38.9708
8/21/2024 22:00:49	LCSW-443448	Ag (328.068 nm)	0.0488	0.43	3132.1471
	LCSW-443448	Al (237.312 nm)	1.9488	0.07	5247.7943
	LCSW-443448	As (188.980 nm)	0.0372	4.32	63.3089
	LCSW-443448	B (249.772 nm)	0.9055	0.31	40430.7503
	LCSW-443448	Ba (230.424 nm)	1.9327	0.12	122350.0250
	LCSW-443448	Be (313.107 nm)	0.0485	0.27	60675.7200
	LCSW-443448	Ca (317.933 nm)	1.9305	0.33	80607.7298
	LCSW-443448	Cd (214.439 nm)	0.0501	0.36	3256.4666
	LCSW-443448	Co (230.786 nm)	0.4916	0.13	10486.3930
	LCSW-443448	Cr (267.716 nm)	0.2015	0.48	11717.2170
	LCSW-443448	Cu (327.395 nm)	0.2513	0.09	11461.7845
	LCSW-443448	Fe (234.350 nm)	1.0020	0.38	24161.9186
	LCSW-443448	K (766.491 nm)	18.7700	0.17	22698.7104
	LCSW-443448	Mg (279.078 nm)	1.9232	0.22	8392.9723
	LCSW-443448	Mn (257.610 nm)	0.4749	0.33	174242.5225
	LCSW-443448	Mo (202.032 nm)	0.4918	0.56	5535.7621
	LCSW-443448	Na (588.995 nm)	19.1762	0.12	318291.9071
	LCSW-443448	Ni (230.299 nm)	0.4848	0.33	6554.0070
	LCSW-443448	Pb (220.353 nm)	0.5018	0.38	2732.1310
	LCSW-443448	Sb (217.582 nm)	0.4929	0.27	1190.1914
	LCSW-443448	Se (196.026 nm)	0.9857	0.31	837.0963
	LCSW-443448	Si (252.851 nm)	0.3248	0.82	2220.6138
	LCSW-443448	Sn (189.925 nm)	4.8286	0.29	13654.2427
	LCSW-443448	Sr (216.596 nm)	1.9741	0.39	39503.3685
	LCSW-443448	Ti (336.122 nm)	0.5010	0.28	78908.5448
	LCSW-443448	Tl (190.794 nm)	1.9427	0.36	1889.7644
	LCSW-443448	V (292.401 nm)	0.4871	0.26	18929.1222
	LCSW-443448	Y (360.074 nm)	1.00	0.14	554684.53
	LCSW-443448	Y_R (360.074 nm)	1.00	0.14	554731.10
	LCSW-443448	Zn (213.857 nm)	0.4944	0.26	31845.1159
8/21/2024 22:04:02	DLCSW-443448	Ag (328.068 nm)	0.0487	1.14	3124.3950
	DLCSW-443448	Al (237.312 nm)	1.9481	0.35	5245.8350
	DLCSW-443448	As (188.980 nm)	0.0389	2.71	66.2509
	DLCSW-443448	B (249.772 nm)	0.9036	0.40	40345.9934
	DLCSW-443448	Ba (230.424 nm)	1.9255	0.31	121897.3525
	DLCSW-443448	Be (313.107 nm)	0.0484	0.49	60497.4816
	DLCSW-443448	Ca (317.933 nm)	1.9227	0.50	80296.3302
	DLCSW-443448	Cd (214.439 nm)	0.0499	0.38	3244.5651
	DLCSW-443448	Co (230.786 nm)	0.4895	0.63	10440.2525
	DLCSW-443448	Cr (267.716 nm)	0.1976	0.46	11489.0448
	DLCSW-443448	Cu (327.395 nm)	0.2501	0.51	11408.3440
	DLCSW-443448	Fe (234.350 nm)	0.9828	0.50	23697.9721
	DLCSW-443448	K (766.491 nm)	18.6742	0.13	22585.5960

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	DLCSW-443448	Mg (279.078 nm)	1.9161	0.50	8361.7676
	DLCSW-443448	Mn (257.610 nm)	0.4730	0.51	173539.0910
	DLCSW-443448	Mo (202.032 nm)	0.4900	0.78	5515.7865
	DLCSW-443448	Na (588.995 nm)	19.1079	0.14	317113.4602
	DLCSW-443448	Ni (230.299 nm)	0.4824	0.67	6522.2623
	DLCSW-443448	Pb (220.353 nm)	0.4999	0.42	2721.7290
	DLCSW-443448	Sb (217.582 nm)	0.4901	0.15	1183.5675
	DLCSW-443448	Se (196.026 nm)	0.9659	0.32	820.2525
	DLCSW-443448	Si (252.851 nm)	0.3215	1.26	2198.4964
	DLCSW-443448	Sn (189.925 nm)	4.7198	0.54	13346.6601
	DLCSW-443448	Sr (216.596 nm)	1.9304	0.58	38629.6265
	DLCSW-443448	Ti (336.122 nm)	0.4981	0.45	78442.1118
	DLCSW-443448	Tl (190.794 nm)	1.9335	0.43	1880.8125
	DLCSW-443448	V (292.401 nm)	0.4852	0.39	18854.6574
	DLCSW-443448	Y (360.074 nm)	0.99	0.18	551475.24
	DLCSW-443448	Y_R (360.074 nm)	0.99	0.18	551515.11
	DLCSW-443448	Zn (213.857 nm)	0.4927	0.51	31731.4922
8/21/2024 22:07:16	R2407708-001	Ag (328.068 nm)	0.0000 u	> 100.00	16.4296
	R2407708-001	Al (237.312 nm)	-0.0015 u	> 100.00	-19.6281
	R2407708-001	As (188.980 nm)	0.0149	14.80	23.7894
	R2407708-001	B (249.772 nm)	14.0007 o	0.39	623901.9099
	R2407708-001	Ba (230.424 nm)	0.0209	0.44	1334.3329
	R2407708-001	Be (313.107 nm)	0.0000 u	> 100.00	-21.9743
	R2407708-001	Ca (317.933 nm)	7.7291	0.55	313586.3239
	R2407708-001	Cd (214.439 nm)	0.0001	55.68	15.5020
	R2407708-001	Co (230.786 nm)	0.5724	0.42	12208.4732
	R2407708-001	Cr (267.716 nm)	0.0081	0.70	489.5169
	R2407708-001	Cu (327.395 nm)	0.0002	53.20	-134.7756
	R2407708-001	Fe (234.350 nm)	8.7807	0.46	211298.6729
	R2407708-001	K (766.491 nm)	413.6605 o	0.11	488734.3685
	R2407708-001	Mg (279.078 nm)	7.0732	0.47	30855.8027
	R2407708-001	Mn (257.610 nm)	0.2335	0.43	85686.2852
	R2407708-001	Mo (202.032 nm)	5.2942	0.56	59538.4095
	R2407708-001	Na (588.995 nm)	428.1681 o	0.57	7374204.1076
	R2407708-001	Ni (230.299 nm)	0.6920	0.59	9352.6596
	R2407708-001	Pb (220.353 nm)	0.0021	30.16	14.6794
	R2407708-001	Sb (217.582 nm)	0.0336	4.17	83.6228
	R2407708-001	Se (196.026 nm)	0.0187	20.61	17.3457
	R2407708-001	Si (252.851 nm)	3.5405	3.13	23588.6462
	R2407708-001	Sn (189.925 nm)	0.0027	14.09	14.6962
	R2407708-001	Sr (216.596 nm)	0.0109	0.65	226.8633
	R2407708-001	Ti (336.122 nm)	0.0020	31.49	376.9024
	R2407708-001	Tl (190.794 nm)	-0.0023 u	> 100.00	-5.0166
	R2407708-001	V (292.401 nm)	-0.0002 u	55.68	-0.8646
	R2407708-001	Y (360.074 nm)	0.89	0.18	497420.33
	R2407708-001	Y_R (360.074 nm)	0.89	0.18	497417.08
	R2407708-001	Zn (213.857 nm)	0.1817	0.44	11710.1569
8/21/2024 22:10:30	R2407719-001	Ag (328.068 nm)	0.0001	84.60	20.3527
	R2407719-001	Al (237.312 nm)	0.0081	12.85	6.2539
	R2407719-001	As (188.980 nm)	0.0042	19.77	5.0245
	R2407719-001	B (249.772 nm)	0.3073	0.17	13774.6945
	R2407719-001	Ba (230.424 nm)	0.0253	0.89	1614.9278
	R2407719-001	Be (313.107 nm)	0.0000	47.60	-11.1336
	R2407719-001	Ca (317.933 nm)	95.3659 o	0.54	3834699.4020
	R2407719-001	Cd (214.439 nm)	0.0001	98.88	16.9886
	R2407719-001	Co (230.786 nm)	0.0000 u	> 100.00	2.5751
	R2407719-001	Cr (267.716 nm)	0.0011	4.20	83.2947

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407719-001	Cu (327.395 nm)	0.0006	12.27	-117.6632
	R2407719-001	Fe (234.350 nm)	0.0320	3.89	825.0745
	R2407719-001	K (766.491 nm)	10.8925	0.78	13401.9654
	R2407719-001	Mg (279.078 nm)	33.0993	0.51	144376.4872
	R2407719-001	Mn (257.610 nm)	0.0454	0.44	16659.1468
	R2407719-001	Mo (202.032 nm)	0.0226	5.19	260.0538
	R2407719-001	Na (588.995 nm)	215.7123 o	0.15	3708925.4421
	R2407719-001	Ni (230.299 nm)	0.0516	5.29	703.1547
	R2407719-001	Pb (220.353 nm)	-0.0014 u	32.62	-4.3881
	R2407719-001	Sb (217.582 nm)	-0.0007 u	> 100.00	0.7873
	R2407719-001	Se (196.026 nm)	-0.0004 u	> 100.00	1.1749
	R2407719-001	Si (252.851 nm)	14.7858	5.28	98312.3654
	R2407719-001	Sn (189.925 nm)	0.0003 u	> 100.00	7.8479
	R2407719-001	Sr (216.596 nm)	2.0857	0.57	41735.8509
	R2407719-001	Ti (336.122 nm)	0.0007	31.77	170.5235
	R2407719-001	Tl (190.794 nm)	0.0027	30.05	-0.1798
	R2407719-001	V (292.401 nm)	0.0121	1.13	476.0192
	R2407719-001	Y (360.074 nm)	0.94	0.08	521185.44
	R2407719-001	Y_R (360.074 nm)	0.94	0.08	521213.59
	R2407719-001	Zn (213.857 nm)	0.0100	0.58	656.9755
8/21/2024 22:13:43	R2407719-002	Ag (328.068 nm)	0.0001	74.94	26.3417
	R2407719-002	Al (237.312 nm)	0.0065	40.61	1.9932
	R2407719-002	As (188.980 nm)	0.0023 u	> 100.00	1.5789
	R2407719-002	B (249.772 nm)	0.2971	0.37	13321.2544
	R2407719-002	Ba (230.424 nm)	0.0257	0.43	1640.8435
	R2407719-002	Be (313.107 nm)	0.0000 u	85.08	-21.7773
	R2407719-002	Ca (317.933 nm)	94.5622 o	0.50	3802409.2296
	R2407719-002	Cd (214.439 nm)	0.0000 u	> 100.00	12.8211
	R2407719-002	Co (230.786 nm)	0.0000 u	> 100.00	2.2575
	R2407719-002	Cr (267.716 nm)	0.0009	16.59	74.4786
	R2407719-002	Cu (327.395 nm)	0.0004	21.28	-122.6337
	R2407719-002	Fe (234.350 nm)	0.0364	1.19	931.5981
	R2407719-002	K (766.491 nm)	10.4734	0.31	12907.3303
	R2407719-002	Mg (279.078 nm)	32.7755	0.42	142964.1909
	R2407719-002	Mn (257.610 nm)	0.0485	0.45	17793.1602
	R2407719-002	Mo (202.032 nm)	0.0165	4.40	191.2818
	R2407719-002	Na (588.995 nm)	213.5165 o	0.15	3671042.7038
	R2407719-002	Ni (230.299 nm)	0.0527	4.55	717.3550
	R2407719-002	Pb (220.353 nm)	-0.0003 u	> 100.00	1.6946
	R2407719-002	Sb (217.582 nm)	-0.0005 u	78.59	1.3002
	R2407719-002	Se (196.026 nm)	0.0017 u	> 100.00	2.9394
	R2407719-002	Si (252.851 nm)	15.1119	5.23	100478.9875
	R2407719-002	Sn (189.925 nm)	-0.0001 u	> 100.00	6.6951
	R2407719-002	Sr (216.596 nm)	2.0663	0.45	41347.5814
	R2407719-002	Ti (336.122 nm)	0.0004	41.81	124.6662
	R2407719-002	Tl (190.794 nm)	0.0004 u	> 100.00	-2.3299
	R2407719-002	V (292.401 nm)	0.0119	1.62	469.4587
	R2407719-002	Y (360.074 nm)	0.93	0.12	517991.78
	R2407719-002	Y_R (360.074 nm)	0.93	0.12	518016.52
	R2407719-002	Zn (213.857 nm)	0.0046	1.06	308.2791
8/21/2024 22:16:57	R2407723-001	Ag (328.068 nm)	0.0000 u	> 100.00	17.3618
	R2407723-001	Al (237.312 nm)	0.4181	0.28	1113.4526
	R2407723-001	As (188.980 nm)	1.6463	0.20	2907.1868
	R2407723-001	B (249.772 nm)	0.0088	2.21	477.4942
	R2407723-001	Ba (230.424 nm)	0.0036	1.37	238.6341
	R2407723-001	Be (313.107 nm)	0.0000	38.77	-4.7739
	R2407723-001	Ca (317.933 nm)	2.5204	0.38	104311.1084

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407723-001	Cd (214.439 nm)	0.0000	> 100.00	13.0957
	R2407723-001	Co (230.786 nm)	0.0003	62.06	7.7401
	R2407723-001	Cr (267.716 nm)	0.0024	4.58	163.8927
	R2407723-001	Cu (327.395 nm)	0.0306	0.70	1268.4286
	R2407723-001	Fe (234.350 nm)	2.3831	0.38	57386.8596
	R2407723-001	K (766.491 nm)	0.3643	5.80	976.9078
	R2407723-001	Mg (279.078 nm)	0.4701	0.06	2054.6114
	R2407723-001	Mn (257.610 nm)	0.0326	0.31	11966.6496
	R2407723-001	Mo (202.032 nm)	0.0016	16.23	23.2864
	R2407723-001	Na (588.995 nm)	0.2762	4.80	-7770.4056
	R2407723-001	Ni (230.299 nm)	0.0202	0.99	278.8500
	R2407723-001	Pb (220.353 nm)	0.0026	37.63	17.7742
	R2407723-001	Sb (217.582 nm)	0.7537	0.91	1818.6382
	R2407723-001	Se (196.026 nm)	0.0007	58.51	2.1607
	R2407723-001	Si (252.851 nm)	0.9501	1.32	6375.4321
	R2407723-001	Sn (189.925 nm)	0.0018	35.30	12.1302
	R2407723-001	Sr (216.596 nm)	0.0046	3.05	100.6222
	R2407723-001	Ti (336.122 nm)	0.0042	3.61	730.8372
	R2407723-001	Tl (190.794 nm)	0.0020	74.93	-0.7816
	R2407723-001	V (292.401 nm)	0.0011	17.32	49.8851
	R2407723-001	Y (360.074 nm)	1.03	0.10	573924.98
	R2407723-001	Y_R (360.074 nm)	1.03	0.10	574046.12
	R2407723-001	Zn (213.857 nm)	0.0634	0.69	4094.2834
8/21/2024 22:20:11	R2407723-001L 5X	Ag (328.068 nm)	0.0001 u	> 100.00	20.2184
	R2407723-001L 5X	Al (237.312 nm)	0.0883	0.90	222.8024
	R2407723-001L 5X	As (188.980 nm)	0.3403	0.82	599.0587
	R2407723-001L 5X	B (249.772 nm)	0.0037	3.07	247.3111
	R2407723-001L 5X	Ba (230.424 nm)	0.0008	9.25	62.1464
	R2407723-001L 5X	Be (313.107 nm)	0.0000	51.41	-11.2628
	R2407723-001L 5X	Ca (317.933 nm)	0.5277	0.64	24246.0892
	R2407723-001L 5X	Cd (214.439 nm)	0.0000 u	73.56	10.2183
	R2407723-001L 5X	Co (230.786 nm)	0.0001	> 100.00	5.0267
	R2407723-001L 5X	Cr (267.716 nm)	0.0006	5.62	56.2842
	R2407723-001L 5X	Cu (327.395 nm)	0.0063	1.00	147.0411
	R2407723-001L 5X	Fe (234.350 nm)	0.4952	0.66	11967.4546
	R2407723-001L 5X	K (766.491 nm)	0.1591	12.68	734.7378
	R2407723-001L 5X	Mg (279.078 nm)	0.0986	1.71	434.2302
	R2407723-001L 5X	Mn (257.610 nm)	0.0067	0.61	2478.7443
	R2407723-001L 5X	Mo (202.032 nm)	0.0006	36.08	12.7482
	R2407723-001L 5X	Na (588.995 nm)	0.1527	4.52	-9900.4945
	R2407723-001L 5X	Ni (230.299 nm)	0.0045	4.95	66.7691
	R2407723-001L 5X	Pb (220.353 nm)	-0.0006 u	78.88	0.0758
	R2407723-001L 5X	Sb (217.582 nm)	0.1609	0.56	390.1853
	R2407723-001L 5X	Se (196.026 nm)	-0.0010 u	> 100.00	0.6892
	R2407723-001L 5X	Si (252.851 nm)	0.2377	2.86	1642.0051
	R2407723-001L 5X	Sn (189.925 nm)	-0.0002 u	87.13	6.4071
	R2407723-001L 5X	Sr (216.596 nm)	0.0007	22.92	22.7964
	R2407723-001L 5X	Ti (336.122 nm)	0.0010	11.52	220.9413
	R2407723-001L 5X	Tl (190.794 nm)	0.0024	51.06	-0.4401
	R2407723-001L 5X	V (292.401 nm)	0.0002	63.22	16.7458
	R2407723-001L 5X	Y (360.074 nm)	1.02	0.11	565445.39
	R2407723-001L 5X	Y_R (360.074 nm)	1.02	0.10	565559.17
	R2407723-001L 5X	Zn (213.857 nm)	0.0136	0.41	887.1156
8/21/2024 22:23:25	R2407724-001	Ag (328.068 nm)	0.0003	14.73	36.2019
	R2407724-001	Al (237.312 nm)	0.1145	1.77	293.5907
	R2407724-001	As (188.980 nm)	0.0000 u	> 100.00	-2.5131
	R2407724-001	B (249.772 nm)	0.0785	0.52	3582.1134

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407724-001	Ba (230.424 nm)	0.0243	0.17	1553.9341
	R2407724-001	Be (313.107 nm)	0.0000	> 100.00	-14.2321
	R2407724-001	Ca (317.933 nm)	186.0194 o	0.18	7477022.6176
	R2407724-001	Cd (214.439 nm)	0.0001	27.60	17.3124
	R2407724-001	Co (230.786 nm)	-0.0001 u	92.61	0.4784
	R2407724-001	Cr (267.716 nm)	0.0010	6.23	81.7558
	R2407724-001	Cu (327.395 nm)	0.0016	20.06	-70.9531
	R2407724-001	Fe (234.350 nm)	0.1111	0.80	2727.8050
	R2407724-001	K (766.491 nm)	3.9167	1.00	5169.4105
	R2407724-001	Mg (279.078 nm)	52.4589	0.14	228819.1226
	R2407724-001	Mn (257.610 nm)	1.5701	0.13	576021.8947
	R2407724-001	Mo (202.032 nm)	0.0016	12.79	23.5466
	R2407724-001	Na (588.995 nm)	62.8514 o	0.20	1071774.0932
	R2407724-001	Ni (230.299 nm)	0.0147	1.57	204.9861
	R2407724-001	Pb (220.353 nm)	0.0005	63.32	6.2028
	R2407724-001	Sb (217.582 nm)	0.0010	28.35	4.9166
	R2407724-001	Se (196.026 nm)	-0.0038 u	47.61	-1.6682
	R2407724-001	Si (252.851 nm)	4.3777	0.10	29151.5799
	R2407724-001	Sn (189.925 nm)	0.0002 u	> 100.00	7.6359
	R2407724-001	Sr (216.596 nm)	0.2182	0.44	4372.7341
	R2407724-001	Ti (336.122 nm)	0.0024	17.50	437.4711
	R2407724-001	Tl (190.794 nm)	0.0014 u	> 100.00	-1.4375
	R2407724-001	V (292.401 nm)	0.0017	14.39	73.3992
	R2407724-001	Y (360.074 nm)	0.95	0.49	529395.75
	R2407724-001	Y_R (360.074 nm)	0.95	0.49	529462.35
	R2407724-001	Zn (213.857 nm)	0.0020	2.38	143.4568
8/21/2024 22:26:39	Continuing Calibration Verification1	Ag (328.068 nm)	0.5098	0.19	32530.1650
	Continuing Calibration Verification1	Al (237.312 nm)	9.9625	0.34	26891.8056
	Continuing Calibration Verification1	As (188.980 nm)	0.9972	0.52	1760.0573
	Continuing Calibration Verification1	B (249.772 nm)	2.3576	0.55	105130.0589
	Continuing Calibration Verification1	Ba (230.424 nm)	9.8842	0.84	625673.6083
	Continuing Calibration Verification1	Be (313.107 nm)	0.2484	0.57	310747.6683
	Continuing Calibration Verification1	Ca (317.933 nm)	25.0740	0.68	1010479.8524
	Continuing Calibration Verification1	Cd (214.439 nm)	0.5032	0.60	32635.1774
	Continuing Calibration Verification1	Co (230.786 nm)	2.4964	0.58	53240.0232
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5182	0.61	30102.5308
	Continuing Calibration Verification1	Cu (327.395 nm)	1.2549	0.47	57817.3991
	Continuing Calibration Verification1	Fe (234.350 nm)	4.9590	0.67	119356.7417
	Continuing Calibration Verification1	K (766.491 nm)	24.9562	0.01	29999.4156
	Continuing Calibration Verification1	Mg (279.078 nm)	25.5514	0.64	111454.1305
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7412	0.59	271932.6039
	Continuing Calibration Verification1	Mo (202.032 nm)	2.5948	0.81	29183.2332
	Continuing Calibration Verification1	Na (588.995 nm)	25.0108	0.29	418949.7500
	Continuing Calibration Verification1	Ni (230.299 nm)	2.0163	0.69	27241.6292
	Continuing Calibration Verification1	Pb (220.353 nm)	0.4998	0.46	2720.8364
	Continuing Calibration Verification1	Sb (217.582 nm)	5.0026	0.26	12056.5670
	Continuing Calibration Verification1	Se (196.026 nm)	0.4921	0.84	418.6544
	Continuing Calibration Verification1	Si (252.851 nm)	10.2708	2.16	68310.7058
	Continuing Calibration Verification1	Sn (189.925 nm)	4.9977	0.59	14132.2168
	Continuing Calibration Verification1	Sr (216.596 nm)	2.5283	1.32	50592.1551
	Continuing Calibration Verification1	Ti (336.122 nm)	2.6130	0.54	411242.8785
	Continuing Calibration Verification1	Tl (190.794 nm)	0.9995	0.17	970.9377
	Continuing Calibration Verification1	V (292.401 nm)	2.5576	0.58	99354.2515
	Continuing Calibration Verification1	Y (360.074 nm)	0.97	0.04	538322.18
	Continuing Calibration Verification1	Y_R (360.074 nm)	0.97	0.04	538411.49
	Continuing Calibration Verification1	Zn (213.857 nm)	0.9971	0.90	64206.3798
8/21/2024 22:29:53	Continuing Calibration Blank1	Ag (328.068 nm)	0.0000 u	> 100.00	15.6150

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank1	Al (237.312 nm)	0.0017	76.26	-11.1497
	Continuing Calibration Blank1	As (188.980 nm)	0.0007	64.64	-1.2630
	Continuing Calibration Blank1	B (249.772 nm)	0.0035	8.51	240.8521
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0004	3.73	37.2709
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000 u	> 100.00	-18.0395
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0035	1.08	3186.1391
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0000 u	> 100.00	12.4586
	Continuing Calibration Blank1	Co (230.786 nm)	0.0002	82.90	5.9793
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0001	28.62	27.8533
	Continuing Calibration Blank1	Cu (327.395 nm)	0.0004	32.47	-125.3947
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0031	18.19	130.7271
	Continuing Calibration Blank1	K (766.491 nm)	0.0864	2.80	648.9928
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0005 u	> 100.00	6.3180
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0001	23.84	28.7750
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0036	11.25	45.4860
	Continuing Calibration Blank1	Na (588.995 nm)	0.0688	11.84	-11348.4086
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0000 u	> 100.00	6.0526
	Continuing Calibration Blank1	Pb (220.353 nm)	-0.0004 u	> 100.00	1.0756
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0080	24.50	21.9316
	Continuing Calibration Blank1	Se (196.026 nm)	-0.0028 u	95.32	-0.8510
	Continuing Calibration Blank1	Si (252.851 nm)	0.0154	19.13	164.3505
	Continuing Calibration Blank1	Sn (189.925 nm)	-0.0005 u	> 100.00	5.5414
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0000 u	> 100.00	8.9708
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0045	22.86	782.2502
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0024	46.73	-0.4607
	Continuing Calibration Blank1	V (292.401 nm)	0.0002	36.72	13.9839
	Continuing Calibration Blank1	Y (360.074 nm)	1.01	0.02	562065.97
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.01	0.02	562134.66
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0003	14.43	32.0169
8/21/2024 22:33:07	R2407724-002	Ag (328.068 nm)	0.0000 u	> 100.00	17.0054
	R2407724-002	Al (237.312 nm)	0.3700	0.70	983.6059
	R2407724-002	As (188.980 nm)	0.0075	27.96	10.7233
	R2407724-002	B (249.772 nm)	0.0249	0.33	1192.9056
	R2407724-002	Ba (230.424 nm)	0.0337	0.60	2144.6233
	R2407724-002	Be (313.107 nm)	0.0000	42.72	-14.2592
	R2407724-002	Ca (317.933 nm)	92.0432 o	0.58	3701202.2297
	R2407724-002	Cd (214.439 nm)	0.0000 u	> 100.00	9.9782
	R2407724-002	Co (230.786 nm)	0.0003	21.18	7.8703
	R2407724-002	Cr (267.716 nm)	0.0036	0.47	231.5432
	R2407724-002	Cu (327.395 nm)	0.0035	6.11	16.4299
	R2407724-002	Fe (234.350 nm)	0.1172	0.72	2874.5777
	R2407724-002	K (766.491 nm)	12.2972	0.40	15059.7537
	R2407724-002	Mg (279.078 nm)	0.0501	1.58	222.8029
	R2407724-002	Mn (257.610 nm)	0.0020	0.52	740.8890
	R2407724-002	Mo (202.032 nm)	0.0117	3.72	136.6475
	R2407724-002	Na (588.995 nm)	45.1685	0.22	766709.3253
	R2407724-002	Ni (230.299 nm)	0.0142	2.84	198.1855
	R2407724-002	Pb (220.353 nm)	0.0002 u	99.67	4.7507
	R2407724-002	Sb (217.582 nm)	0.0059	26.98	16.7624
	R2407724-002	Se (196.026 nm)	0.0018 u	> 100.00	3.0500
	R2407724-002	Si (252.851 nm)	3.7701	0.43	25114.4636
	R2407724-002	Sn (189.925 nm)	-0.0001 u	> 100.00	6.8725
	R2407724-002	Sr (216.596 nm)	0.4971	0.42	9952.7991
	R2407724-002	Ti (336.122 nm)	0.0031	12.80	557.4735
	R2407724-002	Tl (190.794 nm)	0.0002 u	> 100.00	-2.5386
	R2407724-002	V (292.401 nm)	0.0082	0.21	326.8654
	R2407724-002	Y (360.074 nm)	0.98	0.13	542847.21

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407724-002	Y_R (360.074 nm)	0.98	0.13	542907.80
	R2407724-002	Zn (213.857 nm)	0.0024	2.78	168.0015
8/21/2024 22:36:20	R2407724-003	Ag (328.068 nm)	0.0003	71.74	35.8150
	R2407724-003	Al (237.312 nm)	0.3352	0.54	889.7435
	R2407724-003	As (188.980 nm)	0.0011 u	92.61	-0.6061
	R2407724-003	B (249.772 nm)	0.0983	0.37	4462.6015
	R2407724-003	Ba (230.424 nm)	0.0217	0.59	1389.2799
	R2407724-003	Be (313.107 nm)	0.0000	42.46	-9.7468
	R2407724-003	Ca (317.933 nm)	299.9245 o LR	0.37	12053556.7980
	R2407724-003	Cd (214.439 nm)	0.0001	14.93	18.5907
	R2407724-003	Co (230.786 nm)	0.0005	20.29	13.1334
	R2407724-003	Cr (267.716 nm)	0.0015	10.27	108.0782
	R2407724-003	Cu (327.395 nm)	0.0009	21.76	-102.3811
	R2407724-003	Fe (234.350 nm)	2.1505	0.37	51790.9796
	R2407724-003	K (766.491 nm)	14.9321	0.10	18169.3416
	R2407724-003	Mg (279.078 nm)	97.8746 o	0.39	426913.1658
	R2407724-003	Mn (257.610 nm)	2.1634 o	0.36	793675.0792
	R2407724-003	Mo (202.032 nm)	0.0057	5.06	69.6900
	R2407724-003	Na (588.995 nm)	92.3816 o	0.12	1581229.5265
	R2407724-003	Ni (230.299 nm)	0.0154	0.47	213.1425
	R2407724-003	Pb (220.353 nm)	0.0003	97.56	5.1406
	R2407724-003	Sb (217.582 nm)	0.0041	32.06	12.4134
	R2407724-003	Se (196.026 nm)	0.0001 u	> 100.00	1.5973
	R2407724-003	Si (252.851 nm)	4.2374	0.20	28219.4791
	R2407724-003	Sn (189.925 nm)	-0.0004 u	> 100.00	5.9577
	R2407724-003	Sr (216.596 nm)	0.3634	0.52	7279.2442
	R2407724-003	Ti (336.122 nm)	0.0089	4.98	1465.5381
	R2407724-003	Tl (190.794 nm)	0.0021	64.47	-0.6803
	R2407724-003	V (292.401 nm)	0.0010	5.83	45.8152
	R2407724-003	Y (360.074 nm)	0.93	0.13	517363.88
	R2407724-003	Y_R (360.074 nm)	0.93	0.14	517402.28
	R2407724-003	Zn (213.857 nm)	0.0025	0.65	173.0040
8/21/2024 22:39:33	R2407724-004	Ag (328.068 nm)	0.0000 u	> 100.00	19.8063
	R2407724-004	Al (237.312 nm)	0.0880	0.31	221.9211
	R2407724-004	As (188.980 nm)	0.0023	42.82	1.6137
	R2407724-004	B (249.772 nm)	0.0267	0.65	1271.5010
	R2407724-004	Ba (230.424 nm)	0.0473	0.44	3009.8247
	R2407724-004	Be (313.107 nm)	0.0000 u	> 100.00	-20.9321
	R2407724-004	Ca (317.933 nm)	131.0254 o	0.57	5267446.3058
	R2407724-004	Cd (214.439 nm)	0.0003	20.40	29.0609
	R2407724-004	Co (230.786 nm)	0.0000 u	> 100.00	2.0016
	R2407724-004	Cr (267.716 nm)	0.0009	7.96	75.6758
	R2407724-004	Cu (327.395 nm)	0.0020	10.50	-49.9235
	R2407724-004	Fe (234.350 nm)	0.0950	0.90	2341.0985
	R2407724-004	K (766.491 nm)	1.6755	1.62	2524.3743
	R2407724-004	Mg (279.078 nm)	36.9332	0.50	161099.1501
	R2407724-004	Mn (257.610 nm)	0.0025	0.37	928.1329
	R2407724-004	Mo (202.032 nm)	0.0011	21.27	17.5893
	R2407724-004	Na (588.995 nm)	53.6849	0.28	913635.1560
	R2407724-004	Ni (230.299 nm)	0.0156	0.76	216.1052
	R2407724-004	Pb (220.353 nm)	0.0000 u	> 100.00	3.6480
	R2407724-004	Sb (217.582 nm)	0.0018	67.38	6.9151
	R2407724-004	Se (196.026 nm)	-0.0045 u	27.63	-2.2616
	R2407724-004	Si (252.851 nm)	4.2418	0.49	28248.2618
	R2407724-004	Sn (189.925 nm)	-0.0015 u	39.23	2.7996
	R2407724-004	Sr (216.596 nm)	0.2266	0.52	4542.2425
	R2407724-004	Ti (336.122 nm)	0.0015	18.30	306.5795

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407724-004	Tl (190.794 nm)	0.0028	21.17	-0.0674
	R2407724-004	V (292.401 nm)	0.0005	6.92	26.9281
	R2407724-004	Y (360.074 nm)	0.96	0.03	534529.65
	R2407724-004	Y_R (360.074 nm)	0.96	0.03	534571.73
	R2407724-004	Zn (213.857 nm)	0.0025	0.62	176.3473
8/21/2024 22:42:46	R2407724-005	Ag (328.068 nm)	0.0002	24.76	26.6072
	R2407724-005	Al (237.312 nm)	0.0445	1.48	104.6168
	R2407724-005	As (188.980 nm)	-0.0001 u	> 100.00	-2.6440
	R2407724-005	B (249.772 nm)	0.0208	1.21	1012.9417
	R2407724-005	Ba (230.424 nm)	0.0619	0.50	3934.4213
	R2407724-005	Be (313.107 nm)	0.0000 u	> 100.00	-14.8077
	R2407724-005	Ca (317.933 nm)	42.4168	0.46	1707286.5066
	R2407724-005	Cd (214.439 nm)	0.0004	7.14	35.9994
	R2407724-005	Co (230.786 nm)	0.0001 u	> 100.00	3.3831
	R2407724-005	Cr (267.716 nm)	0.0025	6.79	166.8001
	R2407724-005	Cu (327.395 nm)	0.0009	11.62	-101.4041
	R2407724-005	Fe (234.350 nm)	0.0647	1.20	1611.5121
	R2407724-005	K (766.491 nm)	1.8655	1.03	2748.5694
	R2407724-005	Mg (279.078 nm)	10.6150	0.48	46304.7623
	R2407724-005	Mn (257.610 nm)	0.0026	0.45	953.3397
	R2407724-005	Mo (202.032 nm)	0.0006	25.18	12.5661
	R2407724-005	Na (588.995 nm)	3.2572	0.14	43658.3689
	R2407724-005	Ni (230.299 nm)	0.0129	2.58	179.7489
	R2407724-005	Pb (220.353 nm)	0.0004 u	> 100.00	5.8713
	R2407724-005	Sb (217.582 nm)	0.0010	> 100.00	5.0280
	R2407724-005	Se (196.026 nm)	0.0008 u	> 100.00	2.1828
	R2407724-005	Si (252.851 nm)	3.4201	0.45	22788.4081
	R2407724-005	Sn (189.925 nm)	-0.0007 u	79.42	5.0247
	R2407724-005	Sr (216.596 nm)	0.0651	0.66	1311.1164
	R2407724-005	Ti (336.122 nm)	0.0008	28.16	185.6725
	R2407724-005	Tl (190.794 nm)	0.0012 u	> 100.00	-1.5585
	R2407724-005	V (292.401 nm)	0.0004	64.20	21.8208
	R2407724-005	Y (360.074 nm)	1.00	0.03	556990.00
	R2407724-005	Y_R (360.074 nm)	1.00	0.03	557064.08
	R2407724-005	Zn (213.857 nm)	0.0025	2.62	176.6919
8/21/2024 22:46:00	R2407724-006	Ag (328.068 nm)	0.0029	0.78	204.3098
	R2407724-006	Al (237.312 nm)	0.0381	2.13	87.2909
	R2407724-006	As (188.980 nm)	0.0000 u	> 100.00	-2.4665
	R2407724-006	B (249.772 nm)	0.0340	0.73	1598.1519
	R2407724-006	Ba (230.424 nm)	0.0685	0.49	4350.3632
	R2407724-006	Be (313.107 nm)	0.0000 u	> 100.00	-13.2187
	R2407724-006	Ca (317.933 nm)	61.6179 o	0.61	2478759.8507
	R2407724-006	Cd (214.439 nm)	0.0001	88.15	14.9970
	R2407724-006	Co (230.786 nm)	0.0001 u	> 100.00	3.9923
	R2407724-006	Cr (267.716 nm)	0.0012	6.28	94.2321
	R2407724-006	Cu (327.395 nm)	0.0009	25.89	-102.4949
	R2407724-006	Fe (234.350 nm)	0.1073	0.51	2635.8614
	R2407724-006	K (766.491 nm)	3.1636	0.21	4280.6300
	R2407724-006	Mg (279.078 nm)	21.0929	0.55	92007.2219
	R2407724-006	Mn (257.610 nm)	0.0072	0.56	2647.0300
	R2407724-006	Mo (202.032 nm)	0.0008	2.64	14.8393
	R2407724-006	Na (588.995 nm)	18.1234	0.14	300129.5865
	R2407724-006	Ni (230.299 nm)	0.0119	2.65	166.8201
	R2407724-006	Pb (220.353 nm)	-0.0003 u	> 100.00	1.7383
	R2407724-006	Sb (217.582 nm)	0.0010	66.18	5.0579
	R2407724-006	Se (196.026 nm)	-0.0002 u	> 100.00	1.3882
	R2407724-006	Si (252.851 nm)	3.0199	0.44	20129.3474

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407724-006	Sn (189.925 nm)	-0.0009 u	64.79	4.4632
	R2407724-006	Sr (216.596 nm)	0.0923	0.54	1854.2291
	R2407724-006	Ti (336.122 nm)	0.0006	15.80	163.0439
	R2407724-006	Tl (190.794 nm)	0.0014 u	> 100.00	-1.4494
	R2407724-006	V (292.401 nm)	0.0004	12.26	23.3442
	R2407724-006	Y (360.074 nm)	0.99	0.04	547959.32
	R2407724-006	Y_R (360.074 nm)	0.99	0.04	548023.93
	R2407724-006	Zn (213.857 nm)	0.0024	5.87	171.1932
8/21/2024 22:49:13	R2407792-003	Ag (328.068 nm)	0.0000 u	> 100.00	18.2379
	R2407792-003	Al (237.312 nm)	0.1125	1.56	288.2281
	R2407792-003	As (188.980 nm)	0.0016	86.66	0.3642
	R2407792-003	B (249.772 nm)	0.2889	0.39	12957.2672
	R2407792-003	Ba (230.424 nm)	0.0375	0.80	2388.4288
	R2407792-003	Be (313.107 nm)	0.0000	62.78	-8.3961
	R2407792-003	Ca (317.933 nm)	120.0787 o	0.40	4827623.3201
	R2407792-003	Cd (214.439 nm)	0.0001	48.83	15.7032
	R2407792-003	Co (230.786 nm)	0.0008	19.21	19.2743
	R2407792-003	Cr (267.716 nm)	0.0016	3.12	113.8558
	R2407792-003	Cu (327.395 nm)	0.0008	33.85	-107.7219
	R2407792-003	Fe (234.350 nm)	0.2718	0.48	6593.7016
	R2407792-003	K (766.491 nm)	4.2526	1.57	5565.7616
	R2407792-003	Mg (279.078 nm)	84.2805 o	0.49	367618.4325
	R2407792-003	Mn (257.610 nm)	0.1583	0.47	58070.1409
	R2407792-003	Mo (202.032 nm)	0.0080	1.34	95.7942
	R2407792-003	Na (588.995 nm)	152.4017 o	0.16	2616693.5363
	R2407792-003	Ni (230.299 nm)	0.0353	4.25	482.1039
	R2407792-003	Pb (220.353 nm)	-0.0004 u	72.41	1.3283
	R2407792-003	Sb (217.582 nm)	0.0009 u	> 100.00	4.7732
	R2407792-003	Se (196.026 nm)	-0.0001 u	> 100.00	1.4379
	R2407792-003	Si (252.851 nm)	9.7817	3.05	65060.8535
	R2407792-003	Sn (189.925 nm)	0.0008	75.09	9.2765
	R2407792-003	Sr (216.596 nm)	2.3006	0.73	46036.1926
	R2407792-003	Ti (336.122 nm)	0.0047	3.64	813.4712
	R2407792-003	Tl (190.794 nm)	0.0026	38.97	-0.2788
	R2407792-003	V (292.401 nm)	0.0029	1.37	119.4128
	R2407792-003	Y (360.074 nm)	0.94	0.08	520227.10
	R2407792-003	Y_R (360.074 nm)	0.94	0.08	520261.79
	R2407792-003	Zn (213.857 nm)	0.0221	0.28	1437.5204
8/21/2024 22:52:27	R2407792-008	Ag (328.068 nm)	0.0000	75.23	19.9892
	R2407792-008	Al (237.312 nm)	0.0028	62.11	-8.0024
	R2407792-008	As (188.980 nm)	0.0001 u	> 100.00	-2.2444
	R2407792-008	B (249.772 nm)	0.1243	0.55	5624.4373
	R2407792-008	Ba (230.424 nm)	0.0238	0.64	1521.4863
	R2407792-008	Be (313.107 nm)	0.0000	48.09	-0.0599
	R2407792-008	Ca (317.933 nm)	122.1216 o	0.59	4909705.4177
	R2407792-008	Cd (214.439 nm)	0.0001 u	> 100.00	15.2897
	R2407792-008	Co (230.786 nm)	0.0000 u	> 100.00	1.8717
	R2407792-008	Cr (267.716 nm)	0.0021	1.69	143.1126
	R2407792-008	Cu (327.395 nm)	0.0008	28.92	-105.1735
	R2407792-008	Fe (234.350 nm)	0.2323	0.56	5642.7867
	R2407792-008	K (766.491 nm)	3.4337	0.56	4599.3921
	R2407792-008	Mg (279.078 nm)	76.4952 o	0.54	333660.8434
	R2407792-008	Mn (257.610 nm)	0.0097	0.77	3582.2591
	R2407792-008	Mo (202.032 nm)	0.0002	62.31	7.9948
	R2407792-008	Na (588.995 nm)	48.5181	0.32	824496.6913
	R2407792-008	Ni (230.299 nm)	0.0225	1.61	309.6064
	R2407792-008	Pb (220.353 nm)	0.0006 u	> 100.00	6.6125

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407792-008	Sb (217.582 nm)	0.0005 u	> 100.00	3.6823
	R2407792-008	Se (196.026 nm)	-0.0007 u	> 100.00	0.9727
	R2407792-008	Si (252.851 nm)	5.8079	0.65	38654.9584
	R2407792-008	Sn (189.925 nm)	-0.0003 u	> 100.00	6.2647
	R2407792-008	Sr (216.596 nm)	13.5057 o	0.66	270214.9115
	R2407792-008	Ti (336.122 nm)	-0.0001 u	38.62	56.8477
	R2407792-008	Tl (190.794 nm)	0.0014	49.58	-1.3689
	R2407792-008	V (292.401 nm)	0.0007	28.27	35.9696
	R2407792-008	Y (360.074 nm)	0.96	0.06	531783.75
	R2407792-008	Y_R (360.074 nm)	0.96	0.06	531825.50
	R2407792-008	Zn (213.857 nm)	0.0222	0.58	1440.3773
8/21/2024 22:55:41	R2407792-011	Ag (328.068 nm)	0.0002	17.89	31.0869
	R2407792-011	Al (237.312 nm)	0.0857	2.08	215.7758
	R2407792-011	As (188.980 nm)	0.0039	19.19	4.4464
	R2407792-011	B (249.772 nm)	0.1300	0.53	5877.2051
	R2407792-011	Ba (230.424 nm)	0.0697	0.38	4423.8209
	R2407792-011	Be (313.107 nm)	0.0000	21.77	-9.4801
	R2407792-011	Ca (317.933 nm)	94.5062 o	0.51	3800160.9331
	R2407792-011	Cd (214.439 nm)	0.0001	> 100.00	15.5799
	R2407792-011	Co (230.786 nm)	0.0016	15.43	36.8994
	R2407792-011	Cr (267.716 nm)	0.0013	7.21	98.0690
	R2407792-011	Cu (327.395 nm)	0.0010	2.96	-98.9529
	R2407792-011	Fe (234.350 nm)	0.4591	0.40	11099.5630
	R2407792-011	K (766.491 nm)	3.7977	0.96	5028.8701
	R2407792-011	Mg (279.078 nm)	55.7372 o	0.49	243118.4035
	R2407792-011	Mn (257.610 nm)	0.4628	0.49	169797.7238
	R2407792-011	Mo (202.032 nm)	0.0362	0.57	412.2962
	R2407792-011	Na (588.995 nm)	68.9350 o	0.10	1176729.4576
	R2407792-011	Ni (230.299 nm)	0.0308	1.25	421.2246
	R2407792-011	Pb (220.353 nm)	0.0000 u	> 100.00	3.2666
	R2407792-011	Sb (217.582 nm)	-0.0003 u	> 100.00	1.8511
	R2407792-011	Se (196.026 nm)	0.0012 u	> 100.00	2.5744
	R2407792-011	Si (252.851 nm)	7.8951	0.73	52524.6058
	R2407792-011	Sn (189.925 nm)	0.0004 u	> 100.00	8.2084
	R2407792-011	Sr (216.596 nm)	1.8067	0.54	36155.3953
	R2407792-011	Ti (336.122 nm)	0.0012	5.78	253.9085
	R2407792-011	Tl (190.794 nm)	0.0032	23.01	0.3094
	R2407792-011	V (292.401 nm)	0.0006	20.20	30.2087
	R2407792-011	Y (360.074 nm)	0.96	0.03	535948.20
	R2407792-011	Y_R (360.074 nm)	0.96	0.03	535974.03
	R2407792-011	Zn (213.857 nm)	0.3222	0.44	20758.2691
8/21/2024 22:58:55	R2407812-002	Ag (328.068 nm)	0.0001	33.37	23.7658
	R2407812-002	Al (237.312 nm)	0.0182	9.50	33.3754
	R2407812-002	As (188.980 nm)	0.0014 u	> 100.00	-0.0062
	R2407812-002	B (249.772 nm)	0.0851	0.41	3877.1746
	R2407812-002	Ba (230.424 nm)	0.1031	0.50	6539.6519
	R2407812-002	Be (313.107 nm)	0.0000 u	37.84	-20.2472
	R2407812-002	Ca (317.933 nm)	133.3406 o	0.64	5360468.6352
	R2407812-002	Cd (214.439 nm)	0.0001	23.99	18.3830
	R2407812-002	Co (230.786 nm)	0.0000 u	> 100.00	2.3548
	R2407812-002	Cr (267.716 nm)	0.0006	3.81	58.0643
	R2407812-002	Cu (327.395 nm)	0.0026	3.47	-25.4035
	R2407812-002	Fe (234.350 nm)	0.0457	1.30	1153.6672
	R2407812-002	K (766.491 nm)	2.9319	0.20	4007.1655
	R2407812-002	Mg (279.078 nm)	13.9529	0.56	60864.0597
	R2407812-002	Mn (257.610 nm)	0.0983	0.58	36080.1297
	R2407812-002	Mo (202.032 nm)	0.0014	6.12	21.7429

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407812-002	Na (588.995 nm)	164.7045 o	0.08	2828940.6678
	R2407812-002	Ni (230.299 nm)	0.0176	1.18	243.4116
	R2407812-002	Pb (220.353 nm)	0.0000 u	> 100.00	3.7143
	R2407812-002	Sb (217.582 nm)	-0.0007 u	> 100.00	0.9248
	R2407812-002	Se (196.026 nm)	-0.0006 u	> 100.00	1.0405
	R2407812-002	Si (252.851 nm)	4.7479	0.68	31611.7859
	R2407812-002	Sn (189.925 nm)	-0.0011 u	13.07	4.0202
	R2407812-002	Sr (216.596 nm)	0.4996	0.66	10004.3486
	R2407812-002	Ti (336.122 nm)	0.0000 u	> 100.00	64.5860
	R2407812-002	Tl (190.794 nm)	0.0009 u	> 100.00	-1.8994
	R2407812-002	V (292.401 nm)	0.0003	6.89	17.8143
	R2407812-002	Y (360.074 nm)	0.94	0.04	522488.55
	R2407812-002	Y_R (360.074 nm)	0.94	0.04	522501.10
	R2407812-002	Zn (213.857 nm)	0.0041	1.48	280.5053
8/21/2024 23:02:09	R2407825-021	Ag (328.068 nm)	0.0001 u	> 100.00	21.5686
	R2407825-021	Al (237.312 nm)	0.1953	1.03	511.7786
	R2407825-021	As (188.980 nm)	0.0076	8.84	11.0451
	R2407825-021	B (249.772 nm)	2.0318	0.54	90615.2241
	R2407825-021	Ba (230.424 nm)	0.0224	0.44	1430.1434
	R2407825-021	Be (313.107 nm)	0.0000 u	> 100.00	-13.7720
	R2407825-021	Ca (317.933 nm)	374.2837 oLR	0.71	15041193.0632
	R2407825-021	Cd (214.439 nm)	0.0001	10.01	19.1285
	R2407825-021	Co (230.786 nm)	0.0005	37.36	13.0112
	R2407825-021	Cr (267.716 nm)	0.0012	9.87	90.1446
	R2407825-021	Cu (327.395 nm)	0.0002	74.45	-132.2136
	R2407825-021	Fe (234.350 nm)	3.6158	0.67	87042.2040
	R2407825-021	K (766.491 nm)	30.5096	0.31	36553.3573
	R2407825-021	Mg (279.078 nm)	358.4001 o	0.79	1563272.2833
	R2407825-021	Mn (257.610 nm)	0.3362	0.63	123358.7536
	R2407825-021	Mo (202.032 nm)	0.0076	3.23	91.1005
	R2407825-021	Na (588.995 nm)	370.2191 o LR	0.16	6374470.2061
	R2407825-021	Ni (230.299 nm)	0.0230	1.57	316.1021
	R2407825-021	Pb (220.353 nm)	-0.0009 u	> 100.00	-1.1508
	R2407825-021	Sb (217.582 nm)	-0.0010 u	42.90	0.0554
	R2407825-021	Se (196.026 nm)	-0.0012 u	> 100.00	0.5000
	R2407825-021	Si (252.851 nm)	6.4139	0.20	42682.0467
	R2407825-021	Sn (189.925 nm)	-0.0010 u	52.66	4.1025
	R2407825-021	Sr (216.596 nm)	9.1736 o	0.78	183543.7587
	R2407825-021	Ti (336.122 nm)	0.0039	2.03	682.8933
	R2407825-021	Tl (190.794 nm)	0.0014	71.79	-1.3825
	R2407825-021	V (292.401 nm)	0.0006	20.14	31.4841
	R2407825-021	Y (360.074 nm)	0.87	0.20	482525.08
	R2407825-021	Y_R (360.074 nm)	0.87	0.20	482514.89
	R2407825-021	Zn (213.857 nm)	0.0066	0.14	441.9581
8/21/2024 23:05:23	Continuing Calibration Verification1	Ag (328.068 nm)	0.5095	0.26	32511.0574
	Continuing Calibration Verification1	Al (237.312 nm)	9.9320	0.37	26809.4816
	Continuing Calibration Verification1	As (188.980 nm)	0.9976	0.99	1760.6518
	Continuing Calibration Verification1	B (249.772 nm)	2.3551	0.49	105020.0598
	Continuing Calibration Verification1	Ba (230.424 nm)	9.8144	0.37	621252.7980
	Continuing Calibration Verification1	Be (313.107 nm)	0.2479	0.63	310088.3692
	Continuing Calibration Verification1	Ca (317.933 nm)	25.0378	0.66	1009025.8476
	Continuing Calibration Verification1	Cd (214.439 nm)	0.5032	0.62	32636.6314
	Continuing Calibration Verification1	Co (230.786 nm)	2.4925	0.63	53155.6957
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5179	0.64	30084.6184
	Continuing Calibration Verification1	Cu (327.395 nm)	1.2516	0.63	57665.7875
	Continuing Calibration Verification1	Fe (234.350 nm)	4.9561	0.65	119287.8493
	Continuing Calibration Verification1	K (766.491 nm)	24.9715	0.27	30017.5361

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification1	Mg (279.078 nm)	25.5425	0.64	111415.2229
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7394	0.62	271270.7300
	Continuing Calibration Verification1	Mo (202.032 nm)	2.5851	0.70	29074.1102
	Continuing Calibration Verification1	Na (588.995 nm)	25.0456	0.07	419550.5540
	Continuing Calibration Verification1	Ni (230.299 nm)	2.0073	0.57	27120.0751
	Continuing Calibration Verification1	Pb (220.353 nm)	0.4985	0.56	2714.0875
	Continuing Calibration Verification1	Sb (217.582 nm)	4.9918	0.39	12030.7206
	Continuing Calibration Verification1	Se (196.026 nm)	0.4894	0.93	416.3921
	Continuing Calibration Verification1	Si (252.851 nm)	10.3019	2.34	68517.0949
	Continuing Calibration Verification1	Sn (189.925 nm)	4.9950	0.61	14124.6664
	Continuing Calibration Verification1	Sr (216.596 nm)	2.5220	0.82	50465.4017
	Continuing Calibration Verification1	Ti (336.122 nm)	2.6085	0.58	410541.4597
	Continuing Calibration Verification1	Tl (190.794 nm)	0.9951	0.69	966.6429
	Continuing Calibration Verification1	V (292.401 nm)	2.5537	0.60	99204.0393
	Continuing Calibration Verification1	Y (360.074 nm)	0.97	0.10	537408.80
	Continuing Calibration Verification1	Y_R (360.074 nm)	0.97	0.10	537414.05
	Continuing Calibration Verification1	Zn (213.857 nm)	0.9921	0.75	63883.4385
8/21/2024 23:08:37	Continuing Calibration Blank1	Ag (328.068 nm)	0.0000 u	> 100.00	18.5428
	Continuing Calibration Blank1	Al (237.312 nm)	0.0022	61.42	-9.6848
	Continuing Calibration Blank1	As (188.980 nm)	0.0013 u	> 100.00	-0.1893
	Continuing Calibration Blank1	B (249.772 nm)	0.0028	15.35	210.6942
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0005	16.15	43.2886
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000 u	> 100.00	-11.5003
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0044	5.59	3221.4870
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0000	63.18	14.4516
	Continuing Calibration Blank1	Co (230.786 nm)	0.0002	38.76	6.7567
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0001 u	> 100.00	30.1757
	Continuing Calibration Blank1	Cu (327.395 nm)	0.0002	66.51	-133.4280
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0032	9.78	130.8482
	Continuing Calibration Blank1	K (766.491 nm)	0.0568	54.16	614.1066
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0011 u	98.05	9.0113
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0001	9.30	35.4973
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0033	18.25	42.8157
	Continuing Calibration Blank1	Na (588.995 nm)	0.1036	3.93	-10747.4441
	Continuing Calibration Blank1	Ni (230.299 nm)	-0.0001 u	> 100.00	4.2896
	Continuing Calibration Blank1	Pb (220.353 nm)	-0.0003 u	37.16	1.8287
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0063	13.11	17.8065
	Continuing Calibration Blank1	Se (196.026 nm)	-0.0014 u	> 100.00	0.3272
	Continuing Calibration Blank1	Si (252.851 nm)	0.0157	29.38	166.2555
	Continuing Calibration Blank1	Sn (189.925 nm)	-0.0012 u	61.62	3.7309
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0000 u	> 100.00	8.1310
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0045	23.34	773.4907
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0005	35.40	-2.2567
	Continuing Calibration Blank1	V (292.401 nm)	0.0003	26.98	18.6753
	Continuing Calibration Blank1	Y (360.074 nm)	1.01	0.25	561836.71
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.01	0.25	561836.53
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0003	13.10	33.6652
8/21/2024 23:11:51	R2407825-023	Ag (328.068 nm)	0.0000 u	> 100.00	15.3973
	R2407825-023	Al (237.312 nm)	1.0878	0.21	2922.2969
	R2407825-023	As (188.980 nm)	0.0218	13.51	35.9774
	R2407825-023	B (249.772 nm)	0.8149	0.47	36391.7488
	R2407825-023	Ba (230.424 nm)	0.0234	0.52	1493.0481
	R2407825-023	Be (313.107 nm)	0.0000	36.96	-7.6644
	R2407825-023	Ca (317.933 nm)	191.3264 o	0.59	7690246.6742
	R2407825-023	Cd (214.439 nm)	0.0003	14.29	33.5762
	R2407825-023	Co (230.786 nm)	0.0012	8.11	27.7411
	R2407825-023	Cr (267.716 nm)	0.0034	3.27	220.0438

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-023	Cu (327.395 nm)	0.0065	1.39	157.9346
	R2407825-023	Fe (234.350 nm)	11.1509 o	0.54	268321.9487
	R2407825-023	K (766.491 nm)	22.2011	0.65	26747.9334
	R2407825-023	Mg (279.078 nm)	191.6096 o	0.50	835766.2757
	R2407825-023	Mn (257.610 nm)	0.1978	0.47	72586.0119
	R2407825-023	Mo (202.032 nm)	0.0231	0.70	265.7758
	R2407825-023	Na (588.995 nm)	334.2965 o LR	0.13	5754734.2168
	R2407825-023	Ni (230.299 nm)	0.0309	3.85	423.2356
	R2407825-023	Pb (220.353 nm)	0.0016	58.16	12.1189
	R2407825-023	Sb (217.582 nm)	0.0055	35.98	15.7836
	R2407825-023	Se (196.026 nm)	-0.0010 u	> 100.00	0.6877
	R2407825-023	Si (252.851 nm)	7.9573	4.41	52937.9650
	R2407825-023	Sn (189.925 nm)	0.0001 u	> 100.00	7.2301
	R2407825-023	Sr (216.596 nm)	4.8653	0.41	97348.2323
	R2407825-023	Ti (336.122 nm)	0.0222	0.30	3567.1845
	R2407825-023	Tl (190.794 nm)	0.0017 u	> 100.00	-1.1333
	R2407825-023	V (292.401 nm)	0.0027	5.89	111.7413
	R2407825-023	Y (360.074 nm)	0.89	0.12	497057.28
	R2407825-023	Y_R (360.074 nm)	0.89	0.12	497017.78
	R2407825-023	Zn (213.857 nm)	0.0516	0.58	3333.4748
8/21/2024 23:15:05	R2407825-039	Ag (328.068 nm)	0.0000	47.89	20.0011
	R2407825-039	Al (237.312 nm)	0.0104	17.45	12.3827
	R2407825-039	As (188.980 nm)	0.0086	19.56	12.8205
	R2407825-039	B (249.772 nm)	0.7118	0.35	31800.7177
	R2407825-039	Ba (230.424 nm)	0.0205	0.65	1310.1099
	R2407825-039	Be (313.107 nm)	0.0000 u	48.21	-20.0425
	R2407825-039	Ca (317.933 nm)	188.9048 o	0.41	7592952.2099
	R2407825-039	Cd (214.439 nm)	0.0001	87.09	15.7043
	R2407825-039	Co (230.786 nm)	0.0000 u	56.99	1.2476
	R2407825-039	Cr (267.716 nm)	0.0006	20.91	56.1009
	R2407825-039	Cu (327.395 nm)	0.0008	10.39	-106.7354
	R2407825-039	Fe (234.350 nm)	0.1859	0.95	4526.5932
	R2407825-039	K (766.491 nm)	9.4338	0.34	11680.4848
	R2407825-039	Mg (279.078 nm)	232.1681 o	0.39	1012673.9343
	R2407825-039	Mn (257.610 nm)	0.2403	0.37	88155.9043
	R2407825-039	Mo (202.032 nm)	0.0212	0.73	244.2671
	R2407825-039	Na (588.995 nm)	231.0311 o	0.09	3973204.2563
	R2407825-039	Ni (230.299 nm)	0.0158	1.86	219.6220
	R2407825-039	Pb (220.353 nm)	0.0000 u	> 100.00	3.2909
	R2407825-039	Sb (217.582 nm)	0.0024	67.28	8.4497
	R2407825-039	Se (196.026 nm)	-0.0024 u	> 100.00	-0.4865
	R2407825-039	Si (252.851 nm)	4.2977	0.18	28619.8090
	R2407825-039	Sn (189.925 nm)	-0.0009 u	43.90	4.4879
	R2407825-039	Sr (216.596 nm)	5.5218 o	0.45	110481.3785
	R2407825-039	Ti (336.122 nm)	0.0007	30.75	183.8212
	R2407825-039	Tl (190.794 nm)	0.0029	40.56	0.0414
	R2407825-039	V (292.401 nm)	0.0006	24.49	31.0668
	R2407825-039	Y (360.074 nm)	0.91	0.23	504585.56
	R2407825-039	Y_R (360.074 nm)	0.91	0.23	504569.56
	R2407825-039	Zn (213.857 nm)	0.0028	1.06	193.2545
8/21/2024 23:18:18	R2407827-001	Ag (328.068 nm)	0.0001	78.53	24.5206
	R2407827-001	Al (237.312 nm)	0.0073	20.76	4.1515
	R2407827-001	As (188.980 nm)	0.0000 u	> 100.00	-2.4258
	R2407827-001	B (249.772 nm)	0.0581	0.71	2672.6625
	R2407827-001	Ba (230.424 nm)	0.0884	0.60	5609.4778
	R2407827-001	Be (313.107 nm)	0.0000 u	> 100.00	-17.3407
	R2407827-001	Ca (317.933 nm)	87.7119 o	0.66	3527173.6906

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407827-001	Cd (214.439 nm)	0.0001	45.31	18.3720
	R2407827-001	Co (230.786 nm)	0.0002	34.69	6.7115
	R2407827-001	Cr (267.716 nm)	0.0008	10.35	68.7353
	R2407827-001	Cu (327.395 nm)	0.0013	26.88	-82.3551
	R2407827-001	Fe (234.350 nm)	5.8080	0.69	139782.8866
	R2407827-001	K (766.491 nm)	3.0266	1.57	4118.8977
	R2407827-001	Mg (279.078 nm)	42.9654	0.59	187410.3793
	R2407827-001	Mn (257.610 nm)	1.0326	0.58	378817.5194
	R2407827-001	Mo (202.032 nm)	0.0007	21.31	12.9307
	R2407827-001	Na (588.995 nm)	89.0340 o	0.21	1523476.5266
	R2407827-001	Ni (230.299 nm)	0.0118	2.68	164.6516
	R2407827-001	Pb (220.353 nm)	-0.0001 u	> 100.00	3.0374
	R2407827-001	Sb (217.582 nm)	0.0003 u	> 100.00	3.3202
	R2407827-001	Se (196.026 nm)	0.0018 u	> 100.00	3.0918
	R2407827-001	Si (252.851 nm)	3.0567	0.72	20373.4193
	R2407827-001	Sn (189.925 nm)	-0.0005 u	> 100.00	5.5166
	R2407827-001	Sr (216.596 nm)	0.2658	0.61	5325.2358
	R2407827-001	Ti (336.122 nm)	0.0005	23.57	140.7876
	R2407827-001	Tl (190.794 nm)	0.0021	60.03	-0.7151
	R2407827-001	V (292.401 nm)	0.0004	34.32	22.3168
	R2407827-001	Y (360.074 nm)	0.95	0.06	529356.20
	R2407827-001	Y_R (360.074 nm)	0.95	0.06	529339.70
	R2407827-001	Zn (213.857 nm)	0.0164	0.38	1072.2085
8/21/2024 23:21:31	R2407827-002	Ag (328.068 nm)	0.0000	48.34	19.4727
	R2407827-002	Al (237.312 nm)	0.1321	0.65	341.1515
	R2407827-002	As (188.980 nm)	0.0010 u	> 100.00	-0.7413
	R2407827-002	B (249.772 nm)	0.7997	0.25	35715.0952
	R2407827-002	Ba (230.424 nm)	0.0505	0.63	3208.7181
	R2407827-002	Be (313.107 nm)	0.0000	85.65	-11.9870
	R2407827-002	Ca (317.933 nm)	100.5221 o	0.36	4041869.6657
	R2407827-002	Cd (214.439 nm)	0.0002	6.46	21.5309
	R2407827-002	Co (230.786 nm)	0.0000 u	> 100.00	2.9911
	R2407827-002	Cr (267.716 nm)	0.0010	15.49	79.8226
	R2407827-002	Cu (327.395 nm)	0.0076	2.73	206.5534
	R2407827-002	Fe (234.350 nm)	5.4571	0.31	131340.2923
	R2407827-002	K (766.491 nm)	16.0424	0.20	19479.6951
	R2407827-002	Mg (279.078 nm)	35.8891	0.32	156544.9992
	R2407827-002	Mn (257.610 nm)	0.0948	0.22	34784.9716
	R2407827-002	Mo (202.032 nm)	0.0015	26.67	22.2191
	R2407827-002	Na (588.995 nm)	147.4124 o	0.20	2530618.2406
	R2407827-002	Ni (230.299 nm)	0.0104	0.95	145.7846
	R2407827-002	Pb (220.353 nm)	0.0001 u	> 100.00	4.2834
	R2407827-002	Sb (217.582 nm)	-0.0002 u	> 100.00	2.1768
	R2407827-002	Se (196.026 nm)	-0.0015 u	> 100.00	0.2691
	R2407827-002	Si (252.851 nm)	3.0010	0.34	20003.7122
	R2407827-002	Sn (189.925 nm)	-0.0006 u	67.20	5.4443
	R2407827-002	Sr (216.596 nm)	1.6325	0.29	32670.3079
	R2407827-002	Ti (336.122 nm)	0.0012	8.89	262.5661
	R2407827-002	Tl (190.794 nm)	0.0007 u	> 100.00	-2.1278
	R2407827-002	V (292.401 nm)	0.0004	61.24	24.3683
	R2407827-002	Y (360.074 nm)	0.95	0.25	526190.95
	R2407827-002	Y_R (360.074 nm)	0.95	0.25	526170.04
	R2407827-002	Zn (213.857 nm)	0.1067	0.17	6884.2438
8/21/2024 23:24:45	R2407708-001 5X	Ag (328.068 nm)	0.0001	64.40	26.1302
	R2407708-001 5X	Al (237.312 nm)	0.0024	33.68	-9.0942
	R2407708-001 5X	As (188.980 nm)	0.0012	> 100.00	-0.3606
	R2407708-001 5X	B (249.772 nm)	2.8356	0.52	126425.8489

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407708-001 5X	Ba (230.424 nm)	0.0042	0.89	277.4386
	R2407708-001 5X	Be (313.107 nm)	0.0000	36.24	-13.6844
	R2407708-001 5X	Ca (317.933 nm)	1.5675	0.50	66024.7872
	R2407708-001 5X	Cd (214.439 nm)	-0.0001 u	67.03	8.1939
	R2407708-001 5X	Co (230.786 nm)	0.1163	0.68	2481.8017
	R2407708-001 5X	Cr (267.716 nm)	0.0017	2.36	120.0747
	R2407708-001 5X	Cu (327.395 nm)	-0.0001 u	> 100.00	-146.1326
	R2407708-001 5X	Fe (234.350 nm)	1.7761	0.54	42783.4514
	R2407708-001 5X	K (766.491 nm)	81.8014 o	0.36	97086.1096
	R2407708-001 5X	Mg (279.078 nm)	1.4705	0.63	6418.3279
	R2407708-001 5X	Mn (257.610 nm)	0.0472	0.52	17332.4428
	R2407708-001 5X	Mo (202.032 nm)	1.0428	0.79	11731.6551
	R2407708-001 5X	Na (588.995 nm)	96.1337 o	0.20	1645959.9377
	R2407708-001 5X	Ni (230.299 nm)	0.1459	0.40	1976.6915
	R2407708-001 5X	Pb (220.353 nm)	-0.0011 u	17.01	-2.4144
	R2407708-001 5X	Sb (217.582 nm)	0.0058	20.53	16.6555
	R2407708-001 5X	Se (196.026 nm)	0.0053	96.20	6.0388
	R2407708-001 5X	Si (252.851 nm)	2.4696	1.43	16472.5674
	R2407708-001 5X	Sn (189.925 nm)	-0.0012 u	81.61	3.5782
	R2407708-001 5X	Sr (216.596 nm)	0.0021	7.79	49.4784
	R2407708-001 5X	Ti (336.122 nm)	0.0002	55.99	95.1331
	R2407708-001 5X	Tl (190.794 nm)	0.0001 u	> 100.00	-2.6740
	R2407708-001 5X	V (292.401 nm)	0.0001	> 100.00	11.1296
	R2407708-001 5X	Y (360.074 nm)	0.97	0.14	538098.95
	R2407708-001 5X	Y_R (360.074 nm)	0.97	0.14	538089.10
	R2407708-001 5X	Zn (213.857 nm)	0.0368	0.47	2384.3784
8/21/2024 23:27:58	R2407723-001 5X	Ag (328.068 nm)	0.0001	74.26	22.1411
	R2407723-001 5X	Al (237.312 nm)	0.0875	1.96	220.6494
	R2407723-001 5X	As (188.980 nm)	0.3376	1.03	594.1818
	R2407723-001 5X	B (249.772 nm)	0.0034	9.16	235.8159
	R2407723-001 5X	Ba (230.424 nm)	0.0007	19.84	57.4993
	R2407723-001 5X	Be (313.107 nm)	0.0000	66.59	-12.9073
	R2407723-001 5X	Ca (317.933 nm)	0.5260	0.44	24178.6728
	R2407723-001 5X	Cd (214.439 nm)	0.0000 u	> 100.00	9.7960
	R2407723-001 5X	Co (230.786 nm)	0.0002	72.04	6.1915
	R2407723-001 5X	Cr (267.716 nm)	0.0007	3.47	61.2266
	R2407723-001 5X	Cu (327.395 nm)	0.0061	3.14	139.9313
	R2407723-001 5X	Fe (234.350 nm)	0.4929	0.62	11912.4404
	R2407723-001 5X	K (766.491 nm)	0.1202	36.51	688.8959
	R2407723-001 5X	Mg (279.078 nm)	0.0993	0.91	437.3497
	R2407723-001 5X	Mn (257.610 nm)	0.0067	0.38	2465.8925
	R2407723-001 5X	Mo (202.032 nm)	0.0033	14.93	42.4734
	R2407723-001 5X	Na (588.995 nm)	0.1597	5.69	-9780.4423
	R2407723-001 5X	Ni (230.299 nm)	0.0040	4.64	59.7625
	R2407723-001 5X	Pb (220.353 nm)	0.0007 u	> 100.00	7.1011
	R2407723-001 5X	Sb (217.582 nm)	0.1518	1.67	368.2846
	R2407723-001 5X	Se (196.026 nm)	0.0022	63.91	3.4335
	R2407723-001 5X	Si (252.851 nm)	0.2142	1.90	1485.2657
	R2407723-001 5X	Sn (189.925 nm)	-0.0007 u	45.40	4.9329
	R2407723-001 5X	Sr (216.596 nm)	0.0008	13.95	23.8735
	R2407723-001 5X	Ti (336.122 nm)	0.0009	10.99	209.8876
	R2407723-001 5X	Tl (190.794 nm)	0.0022	75.01	-0.6223
	R2407723-001 5X	V (292.401 nm)	0.0002	6.79	14.9770
	R2407723-001 5X	Y (360.074 nm)	1.02	0.06	569025.20
	R2407723-001 5X	Y_R (360.074 nm)	1.02	0.06	569046.67
	R2407723-001 5X	Zn (213.857 nm)	0.0134	1.12	878.0679
8/21/2024 23:31:12	Continuing Calibration Verification1	Ag (328.068 nm)	0.5096	0.33	32515.8091

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification1	Al (237.312 nm)	9.9068	0.44	26741.2530
	Continuing Calibration Verification1	As (188.980 nm)	0.9946	0.49	1755.3890
	Continuing Calibration Verification1	B (249.772 nm)	2.3525	0.53	104901.1674
	Continuing Calibration Verification1	Ba (230.424 nm)	9.8137	0.71	621209.8963
	Continuing Calibration Verification1	Be (313.107 nm)	0.2479	0.58	310136.8937
	Continuing Calibration Verification1	Ca (317.933 nm)	25.0330	0.61	1008831.1378
	Continuing Calibration Verification1	Cd (214.439 nm)	0.5031	0.59	32627.4133
	Continuing Calibration Verification1	Co (230.786 nm)	2.4919	0.53	53142.4246
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5179	0.64	30081.5280
	Continuing Calibration Verification1	Cu (327.395 nm)	1.2524	0.60	57700.0851
	Continuing Calibration Verification1	Fe (234.350 nm)	4.9544	0.65	119246.8071
	Continuing Calibration Verification1	K (766.491 nm)	24.7725	0.37	29782.6275
	Continuing Calibration Verification1	Mg (279.078 nm)	25.5576	0.59	111481.0199
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7391	0.60	271176.6325
	Continuing Calibration Verification1	Mo (202.032 nm)	2.5880	0.71	29106.8053
	Continuing Calibration Verification1	Na (588.995 nm)	24.8605	0.16	416356.9346
	Continuing Calibration Verification1	Ni (230.299 nm)	2.0081	0.63	27130.7921
	Continuing Calibration Verification1	Pb (220.353 nm)	0.5000	0.23	2722.2171
	Continuing Calibration Verification1	Sb (217.582 nm)	4.9818	0.30	12006.5271
	Continuing Calibration Verification1	Se (196.026 nm)	0.4869	1.16	414.2931
	Continuing Calibration Verification1	Si (252.851 nm)	10.2768	2.30	68350.5313
	Continuing Calibration Verification1	Sn (189.925 nm)	4.9948	0.60	14124.1212
	Continuing Calibration Verification1	Sr (216.596 nm)	2.5257	0.86	50538.6107
	Continuing Calibration Verification1	Ti (336.122 nm)	2.6091	0.57	410632.4242
	Continuing Calibration Verification1	Tl (190.794 nm)	0.9907	0.73	962.3082
	Continuing Calibration Verification1	V (292.401 nm)	2.5552	0.60	99262.3967
	Continuing Calibration Verification1	Y (360.074 nm)	0.97	0.33	538849.39
	Continuing Calibration Verification1	Y_R (360.074 nm)	0.97	0.33	538879.76
	Continuing Calibration Verification1	Zn (213.857 nm)	0.9934	0.96	63971.0780
8/21/2024 23:34:26	Continuing Calibration Blank1	Ag (328.068 nm)	0.0000 u	> 100.00	17.6974
	Continuing Calibration Blank1	Al (237.312 nm)	0.0022	42.08	-9.7386
	Continuing Calibration Blank1	As (188.980 nm)	0.0000 u	> 100.00	-2.4169
	Continuing Calibration Blank1	B (249.772 nm)	0.0029	12.39	214.3099
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0006	16.43	50.0275
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000	59.86	-14.1565
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0045	0.65	3226.0683
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0000 u	> 100.00	9.3554
	Continuing Calibration Blank1	Co (230.786 nm)	0.0002	52.07	6.2251
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0001	9.65	27.2440
	Continuing Calibration Blank1	Cu (327.395 nm)	0.0004	40.12	-124.9702
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0034	22.17	136.4374
	Continuing Calibration Blank1	K (766.491 nm)	0.0883	60.19	651.1926
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0005	45.77	6.5333
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0001	29.47	35.2506
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0037	16.04	47.0903
	Continuing Calibration Blank1	Na (588.995 nm)	0.0715	4.56	-11301.1420
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0000 u	> 100.00	5.6607
	Continuing Calibration Blank1	Pb (220.353 nm)	0.0003 u	> 100.00	4.8957
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0088	7.59	23.7639
	Continuing Calibration Blank1	Se (196.026 nm)	0.0028	80.35	3.9451
	Continuing Calibration Blank1	Si (252.851 nm)	0.0149	27.72	161.4968
	Continuing Calibration Blank1	Sn (189.925 nm)	-0.0001 u	> 100.00	6.7827
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0000 u	> 100.00	9.1051
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0047	22.78	800.6901
	Continuing Calibration Blank1	Tl (190.794 nm)	-0.0007 u	> 100.00	-3.4566
	Continuing Calibration Blank1	V (292.401 nm)	0.0002	32.43	15.6655
	Continuing Calibration Blank1	Y (360.074 nm)	1.01	0.04	563349.09

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.01	0.03	563368.23
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0003	6.44	36.4409
8/22/2024 10:04:12	Continuing Calibration Verification1	Ag (328.068 nm)	0.5367	0.22	34247.5455
	Continuing Calibration Verification1	Al (237.312 nm)	9.9682	0.14	26907.1473
	Continuing Calibration Verification1	As (188.980 nm)	1.0300	0.41	1818.0542
	Continuing Calibration Verification1	B (249.772 nm)	2.3573	0.06	105117.3382
	Continuing Calibration Verification1	Ba (230.424 nm)	9.8680	0.29	624645.5126
	Continuing Calibration Verification1	Be (313.107 nm)	0.2526	0.20	316015.1777
	Continuing Calibration Verification1	Ca (317.933 nm)	25.0976	0.12	1011427.8140
	Continuing Calibration Verification1	Cd (214.439 nm)	0.5038	0.10	32670.1676
	Continuing Calibration Verification1	Co (230.786 nm)	2.5142	0.26	53618.2907
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5280	0.15	30670.6669
	Continuing Calibration Verification1	Cu (327.395 nm)	1.3260	0.32	61101.7620
	Continuing Calibration Verification1	Fe (234.350 nm)	4.9896	0.09	120093.1547
	Continuing Calibration Verification1	K (766.491 nm)	25.8397	0.38	31042.1603
	Continuing Calibration Verification1	Mg (279.078 nm)	26.0281	0.06	113533.4752
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7498	0.04	275069.7504
	Continuing Calibration Verification1	Mo (202.032 nm)	2.6104	0.13	29358.7758
	Continuing Calibration Verification1	Na (588.995 nm)	26.2935	0.25	441078.5830
	Continuing Calibration Verification1	Ni (230.299 nm)	2.0341	0.16	27481.9733
	Continuing Calibration Verification1	Pb (220.353 nm)	0.5038	0.17	2742.8614
	Continuing Calibration Verification1	Sb (217.582 nm)	5.0512	0.23	12173.6916
	Continuing Calibration Verification1	Se (196.026 nm)	0.5009	1.64	426.1435
	Continuing Calibration Verification1	Si (252.851 nm)	10.5720	1.81	70312.0803
	Continuing Calibration Verification1	Sn (189.925 nm)	5.0493	0.08	14278.1407
	Continuing Calibration Verification1	Sr (216.596 nm)	2.5094	0.19	50212.4527
	Continuing Calibration Verification1	Ti (336.122 nm)	2.6539	0.04	417675.9850
	Continuing Calibration Verification1	Tl (190.794 nm)	1.0128	0.59	983.9233
	Continuing Calibration Verification1	V (292.401 nm)	2.6013	0.07	101052.6086
	Continuing Calibration Verification1	Y (360.074 nm)	0.90	0.49	499221.55
	Continuing Calibration Verification1	Y_R (360.074 nm)	0.90	0.49	499281.63
	Continuing Calibration Verification1	Zn (213.857 nm)	1.0250	0.20	66001.4076
8/22/2024 10:07:27	Continuing Calibration Blank1	Ag (328.068 nm)	0.0000 u	> 100.00	16.9848
	Continuing Calibration Blank1	Al (237.312 nm)	0.0007 u	> 100.00	-13.7528
	Continuing Calibration Blank1	As (188.980 nm)	0.0009 u	> 100.00	-0.9069
	Continuing Calibration Blank1	B (249.772 nm)	0.0030	1.35	215.5120
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0006	20.34	53.0866
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000 u	> 100.00	-18.4580
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0038	1.84	3195.0466
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0000 u	> 100.00	11.7755
	Continuing Calibration Blank1	Co (230.786 nm)	0.0001	61.07	4.8563
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0000 u	> 100.00	24.7230
	Continuing Calibration Blank1	Cu (327.395 nm)	0.0005	78.05	-121.9975
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0028	19.34	122.8593
	Continuing Calibration Blank1	K (766.491 nm)	0.1395	28.69	711.6619
	Continuing Calibration Blank1	Mg (279.078 nm)	-0.0017 u	53.38	-3.3729
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0001	6.87	40.2900
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0040	11.50	50.8108
	Continuing Calibration Blank1	Na (588.995 nm)	-0.0077 u	> 100.00	-12667.2920
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0002 u	> 100.00	8.1344
	Continuing Calibration Blank1	Pb (220.353 nm)	-0.0004 u	> 100.00	1.1075
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0042	16.34	12.7894
	Continuing Calibration Blank1	Se (196.026 nm)	0.0008	> 100.00	2.2296
	Continuing Calibration Blank1	Si (252.851 nm)	0.0088	34.52	120.4242
	Continuing Calibration Blank1	Sn (189.925 nm)	-0.0001 u	> 100.00	6.8519
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0000 u	> 100.00	7.9360
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0043	22.10	749.6719

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0008 u	> 100.00	-2.0345
	Continuing Calibration Blank1	V (292.401 nm)	0.0004	35.68	22.1716
	Continuing Calibration Blank1	Y (360.074 nm)	0.95	0.16	525806.67
	Continuing Calibration Blank1	Y_R (360.074 nm)	0.95	0.16	525891.31
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0004	19.08	39.6910
8/22/2024 10:10:41	PBW-443139	Ag (328.068 nm)	0.0000 u	> 100.00	19.2954
	PBW-443139	Al (237.312 nm)	-0.0001 u	> 100.00	-16.0180
	PBW-443139	As (188.980 nm)	-0.0004 u	> 100.00	-3.1992
	PBW-443139	B (249.772 nm)	0.0039	4.64	256.0843
	PBW-443139	Ba (230.424 nm)	0.0001	37.57	17.4553
	PBW-443139	Be (313.107 nm)	0.0000 u	> 100.00	-20.1715
	PBW-443139	Ca (317.933 nm)	0.0095	0.74	3427.4537
	PBW-443139	Cd (214.439 nm)	0.0000 u	> 100.00	13.3241
	PBW-443139	Co (230.786 nm)	0.0001 u	> 100.00	3.9520
	PBW-443139	Cr (267.716 nm)	0.0004	36.51	43.7613
	PBW-443139	Cu (327.395 nm)	0.0000 u	> 100.00	-144.4643
	PBW-443139	Fe (234.350 nm)	0.0054	5.45	184.5674
	PBW-443139	K (766.491 nm)	0.0995	21.90	664.4743
	PBW-443139	Mg (279.078 nm)	-0.0026 u	10.47	-7.3456
	PBW-443139	Mn (257.610 nm)	0.0001	21.52	39.9558
	PBW-443139	Mo (202.032 nm)	0.0008	17.89	14.9182
	PBW-443139	Na (588.995 nm)	0.0000 u	> 100.00	-12535.2303
	PBW-443139	Ni (230.299 nm)	0.0006	76.89	13.8544
	PBW-443139	Pb (220.353 nm)	-0.0002 u	> 100.00	2.1286
	PBW-443139	Sb (217.582 nm)	0.0042	29.87	12.5720
	PBW-443139	Se (196.026 nm)	0.0000 u	> 100.00	1.5122
	PBW-443139	Si (252.851 nm)	0.0180	18.91	181.8475
	PBW-443139	Sn (189.925 nm)	0.0000 u	> 100.00	6.9449
	PBW-443139	Sr (216.596 nm)	-0.0001 u	> 100.00	6.9249
	PBW-443139	Ti (336.122 nm)	0.0015	32.42	298.8524
	PBW-443139	Tl (190.794 nm)	0.0003 u	> 100.00	-2.4733
	PBW-443139	V (292.401 nm)	0.0001	24.29	13.1322
	PBW-443139	Y (360.074 nm)	0.96	0.36	534707.99
	PBW-443139	Y_R (360.074 nm)	0.96	0.36	534806.40
	PBW-443139	Zn (213.857 nm)	0.0002	2.10	28.7458
8/22/2024 10:13:57	LCSW-443139	Ag (328.068 nm)	0.0501	0.33	3213.3651
	LCSW-443139	Al (237.312 nm)	1.9561	0.29	5267.5316
	LCSW-443139	As (188.980 nm)	0.0398	4.22	67.9530
	LCSW-443139	B (249.772 nm)	0.9011	0.18	40235.6425
	LCSW-443139	Ba (230.424 nm)	1.9310	0.24	122245.9398
	LCSW-443139	Be (313.107 nm)	0.0487	0.19	60935.0232
	LCSW-443139	Ca (317.933 nm)	1.9205	0.28	80208.0671
	LCSW-443139	Cd (214.439 nm)	0.0493	0.22	3205.3278
	LCSW-443139	Co (230.786 nm)	0.4892	0.19	10434.0624
	LCSW-443139	Cr (267.716 nm)	0.1997	0.32	11610.8321
	LCSW-443139	Cu (327.395 nm)	0.2580	0.31	11774.0672
	LCSW-443139	Fe (234.350 nm)	0.9817	0.21	23673.6553
	LCSW-443139	K (766.491 nm)	19.2345	0.16	23246.8463
	LCSW-443139	Mg (279.078 nm)	1.9298	0.20	8421.4615
	LCSW-443139	Mn (257.610 nm)	0.4764	0.24	174781.5981
	LCSW-443139	Mo (202.032 nm)	0.4850	0.51	5459.1198
	LCSW-443139	Na (588.995 nm)	19.7039	0.16	327395.6787
	LCSW-443139	Ni (230.299 nm)	0.4830	0.57	6529.8909
	LCSW-443139	Pb (220.353 nm)	0.4985	0.32	2714.1792
	LCSW-443139	Sb (217.582 nm)	0.4903	0.28	1183.9020
	LCSW-443139	Se (196.026 nm)	0.9843	0.88	835.8516
	LCSW-443139	Si (252.851 nm)	0.3307	1.46	2259.4466

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	LCSW-443139	Sn (189.925 nm)	4.7074	0.15	13311.8261
	LCSW-443139	Sr (216.596 nm)	1.9242	0.31	38505.6600
	LCSW-443139	Ti (336.122 nm)	0.4981	0.21	78452.1888
	LCSW-443139	Tl (190.794 nm)	1.9486	0.04	1895.4784
	LCSW-443139	V (292.401 nm)	0.4906	0.20	19064.6931
	LCSW-443139	Y (360.074 nm)	0.95	0.33	526275.93
	LCSW-443139	Y_R (360.074 nm)	0.95	0.33	526367.70
	LCSW-443139	Zn (213.857 nm)	0.4984	0.12	32101.9746
8/22/2024 10:17:12	R2407457-002 10X	Ag (328.068 nm)	0.0001	86.64	21.4014
	R2407457-002 10X	Al (237.312 nm)	0.0077	8.84	5.0498
	R2407457-002 10X	As (188.980 nm)	0.0000 u	> 100.00	-2.4331
	R2407457-002 10X	B (249.772 nm)	0.0174	0.78	858.9324
	R2407457-002 10X	Ba (230.424 nm)	0.0031	0.42	212.3502
	R2407457-002 10X	Be (313.107 nm)	0.0000 u	84.89	-28.0148
	R2407457-002 10X	Ca (317.933 nm)	75.2440 o	0.51	3026234.1237
	R2407457-002 10X	Cd (214.439 nm)	0.0001	60.27	15.2891
	R2407457-002 10X	Co (230.786 nm)	0.0001 u	> 100.00	3.6313
	R2407457-002 10X	Cr (267.716 nm)	0.0004	26.56	47.5090
	R2407457-002 10X	Cu (327.395 nm)	0.0005	29.89	-117.9580
	R2407457-002 10X	Fe (234.350 nm)	0.0650	0.30	1619.3886
	R2407457-002 10X	K (766.491 nm)	4.5266	1.66	5889.1757
	R2407457-002 10X	Mg (279.078 nm)	16.2275	0.63	70785.3043
	R2407457-002 10X	Mn (257.610 nm)	0.0727	0.58	26686.2199
	R2407457-002 10X	Mo (202.032 nm)	0.0026	21.34	34.2487
	R2407457-002 10X	Na (588.995 nm)	361.0714 o	1.07	6216654.2640
	R2407457-002 10X	Ni (230.299 nm)	0.0023	3.51	36.5710
	R2407457-002 10X	Pb (220.353 nm)	0.0001 u	> 100.00	3.9208
	R2407457-002 10X	Sb (217.582 nm)	0.0012 u	> 100.00	5.4493
	R2407457-002 10X	Se (196.026 nm)	0.0031	81.16	4.1889
	R2407457-002 10X	Si (252.851 nm)	0.5093	0.30	3446.5649
	R2407457-002 10X	Sn (189.925 nm)	0.0003	> 100.00	7.8648
	R2407457-002 10X	Sr (216.596 nm)	0.3979	0.56	7969.0747
	R2407457-002 10X	Ti (336.122 nm)	0.0011	30.41	246.9898
	R2407457-002 10X	Tl (190.794 nm)	0.0027	24.00	-0.1521
	R2407457-002 10X	V (292.401 nm)	0.0001	97.23	12.6375
	R2407457-002 10X	Y (360.074 nm)	0.87	0.21	485435.97
	R2407457-002 10X	Y_R (360.074 nm)	0.87	0.21	485471.33
	R2407457-002 10X	Zn (213.857 nm)	0.0019	1.58	138.7652
8/22/2024 10:20:28	R2407457-002L 50X	Ag (328.068 nm)	0.0001 u	> 100.00	20.9995
	R2407457-002L 50X	Al (237.312 nm)	0.0037	37.53	-5.5920
	R2407457-002L 50X	As (188.980 nm)	-0.0005 u	> 100.00	-3.2986
	R2407457-002L 50X	B (249.772 nm)	0.0046	2.26	290.5937
	R2407457-002L 50X	Ba (230.424 nm)	0.0006	12.33	51.9522
	R2407457-002L 50X	Be (313.107 nm)	0.0000 u	> 100.00	-15.7141
	R2407457-002L 50X	Ca (317.933 nm)	15.5740	0.18	628784.0748
	R2407457-002L 50X	Cd (214.439 nm)	0.0000 u	> 100.00	9.0186
	R2407457-002L 50X	Co (230.786 nm)	0.0000 u	> 100.00	2.7950
	R2407457-002L 50X	Cr (267.716 nm)	0.0003	40.93	41.7795
	R2407457-002L 50X	Cu (327.395 nm)	0.0000 u	> 100.00	-144.5988
	R2407457-002L 50X	Fe (234.350 nm)	0.0150	1.64	415.4233
	R2407457-002L 50X	K (766.491 nm)	0.8791	2.24	1584.4421
	R2407457-002L 50X	Mg (279.078 nm)	3.3448	0.22	14593.4656
	R2407457-002L 50X	Mn (257.610 nm)	0.0150	0.34	5502.6302
	R2407457-002L 50X	Mo (202.032 nm)	0.0007	38.76	13.0049
	R2407457-002L 50X	Na (588.995 nm)	79.4305 o	0.10	1357796.2666
	R2407457-002L 50X	Ni (230.299 nm)	0.0006	55.47	13.8229
	R2407457-002L 50X	Pb (220.353 nm)	-0.0002 u	> 100.00	2.3144

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407457-002L 50X	Sb (217.582 nm)	0.0010	91.47	5.0055
	R2407457-002L 50X	Se (196.026 nm)	0.0019 u	> 100.00	3.1182
	R2407457-002L 50X	Si (252.851 nm)	0.1315	1.22	936.2335
	R2407457-002L 50X	Sn (189.925 nm)	-0.0008 u	37.25	4.8644
	R2407457-002L 50X	Sr (216.596 nm)	0.0819	0.01	1646.9413
	R2407457-002L 50X	Ti (336.122 nm)	0.0005	28.97	142.6531
	R2407457-002L 50X	Tl (190.794 nm)	0.0000 u	> 100.00	-2.7908
	R2407457-002L 50X	V (292.401 nm)	0.0003	25.71	18.0126
	R2407457-002L 50X	Y (360.074 nm)	0.93	0.15	515824.46
	R2407457-002L 50X	Y_R (360.074 nm)	0.93	0.15	515865.84
	R2407457-002L 50X	Zn (213.857 nm)	0.0004	13.51	42.3600
8/22/2024 10:23:43	R2407633-001 3X	Ag (328.068 nm)	0.0001 u	> 100.00	24.7445
	R2407633-001 3X	Al (237.312 nm)	0.0168	9.13	29.7885
	R2407633-001 3X	As (188.980 nm)	0.0001 u	> 100.00	-2.2007
	R2407633-001 3X	B (249.772 nm)	0.0586	0.55	2696.4064
	R2407633-001 3X	Ba (230.424 nm)	0.0034	0.59	231.2576
	R2407633-001 3X	Be (313.107 nm)	0.0000 u	> 100.00	-21.3080
	R2407633-001 3X	Ca (317.933 nm)	190.9111 o	0.20	7673562.1930
	R2407633-001 3X	Cd (214.439 nm)	0.0000 u	> 100.00	11.9669
	R2407633-001 3X	Co (230.786 nm)	-0.0002 u	20.87	-1.5301
	R2407633-001 3X	Cr (267.716 nm)	0.0006	13.10	54.6761
	R2407633-001 3X	Cu (327.395 nm)	0.0000 u	> 100.00	-142.7469
	R2407633-001 3X	Fe (234.350 nm)	0.0200	1.23	536.5932
	R2407633-001 3X	K (766.491 nm)	4.3734	1.72	5708.3309
	R2407633-001 3X	Mg (279.078 nm)	78.5222 o	0.24	342501.9345
	R2407633-001 3X	Mn (257.610 nm)	0.0010	2.50	386.0929
	R2407633-001 3X	Mo (202.032 nm)	0.0036	4.69	46.4666
	R2407633-001 3X	Na (588.995 nm)	38.9694	0.52	659763.3793
	R2407633-001 3X	Ni (230.299 nm)	0.0090	0.95	127.2567
	R2407633-001 3X	Pb (220.353 nm)	0.0000 u	> 100.00	3.3380
	R2407633-001 3X	Sb (217.582 nm)	0.0012 u	> 100.00	5.4425
	R2407633-001 3X	Se (196.026 nm)	-0.0018 u	> 100.00	0.0187
	R2407633-001 3X	Si (252.851 nm)	2.6599	0.29	17737.0056
	R2407633-001 3X	Sn (189.925 nm)	-0.0005 u	> 100.00	5.5078
	R2407633-001 3X	Sr (216.596 nm)	0.1835	0.17	3679.2621
	R2407633-001 3X	Ti (336.122 nm)	0.0002	56.64	101.6078
	R2407633-001 3X	Tl (190.794 nm)	0.0021	49.25	-0.6841
	R2407633-001 3X	V (292.401 nm)	0.0004	14.10	24.6505
	R2407633-001 3X	Y (360.074 nm)	0.91	0.26	506511.38
	R2407633-001 3X	Y_R (360.074 nm)	0.91	0.26	506540.59
	R2407633-001 3X	Zn (213.857 nm)	0.0006	17.50	53.5558
8/22/2024 10:26:58	R2407633-002 10X	Ag (328.068 nm)	0.0000 u	> 100.00	17.2985
	R2407633-002 10X	Al (237.312 nm)	0.3106	3.04	823.1349
	R2407633-002 10X	As (188.980 nm)	-0.0001 u	> 100.00	-2.5618
	R2407633-002 10X	B (249.772 nm)	0.0165	1.87	819.0089
	R2407633-002 10X	Ba (230.424 nm)	0.0026	3.91	178.4353
	R2407633-002 10X	Be (313.107 nm)	0.0000	32.99	-11.0932
	R2407633-002 10X	Ca (317.933 nm)	55.3267 o	0.66	2225987.8481
	R2407633-002 10X	Cd (214.439 nm)	0.0000 u	> 100.00	10.6610
	R2407633-002 10X	Co (230.786 nm)	0.0000 u	49.36	1.3683
	R2407633-002 10X	Cr (267.716 nm)	0.0007	6.63	63.6273
	R2407633-002 10X	Cu (327.395 nm)	0.0004	87.61	-124.0445
	R2407633-002 10X	Fe (234.350 nm)	0.3285	1.06	7957.7717
	R2407633-002 10X	K (766.491 nm)	1.5733	5.79	2403.8264
	R2407633-002 10X	Mg (279.078 nm)	17.7743	0.69	77532.0336
	R2407633-002 10X	Mn (257.610 nm)	0.0259	0.53	9498.1980
	R2407633-002 10X	Mo (202.032 nm)	0.0005	36.98	11.6329

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407633-002 10X	Na (588.995 nm)	10.1635	0.91	162805.7052
	R2407633-002 10X	Ni (230.299 nm)	0.0037	3.48	56.0157
	R2407633-002 10X	Pb (220.353 nm)	-0.0001 u	> 100.00	2.7942
	R2407633-002 10X	Sb (217.582 nm)	0.0007 u	> 100.00	4.2524
	R2407633-002 10X	Se (196.026 nm)	-0.0019 u	81.74	-0.0700
	R2407633-002 10X	Si (252.851 nm)	1.0196	2.89	6837.4716
	R2407633-002 10X	Sn (189.925 nm)	-0.0011 u	79.76	3.8493
	R2407633-002 10X	Sr (216.596 nm)	0.0538	0.44	1084.9728
	R2407633-002 10X	Ti (336.122 nm)	0.0094	14.66	1550.8468
	R2407633-002 10X	Tl (190.794 nm)	0.0016 u	> 100.00	-1.2313
	R2407633-002 10X	V (292.401 nm)	0.0005	11.68	27.3834
	R2407633-002 10X	Y (360.074 nm)	0.95	0.13	527691.62
	R2407633-002 10X	Y_R (360.074 nm)	0.95	0.13	527738.33
	R2407633-002 10X	Zn (213.857 nm)	0.0015	3.29	111.8738
8/22/2024 10:30:14	R2407633-001 10X	Ag (328.068 nm)	0.0002	57.02	28.8891
	R2407633-001 10X	Al (237.312 nm)	0.0067	27.00	2.3583
	R2407633-001 10X	As (188.980 nm)	-0.0018 u	73.61	-5.5748
	R2407633-001 10X	B (249.772 nm)	0.0189	0.64	926.5261
	R2407633-001 10X	Ba (230.424 nm)	0.0011	4.33	82.4222
	R2407633-001 10X	Be (313.107 nm)	0.0000 u	> 100.00	-22.3389
	R2407633-001 10X	Ca (317.933 nm)	60.4356 o	0.53	2431254.6594
	R2407633-001 10X	Cd (214.439 nm)	0.0000 u	> 100.00	9.4470
	R2407633-001 10X	Co (230.786 nm)	-0.0001 u	60.13	0.0796
	R2407633-001 10X	Cr (267.716 nm)	0.0004	30.80	43.0165
	R2407633-001 10X	Cu (327.395 nm)	0.0002 u	> 100.00	-134.2033
	R2407633-001 10X	Fe (234.350 nm)	0.0080	3.45	246.5732
	R2407633-001 10X	K (766.491 nm)	1.2456	1.48	2017.0239
	R2407633-001 10X	Mg (279.078 nm)	23.4242	0.60	102175.5869
	R2407633-001 10X	Mn (257.610 nm)	0.0004	3.38	138.9155
	R2407633-001 10X	Mo (202.032 nm)	0.0012	13.18	19.3833
	R2407633-001 10X	Na (588.995 nm)	11.5058	0.79	185963.3691
	R2407633-001 10X	Ni (230.299 nm)	0.0021	8.93	34.1100
	R2407633-001 10X	Pb (220.353 nm)	-0.0009 u	> 100.00	-1.1689
	R2407633-001 10X	Sb (217.582 nm)	0.0009 u	> 100.00	4.6491
	R2407633-001 10X	Se (196.026 nm)	-0.0034 u	43.27	-1.3691
	R2407633-001 10X	Si (252.851 nm)	0.8156	0.41	5481.5413
	R2407633-001 10X	Sn (189.925 nm)	-0.0015 u	16.79	2.6838
	R2407633-001 10X	Sr (216.596 nm)	0.0565	0.55	1137.6748
	R2407633-001 10X	Ti (336.122 nm)	0.0002	29.83	96.1228
	R2407633-001 10X	Tl (190.794 nm)	0.0028	14.52	-0.0021
	R2407633-001 10X	V (292.401 nm)	0.0003	63.13	20.3749
	R2407633-001 10X	Y (360.074 nm)	0.95	0.13	527627.99
	R2407633-001 10X	Y_R (360.074 nm)	0.95	0.13	527649.07
	R2407633-001 10X	Zn (213.857 nm)	0.0003	29.90	31.2043
8/22/2024 10:33:28	Continuing Calibration Verification1	Ag (328.068 nm)	0.5207	0.26	33223.4321
	Continuing Calibration Verification1	Al (237.312 nm)	9.9206	0.12	26778.5183
	Continuing Calibration Verification1	As (188.980 nm)	0.9996	0.23	1764.3409
	Continuing Calibration Verification1	B (249.772 nm)	2.3335	0.36	104055.5996
	Continuing Calibration Verification1	Ba (230.424 nm)	9.7570	0.55	617620.3616
	Continuing Calibration Verification1	Be (313.107 nm)	0.2469	0.40	308908.1276
	Continuing Calibration Verification1	Ca (317.933 nm)	24.7803	0.51	998679.4380
	Continuing Calibration Verification1	Cd (214.439 nm)	0.4931	0.46	31980.8438
	Continuing Calibration Verification1	Co (230.786 nm)	2.4703	0.55	52682.1013
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5181	0.47	30092.5016
	Continuing Calibration Verification1	Cu (327.395 nm)	1.2851	0.44	59213.7605
	Continuing Calibration Verification1	Fe (234.350 nm)	4.9130	0.47	118251.7432
	Continuing Calibration Verification1	K (766.491 nm)	25.3009	0.08	30406.2358

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification1	Mg (279.078 nm)	25.4027	0.43	110805.6386
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7375	0.42	270583.0329
	Continuing Calibration Verification1	Mo (202.032 nm)	2.5720	0.52	28926.8590
	Continuing Calibration Verification1	Na (588.995 nm)	25.7663	0.46	431984.5373
	Continuing Calibration Verification1	Ni (230.299 nm)	1.9889	0.51	26871.8789
	Continuing Calibration Verification1	Pb (220.353 nm)	0.4932	0.56	2685.0529
	Continuing Calibration Verification1	Sb (217.582 nm)	4.9824	0.23	12007.9457
	Continuing Calibration Verification1	Se (196.026 nm)	0.4839	0.30	411.7163
	Continuing Calibration Verification1	Si (252.851 nm)	10.2332	1.97	68060.6387
	Continuing Calibration Verification1	Sn (189.925 nm)	4.9311	0.43	13943.9079
	Continuing Calibration Verification1	Sr (216.596 nm)	2.4832	0.57	49689.3297
	Continuing Calibration Verification1	Ti (336.122 nm)	2.6215	0.42	412586.6614
	Continuing Calibration Verification1	Tl (190.794 nm)	0.9937	0.15	965.2869
	Continuing Calibration Verification1	V (292.401 nm)	2.5607	0.40	99476.2659
	Continuing Calibration Verification1	Y (360.074 nm)	0.93	0.25	518933.84
	Continuing Calibration Verification1	Y_R (360.074 nm)	0.93	0.25	518947.74
	Continuing Calibration Verification1	Zn (213.857 nm)	0.9957	0.23	64117.6416
8/22/2024 10:36:42	Continuing Calibration Blank1	Ag (328.068 nm)	0.0001 u	> 100.00	21.0152
	Continuing Calibration Blank1	Al (237.312 nm)	0.0020	33.16	-10.1814
	Continuing Calibration Blank1	As (188.980 nm)	0.0013	77.42	-0.2335
	Continuing Calibration Blank1	B (249.772 nm)	0.0028	0.97	209.8335
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0006	7.17	53.8847
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000	33.34	-7.5926
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0046	3.10	3230.5771
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0000 u	> 100.00	10.0212
	Continuing Calibration Blank1	Co (230.786 nm)	0.0001	66.92	4.1908
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0001 u	> 100.00	25.6289
	Continuing Calibration Blank1	Cu (327.395 nm)	0.0004	24.54	-123.0679
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0031	21.06	130.7371
	Continuing Calibration Blank1	K (766.491 nm)	0.0099 u	> 100.00	558.6595
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0003 u	> 100.00	5.3888
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0001	2.11	41.2516
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0039	19.35	49.5435
	Continuing Calibration Blank1	Na (588.995 nm)	0.0240	23.97	-12121.0427
	Continuing Calibration Blank1	Ni (230.299 nm)	-0.0001 u	> 100.00	4.0833
	Continuing Calibration Blank1	Pb (220.353 nm)	-0.0010 u	13.90	-1.8236
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0058	8.93	16.5999
	Continuing Calibration Blank1	Se (196.026 nm)	-0.0018 u	70.02	0.0040
	Continuing Calibration Blank1	Si (252.851 nm)	0.0086	27.36	119.5301
	Continuing Calibration Blank1	Sn (189.925 nm)	0.0003 u	> 100.00	7.9317
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0001 u	> 100.00	9.7042
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0044	22.75	753.8067
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0008 u	> 100.00	-2.0036
	Continuing Calibration Blank1	V (292.401 nm)	0.0001 u	> 100.00	11.0144
	Continuing Calibration Blank1	Y (360.074 nm)	0.98	0.19	544722.02
	Continuing Calibration Blank1	Y_R (360.074 nm)	0.98	0.19	544748.70
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0004	15.36	38.9439

Summary Calibration Results

Element and wavelength	Type	Units	Equation	Correlation Coefficient	%RSE
Ag (328.068 nm)	Analyte	ppm	63776.30642733 * Concentration + 16.94518029	1.00000	1.33753626
Al (237.312 nm)	Analyte	ppm	2700.87694819 * Concentration - 15.66963683	1.00000	1.41385416
As (188.980 nm)	Analyte	ppm	1767.42894828 * Concentration - 2.46426929	0.99999	2.05554998
B (249.772 nm)	Analyte	ppm	44556.05791326 * Concentration + 84.06570318	0.99999	2.99001241
Ba (230.424 nm)	Analyte	ppm	63298.79892961 * Concentration + 13.54370491	0.99996	2.11903393
Be (313.107 nm)	Analyte	ppm	1251091.27241038 * Concentration - 16.53544808	1.00000	3.58128727
Ca (317.933 nm)	Analyte	ppm	40178.48074509 * Concentration + 3044.35266950	0.99999	12.477405 62
Cd (214.439 nm)	Analyte	ppm	64828.73943096 * Concentration + 11.60726809	0.99999	1.57946765
Co (230.786 nm)	Analyte	ppm	21325.54520185 * Concentration + 2.21696928	0.99998	1.85624120
Cr (267.716 nm)	Analyte	ppm	58042.69341329 * Concentration + 21.91229563	0.99999	2.41502408
Cu (327.395 nm)	Analyte	ppm	46187.11531743 * Concentration - 143.22924437	0.99999	2.46765628
Fe (234.350 nm)	Analyte	ppm	24057.80872839 * Concentration + 55.02827306	0.99999	1.57488968
K (766.491 nm)	Analyte	ppm	1180.16436272 * Concentration + 547.01624017	0.99995	12.087218 50
Mg (279.078 nm)	Analyte	ppm	4361.79644022 * Concentration + 4.15891035	1.00000	0.46700162
Mn (257.610 nm)	Analyte	ppm	366865.70655973 * Concentration + 9.41199008	0.99999	1.76457552
Mo (202.032 nm)	Analyte	ppm	11244.89250510 * Concentration + 5.47948413	1.00000	1.38999060
Na (588.995 nm)	Analyte	ppm	17251.96001315 * Concentration - 12535.00317825	1.00000	3.26258674
Ni (230.299 nm)	Analyte	ppm	13507.87662474 * Concentration + 5.75948823	0.99999	1.79193890
Pb (220.353 nm)	Analyte	ppm	5437.41442752 * Concentration + 3.48548733	0.99998	2.72677128
Sb (217.582 nm)	Analyte	ppm	2409.56017071 * Concentration + 2.56861894	1.00000	2.15195426
Se (196.026 nm)	Analyte	ppm	847.65491390 * Concentration + 1.53412445	0.99998	8.37124892
Si (252.851 nm)	Analyte	ppm	6644.89411743 * Concentration + 62.25815176	1.00000	2.27131758
Sn (189.925 nm)	Analyte	ppm	2826.33203654 * Concentration + 7.03303560	0.99999	1.54005712
Sr (216.596 nm)	Analyte	ppm	20006.85476601 * Concentration + 8.17308803	0.99999	1.25135787
Ti (336.122 nm)	Analyte	ppm	157358.61721875 * Concentration + 66.37634115	1.00000	0.95672004
Tl (190.794 nm)	Analyte	ppm	974.17335546 * Concentration - 2.76727433	0.99997	4.96109707
V (292.401 nm)	Analyte	ppm	38843.69509493 * Concentration + 7.85043672	1.00000	0.65087164
Zn (213.857 nm)	Analyte	ppm	64379.53509323 * Concentration + 14.21269692	1.00000	5.47717894

Detailed Calibration Results

Ag (328.068 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	16.9452	0.0000	0.0000	N/A
Standard 2	650.4601	0.0100	0.0099	0.6661
Standard 3	1266.0284	0.0200	0.0196	2.0731
Standard 4	6352.2418	0.1000	0.0993	0.6638
Standard 5	12736.7108	0.2000	0.1994	0.2783
Standard 6	64002.3769	1.0000	1.0033	0.3279

Al (237.312 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	-15.6696	0.0000	0.0000	N/A
Standard 1	261.3921	0.1000	0.1026	2.5821
Standard 2	528.2453	0.2000	0.2014	0.6923
Standard 3	1074.2200	0.4000	0.4035	0.8829
Standard 4	5371.8976	2.0000	1.9947	0.2626
Standard 5	10785.5714	4.0000	3.9992	0.0210
Standard 6	54011.2115	20.0000	20.0035	0.0173

As (188.980 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	-2.4643	0.0000	0.0000	N/A
Standard 1	14.8177	0.0100	0.0098	2.2197
Standard 2	32.8860	0.0200	0.0200	0.0048
Standard 3	66.0450	0.0400	0.0388	3.0948
Standard 4	348.8695	0.2000	0.1988	0.6088
Standard 5	696.6899	0.4000	0.3956	1.1058
Standard 6	3564.0759	2.0000	2.0179	0.8963

B (249.772 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	84.0657	0.0000	0.0000	N/A
Standard 2	4407.6413	0.1000	0.0970	2.9632
Standard 3	8736.9258	0.2000	0.1942	2.8992
Standard 4	44256.5870	1.0000	0.9914	0.8608
Standard 5	89705.0001	2.0000	2.0114	0.5710
Standard 6	458686.3687	10.0000	10.2927	2.9270

Ba (230.424 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	13.5437	0.0000	0.0000	N/A
Standard 1	1265.6880	0.0200	0.0198	1.0926
Standard 2	12868.4221	0.2000	0.2031	1.5413
Standard 3	25605.6376	0.4000	0.4043	1.0765
Standard 4	127409.7423	2.0000	2.0126	0.6308
Standard 5	254839.3585	4.0000	4.0258	0.6440
Standard 6	1221373.2054	20.0000	19.2951	3.5243

Be (313.107 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	-16.5354	0.0000	0.0000	N/A
Standard 1	3502.3052	0.0030	0.0028	6.2461
Standard 2	6102.9297	0.0050	0.0049	2.1740
Standard 3	12264.3107	0.0100	0.0098	1.8389
Standard 4	62838.9861	0.0500	0.0502	0.4811
Standard 5	127086.3821	0.1000	0.1016	1.5936
Standard 6	632956.5190	0.5000	0.5059	1.1874

Ca (317.933 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error	
Blank	3044.3527	0.0000	0.0000	N/A	
Standard 2	27375.7108	0.5000	0.6056	21.1164	
Standard 3	42400.0562	1.0000	0.9795	2.0478	MRL Std
Standard 4	200568.2442	5.0000	4.9162	1.6768	
Standard 5	399359.7023	10.0000	9.8639	1.3613	
Standard 6	1941518.9921	50.0000	48.2466	3.5068	

Cd (214.439 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	11.6073	0.0000	0.0000	N/A
Standard 1	344.8443	0.0050	0.0051	2.8054
Standard 2	660.0372	0.0100	0.0100	0.0220
Standard 3	1307.5083	0.0200	0.0200	0.0520

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Standard 4	6503.0502	0.1000	0.1001	0.1322
Standard 5	13004.9775	0.2000	0.2004	0.2130
Standard 6	63913.7638	1.0000	0.9857	1.4293

Co (230.786 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	2.2170	0.0000	0.0000	N/A
Standard 2	1084.2884	0.0500	0.0507	1.4812
Standard 3	2157.2605	0.1000	0.1011	1.0546
Standard 4	10721.6773	0.5000	0.5027	0.5316
Standard 5	21349.0694	1.0000	1.0010	0.0999
Standard 6	103862.1159	5.0000	4.8702	2.5958

Cr (267.716 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	21.9123	0.0000	0.0000	N/A
Standard 2	621.3428	0.0100	0.0103	3.2741
Standard 3	1208.1028	0.0200	0.0204	2.1826
Standard 4	5869.9804	0.1000	0.1008	0.7546
Standard 5	11713.1676	0.2000	0.2014	0.7125
Standard 6	57502.8657	1.0000	0.9903	0.9678

Cu (327.395 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	-143.2292	0.0000	0.0000	N/A
Standard 1	339.4091	0.0100	0.0104	4.4963
Standard 2	1011.2728	0.0250	0.0250	0.0152
Standard 3	2150.5975	0.0500	0.0497	0.6724
Standard 4	11314.0901	0.2500	0.2481	0.7748
Standard 5	22954.9426	0.5000	0.5001	0.0200
Standard 6	117353.4695	2.5000	2.5439	1.7571

Fe (234.350 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	55.0283	0.0000	0.0000	N/A
Standard 2	2495.6621	0.1000	0.1014	1.4487
Standard 3	4887.3682	0.2000	0.2009	0.4318
Standard 4	24194.8777	1.0000	1.0034	0.3410
Standard 5	48050.3308	2.0000	1.9950	0.2501
Standard 6	235266.1502	10.0000	9.7769	2.2309

K (766.491 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	547.0162	0.0000	0.0000	N/A
Standard 2	1040.7808	0.5000	0.4184	16.3227
Standard 3	1609.0117	1.0000	0.8999	10.0129
Standard 4	6036.7903	5.0000	4.6517	6.9659
Standard 5	11782.0369	10.0000	9.5199	4.8012
Standard 6	59666.9577	50.0000	50.0947	0.1893

Mg (279.078 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	4.1589	0.0000	0.0000	N/A
Standard 2	2189.1644	0.5000	0.5009	0.1883
Standard 3	4338.4964	1.0000	0.9937	0.6295
Standard 4	21907.8523	5.0000	5.0217	0.4343
Standard 5	43633.9759	10.0000	10.0027	0.0272
Standard 6	217696.8511	50.0000	49.9090	0.1821

Mn (257.610 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	9.4120	0.0000	0.0000	N/A
Standard 1	3735.4341	0.0100	0.0102	1.5637
Standard 2	5623.1545	0.0150	0.0153	2.0127
Standard 3	11138.3922	0.0300	0.0303	1.1177
Standard 4	55133.1310	0.1500	0.1503	0.1706
Standard 5	109827.7842	0.3000	0.2993	0.2193
Standard 6	538463.4741	1.5000	1.4677	2.1524

Mo (202.032 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	5.4795	0.0000	0.0000	N/A
Standard 1	284.2233	0.0250	0.0248	0.8461
Standard 2	557.9513	0.0500	0.0491	1.7382
Standard 3	1110.7077	0.1000	0.0983	1.7129
Standard 4	5623.0045	0.5000	0.4996	0.0875
Standard 5	11353.3538	1.0000	1.0092	0.9158
Standard 6	56488.1509	5.0000	5.0230	0.4592

Na (588.995 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	-12535.0032	0.0000	0.0000	N/A
Standard 2	-4254.3506	0.5000	0.4800	4.0033
Standard 3	4087.7253	1.0000	0.9635	3.6473
Standard 4	72553.6757	5.0000	4.9321	1.3577
Standard 5	160220.4808	10.0000	10.0137	0.1367
Standard 6	857492.8148	50.0000	50.4307	0.8613

Ni (230.299 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	5.7595	0.0000	0.0000	N/A
Standard 2	554.0071	0.0400	0.0406	1.4681
Standard 3	1099.9518	0.0800	0.0810	1.2550
Standard 4	5447.6380	0.4000	0.4029	0.7168
Standard 5	10832.8842	0.8000	0.8015	0.1927
Standard 6	52787.3093	4.0000	3.9075	2.3134

Pb (220.353 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	3.4855	0.0000	0.0000	N/A
Standard 1	31.0250	0.0050	0.0051	1.2964
Standard 2	55.8547	0.0100	0.0096	3.6874
Standard 3	109.4443	0.0200	0.0195	2.5651
Standard 4	552.3851	0.1000	0.1009	0.9486

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Standard 5	1091.9183	0.2000	0.2002	0.0874
Standard 6	5297.2807	1.0000	0.9736	2.6413

Sb (217.582 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	2.5686	0.0000	0.0000	N/A
Standard 1	142.8092	0.0600	0.0582	2.9971
Standard 2	241.0635	0.1000	0.0990	1.0214
Standard 3	471.4413	0.2000	0.1946	2.7057
Standard 4	2390.0746	1.0000	0.9908	0.9153
Standard 5	4802.7284	2.0000	1.9921	0.3934
Standard 6	24201.5916	10.0000	10.0429	0.4292

Se (196.026 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	1.5341	0.0000	0.0000	N/A
Standard 2	10.0863	0.0100	0.0101	0.8919
Standard 3	20.8725	0.0200	0.0228	14.0698
Standard 4	83.9103	0.1000	0.0972	2.8187
Standard 5	167.8789	0.2000	0.1962	1.8795
Standard 6	849.4120	1.0000	1.0003	0.0263

Si (252.851 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	62.2582	0.0000	0.0000	N/A
Standard 2	3386.6970	0.5000	0.5003	0.0600
Standard 3	6692.8642	1.0000	0.9978	0.2150
Standard 4	33802.8555	5.0000	5.0777	1.5535
Standard 5	67625.7034	10.0000	10.1677	1.6772
Standard 6	342918.2639	50.0000	51.5969	3.1938

Sn (189.925 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	7.0330	0.0000	0.0000	N/A
Standard 2	289.3036	0.1000	0.0999	0.1283
Standard 3	574.2842	0.2000	0.2007	0.3511
Standard 4	2852.4497	1.0000	1.0068	0.6752
Standard 5	5656.1696	2.0000	1.9988	0.0624
Standard 6	27548.9055	10.0000	9.7447	2.5526

Sr (216.596 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	8.1731	0.0000	0.0000	N/A
Standard 2	1013.9692	0.0500	0.0503	0.5452
Standard 3	2007.7607	0.1000	0.0999	0.0549
Standard 4	10024.0355	0.5000	0.5006	0.1243
Standard 5	20070.2989	1.0000	1.0028	0.2763
Standard 6	97966.7146	5.0000	4.8962	2.0750

Ti (336.122 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	66.3763	0.0000	0.0000	N/A
Standard 2	7901.5712	0.0500	0.0498	0.4161

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Standard 3	15693.7660	0.1000	0.0993	0.6893
Standard 4	78713.9433	0.5000	0.4998	0.0403
Standard 5	159043.2746	1.0000	1.0103	1.0284
Standard 6	794877.0701	5.0000	5.0510	1.0190

Tl (190.794 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	-2.7673	0.0000	0.0000	N/A
Standard 1	7.3647	0.0100	0.0104	4.0062
Standard 2	18.2149	0.0200	0.0215	7.6924
Standard 3	37.4063	0.0400	0.0412	3.0966
Standard 4	196.6558	0.2000	0.2047	2.3550
Standard 5	396.3743	0.4000	0.4097	2.4308
Standard 6	1916.7961	2.0000	1.9705	1.4773

V (292.401 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	7.8504	0.0000	0.0000	N/A
Standard 2	1945.1374	0.0500	0.0499	0.2522
Standard 3	3853.1992	0.1000	0.0990	1.0046
Standard 4	19442.7757	0.5000	0.5003	0.0673
Standard 5	38881.3483	1.0000	1.0008	0.0767
Standard 6	195067.8687	5.0000	5.0217	0.4333

Zn (213.857 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	14.2127	0.0000	0.0000	N/A
Standard 2	1422.8128	0.0200	0.0219	9.3981
Standard 3	2584.7625	0.0400	0.0399	0.1799
Standard 4	12750.5462	0.2000	0.1978	1.0840
Standard 5	25600.8586	0.4000	0.3974	0.6414
Standard 6	128471.3276	2.0000	1.9953	0.2345

Preparation Information Benchsheet

Prep Run#: 443265
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigSICP
Prep Method: EPA 3050B

Status: Prepped
Prep Date/Time: 8/16/24 10:21

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2409989-01	MB		0.5g	6010D/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T				50.00mL	White-Coarse/Colorless-Clear		HB:12 Well:D1 Temp:93.8C/93.0C
2	RQ2409989-05	MB		0.5000g	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T				50.00mL	White-Coarse/Colorless-Clear		Non-Aq Matrix
3	RQ2409989-02	LCS		0.5g	6010D/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T				50.00mL	White-Coarse/Colorless-Clear	0.5000 mL/236800; 0.5000 mL/233429; 0.5000 mL/236119	On HB:11:23-11:38,11:40-12:10,12:12-12:42,15:34-15:49,15:50-16:05 Pip:M340,MA100,M380,M38,M33,M23
4	RQ2409989-06	LCS		0.5000g	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T				50.00mL	White-Coarse/Colorless-Clear	0.5000 mL/236119; 0.5000 mL/233429; 0.5000 mL/236800	Non-Aq Matrix
5	R2407513-005	Comp-01-20240812	.03	0.5200g	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T				50.00mL	Brown-Medium/Yellow-Clear		
6	R2407528-001	SS-2 4'-6'	.03	0.5100g	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T				50.00mL	Grey-Medium/Yellow-Clear		
7	R2407528-002	SS-5 6'-8'	.03	0.5500g	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T				50.00mL	Grey-Medium/Yellow-Clear		
8	R2407593-002	WAE-081324A-02	.01	0.5g	6010D/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T				50.00mL	Red-Medium/Yellow-Clear		
9	R2407593-004	WAE-081324A-04	.01	0.5400g	6010D/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T				50.00mL	Red-Medium/Yellow-Clear		
10	R2407593-006	WAE-081324A-06	.01	0.5100g	6010D/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T				50.00mL	Red-Medium/Yellow-Clear		
11	R2407593-008	WAE-081324A-08	.01	0.5200g	6010D/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T				50.00mL	Red-Medium/Yellow-Clear		
12	R2407593-010	WAE-081324A-10	.01	0.5100g	6010D/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T				50.00mL	Brown-Medium/Yellow-Clear		
13	R2407597-001	M35510-1 Soil Sample Subsoil	.01	0.5200g	6010D/As T				50.00mL	Brown-Medium/Yellow-Clear		
14	R2407615-020	NYW 515	.03	0.5400g	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T				50.00mL	Brown-Liquid/Colorless-Clear		

Preparation Information Benchsheet

Prep Run#: 443265
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigSICP
Prep Method: EPA 3050B

Status: Prepped
Prep Date/Time: 8/16/24 10:21

15	R2407616-001	WS-01 (South Wall) Side	.05	0.5300g	6010D/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T				50.00mL	Brown-Coarse/Yellow-Clear		
16	R2407616-002	WS-02 (West Wall) Center	.05	0.5500g	6010D/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T				50.00mL	Brown-Coarse/Yellow-Clear		
17	R2407616-003	WS-03 (East Wall) Center	.05	0.5g	6010D/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T				50.00mL	Brown-Coarse/Yellow-Clear		
18	R2407616-004	WS-04 (North Wall) Side	.05	0.5500g	6010D/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T				50.00mL	Brown-Coarse/Yellow-Clear		
19	R2407693-003	Compost Pile 2024-5	.01	0.5300g	6010D/As T, Cd T, Cr T, Cu T, K T, Mo T, Ni T, Pb T, Se T, Zn T				50.00mL	Brown-Medium/Yellow-Clear		
20	RQ2409989-03	R2407693-003 MS	.01	0.5300g	6010D/As T, Cd T, Cr T, Cu T, K T, Mo T, Ni T, Pb T, Se T, Zn T				50.00mL	Brown-Medium/Yellow-Clear	0.5000 mL/236119; 0.5000 mL/236800; 0.5000 mL/233429	
21	RQ2409989-04	R2407693-003 DMS	.01	0.5200g	6010D/As T, Cd T, Cr T, Cu T, K T, Mo T, Ni T, Pb T, Se T, Zn T				50.00mL	Brown-Medium/Yellow-Clear	0.5000 mL/233429; 0.5000 mL/236119; 0.5000 mL/236800	

Spiking Solutions

Name:	Custom LCS STD A Metals	Inventory ID	233429	Logbook Ref:	233429	Expires On:	07/31/2025	Lot #: 2400837-5
Name:	Custom LCS STD B Metals	Inventory ID	236119	Logbook Ref:	236119	Expires On:	11/02/2024	
Name:	C Spike	Inventory ID	236800	Logbook Ref:	236800	Expires On:	01/31/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 234782 (234783)	1:1 Nitric Acid Metals Grade	1:1 235979 (235980)	Boiling Stones PTFE	226047 (226047)
Hot Block Cups	50mL Lot L223102601 (235558)	Hydrogen Peroxide 30% Reagent Grade H2O2	233709 (233709)	Nitric Acid Metals Grade HNO3	235979 (235979)
Thermometer	462 (230832)				

Preparation Steps

Step: Digestion
Started: 8/16/24 10:21
Finished: 8/16/24 16:08
By: CDISTEFANO
Comments

Preparation Information Benchsheet

Prep Run#: 443265
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigSICP
Prep Method: EPA 3050B

Status: Prepped
Prep Date/Time: 8/16/24 10:21

7513 8/26
7528 8/23
7593 8/28
7597 8/23
7615 - Non Ag 8/23
7616 8/23
7693 8/26

Soils

Comments: _____

Reviewed By: Nicole Mansen Date: 8/19/24

Chain of Custody

Relinquished By: _____ Date: 8/16/24

Received By: R-Aon Date: 8/16/24

Extracts Examined
Yes No

Date: 8/16/24 Analyst: C D

Prep Number: 443265 Balance ID: R-Balance-03

Sample	ICP (g)	Hg (g)	Sample Description
R2407528-01	0.51	NA	grey - med
-02	0.55		
R2407593-02	0.50		Red - Med
-04	0.54		
-06	0.57		
-08	0.52		
-10	0.51		
R2407597-01	0.52		B - M
NON-AG R2407615-20	0.54		B - liquid
R2407616-01	0.53		B - Coarse
-02	0.55		
-03	0.50		
-04	0.55		
R240 7693-03	0.53		B - Medium
-03 MS	0.53		
-03 DMS	0.52		
R2407513-05	0.52		B - M
			8/16/24

Preparation Information Benchsheet

Prep Run#: 443449
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410198-01	MB		50mL	6010D/Al D, As D, As T, Ca T, Cr D, Cr T, Fe D, Fe T, Mg T, Mn D, Mn T, Na T	<2			50.00mL	Colorless-Clear		HB:13 Well:H5 Temp:91.9C
2	RQ2410198-04	MB		50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		Filter Blank R2407601 8/20/2024
3	RQ2410198-02	LCS		50mL	6010D/Al D, As D, As T, Ca T, Cr D, Cr T, Fe D, Fe T, Mg T, Mn D, Mn T, Na T	<2			50.00mL	Colorless-Clear	0.5000 mL/236800; 0.5000 mL/236119; 0.5000 mL/233429	On HB:16:40 HB Shutoff:2:40 Pipet/Repipettor:M340,MA100,M23
4	RQ2410198-03	DLCS		50mL	6010D/Al D, As D, As T, Ca T, Cr D, Cr T, Fe D, Fe T, Mg T, Mn D, Mn T, Na T	<2			50.00mL	Colorless-Clear	0.5000 mL/236800; 0.5000 mL/236119; 0.5000 mL/233429	
5	R2407601-002	OW76-10L Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
6	R2407601-004	OW76-10U Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
7	R2407601-006	OW76-14W Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
8	R2407601-008	OW76-14E Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
9	R2407601-010	OW76-11R Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
10	R2407601-012	OW87-11SH Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
11	R2407601-014	OW88-19D Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
12	R2407601-016	OW88-19SH Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
13	R2407601-018	Duplicate-01 Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
14	R2407601-019	Duplicate-02	.01	50mL	6010D/As T, Ca T, Cr T, Fe T, Mg T, Mn T, Na T	<2			50.00mL	Colorless-Clear		
15	R2407601-020	Duplicate-02 Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
16	R2407601-022	SFDXX-01 Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
17	R2407601-024	OW87-17SH Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
18	R2407601-026	OW87-17D Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
19	R2407601-028	OW76-13 Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
20	R2407601-030	OW76-13A Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
21	R2407601-032	OW87-18SH Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
22	R2407601-034	OW87-18D Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		
23	R2407601-036	OW87-15D Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		

Preparation Information Benchsheet

Prep Run#: 443449
Team: Metals/CDISTEFANO
Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A
Status: Prepped
Prep Date/Time: 8/20/24 18:40

24	R2407601-038	OW87-15SH Diss	.01	50mL	6010D/Al D, As D, Cr D, Fe D, Mn D	<2			50.00mL	Colorless-Clear		

Spiking Solutions

Name:	Custom LCS STD A Metals	Inventory ID	233429	Logbook Ref:	233429	Expires On:	07/31/2025	Lot #: 2400837-5
Name:	Custom LCS STD B Metals	Inventory ID	236119	Logbook Ref:	236119	Expires On:	11/02/2024	
Name:	C Spike	Inventory ID	236800	Logbook Ref:	236800	Expires On:	01/31/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	Hot Block Cups	50mL Lot L223102601 (235558)	Nitric Acid Metals Grade HNO3 235979 (235979)
Thermometer	460 (230830)			

Preparation Steps

Step: Digestion
Started: 8/20/24 18:40
Finished: 8/21/24 22:19
By: CDISTEFANO
Comments

7601 8/30

Comments:

Reviewed By: Nicole Maassen Date: 8/21/24

Chain of Custody

Relinquished By: CD Date: 8/21/24
Received By: R-1701 Date: 8/21/24

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443447
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410201-01	MB		50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		HB:11 Well:H5 Temp:92.0C
2	RQ2410201-02	LCS		50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/236119; 0.5000 mL/233429; 0.5000 mL/236800	On HB:16:40 HB Shutoff:2:40 Pipet/Repipettor:M340,MA100,M23
3	R2407825-001	W-2R	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
4	R2407825-002	W-3R	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
5	R2407825-003	W-4R	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
6	R2407825-004	W-4S	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Cloudy/Colorless-Clear		
7	R2407825-005	W-5	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
8	R2407825-006	W-6R	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
9	R2407825-007	W-7	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
10	R2407825-008	W-9	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
11	RQ2410201-03	R2407825-008 MS	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/233429; 0.5000 mL/236119; 0.5000 mL/236800	
12	RQ2410201-04	R2407825-008 DMS	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/233429; 0.5000 mL/236119; 0.5000 mL/236800	

Preparation Information Benchsheet

Prep Run#: 443447
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

13	R2407825-009	W-10	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
14	R2407825-010	W-11	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
15	R2407825-011	W-14	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
16	R2407825-012	W-15	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
17	R2407825-013	W-16	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
18	R2407825-014	W-17	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
19	R2407825-015	W-18	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
20	R2407825-016	W-21	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
21	R2407825-017	W-22	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
22	R2407825-018	W-23R	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
23	R2407825-019	W-25	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
24	R2407825-020	W-26	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		

Spiking Solutions

Name:	Custom LCS STD A Metals	Inventory ID	233429	Logbook Ref:	233429	Expires On:	07/31/2025	Lot #: 2400837-5
Name:	Custom LCS STD B Metals	Inventory ID	236119	Logbook Ref:	236119	Expires On:	11/02/2024	
Name:	C Spike	Inventory ID	236800	Logbook Ref:	236800	Expires On:	01/31/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	Hot Block Cups	50mL Lot L223102601 (235558)	Nitric Acid Metals Grade HNO3 235979 (235979)
Thermometer	461 (230831)			

Preparation Information Benchsheet

Prep Run#: 443447
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

Preparation Steps

Step: Digestion
Started: 8/20/24 18:40
Finished: 8/21/24 21:58
By: CDISTEFANO
Comments

7825 8/27
(1-20)

Comments: _____

Reviewed By: Nicole Mansen Date: 8/21/24

Chain of Custody

Relinquished By: [signature] Date: 8/21/24
Received By: B-A01 Date: 8/21/24

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443446
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410202-01	MB		50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		HB:11 Well:H5 Temp:92.0C
2	RQ2410202-02	LCS		50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/236800; 0.5000 mL/233429; 0.5000 mL/236119	On HB:16:40 HB Shutoff:2:40 Pipet/Repipettor:M340,MA100,M23
3	R2407573-002	MW-2	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
4	R2407573-004	MW-3	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
5	RQ2410202-03	R2407573-004 MS	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/236119; 0.5000 mL/233429; 0.5000 mL/236800	
6	RQ2410202-04	R2407573-004 DMS	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/233429; 0.5000 mL/236119; 0.5000 mL/236800	
7	R2407573-006	MW-4	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
8	R2407573-008	MW-5	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
9	R2407573-010	MW-6	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
10	R2407573-011	SW-1	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		

Preparation Information Benchsheet

Prep Run#: 443446
Team: Metals/CDISTEFANO
Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A
Status: Prepped
Prep Date/Time: 8/20/24 18:40

11	R2407573-012	SW-2	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
12	R2407573-013	DUPE-X	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
13	R2407596-001	GW-3	.06	50mL	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T	<2			50.00mL	Yellow-Cloudy/Colorless-Cloudy		
14	R2407601-021	SFDXX-01	.01	50mL	6010D/As T, Ca T, Cr T, Fe T, Mg T, Mn T, Na T	<2			50.00mL	Colorless-Clear		
15	R2407624-001	MW-304	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
16	R2407624-002	MW-306	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
17	R2407624-003	NCP	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Cloudy/Colorless-Clear		
18	R2407624-004	MW-309R	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
19	R2407624-005	NC-2	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
20	R2407624-006	NC-1	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
21	R2407624-007	MW-316	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Cloudy/Colorless-Cloudy		
22	R2407624-008	DGC-35RR	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		

Preparation Information Benchsheet

Prep Run#: 443446
Team: Metals/CDISTEFANO
Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A
Status: Prepped
Prep Date/Time: 8/20/24 18:40

23	R2407624-009	MW-305R	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Cloudy/Colorless-Cloudy		
24	R2407624-010	DGC-7	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Cloudy/Colorless-Cloudy		

Spiking Solutions

Name:	Custom LCS STD A Metals	Inventory ID	233429	Logbook Ref:	233429	Expires On:	07/31/2025	Lot #: 2400837-5
Name:	Custom LCS STD B Metals	Inventory ID	236119	Logbook Ref:	236119	Expires On:	11/02/2024	
Name:	C Spike	Inventory ID	236800	Logbook Ref:	236800	Expires On:	01/31/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	Hot Block Cups	50mL Lot L223102601 (235558)	Nitric Acid Metals Grade HNO3 235979 (235979)
Thermometer	461 (230831)			

Preparation Steps

Step: Digestion
Started: 8/20/24 18:40
Finished: 8/21/24 21:51
By: CDISTEFANO
Comments

7573 8123
7596 8123
7601 8123
7624 8130

Comments: _____

Reviewed By: Nicole Maassen Date: 8/21/24

Chain of Custody

Relinquished By: _____ Date: 8/21/24

Received By: R-A01 Date: 8/21/24

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443448
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410200-01	MB		50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Sb T, Se T, Sn T, Sr T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		HB:13 Well:H5 Temp:91.9C
2	RQ2410200-02	LCS		50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Sb T, Se T, Sn T, Sr T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/236119; 0.5000 mL/233429; 0.5000 mL/236800	On HB:16:40 HB Shutoff:2:40 Pipet/Repipettor:M340,MA100,M23
3	RQ2410200-03	DLCS		50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Sb T, Se T, Sn T, Sr T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/236119; 0.5000 mL/233429; 0.5000 mL/236800	
4	R2407708-001	UFP Discharge	.03	50mL	6010D/Ag T, Cd T, Cr T, Cu T, Ni T, Pb T, Zn T	<2			50.00mL	Orange-Cloudy/Yellow-Cloudy		
5	R2407719-001	2408081011X ST-5-1175	.02	50mL	6010D/Ag T, Al T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Se T, Sn T, Sr T, V T, Zn T	<2			50.00mL	Colorless-Clear		
6	R2407719-002	2408081030X ST-5-1175	.02	50mL	6010D/Ag T, Al T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Se T, Sn T, Sr T, V T, Zn T	<2			50.00mL	Colorless-Clear		
7	R2407723-001	Condensate - 0824	.06	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Yellow-Cloudy/Colorless-Clear		Tier IV
8	R2407724-001	MW50A-0824	.02	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
9	R2407724-002	MW46A-0824	.02	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
10	R2407724-003	MW34A-0824	.02	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
11	R2407724-004	MW26-0824	.02	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
12	R2407724-005	MW14-0824	.02	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
13	R2407724-006	MW19-0824	.02	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
14	R2407792-003	2408140834A 300-001-GSV	.02	50mL	6010D/Ag T, Al T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Se T, Sn T, Sr T, V T, Zn T	<2			50.00mL	Colorless-Clear		

Preparation Information Benchsheet

Prep Run#: 443448
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

15	R2407792-008	2408140940X WB-5-345	.02	50mL	6010D/Ag T, Al T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Se T, Sn T, Sr T, V T, Zn T	<2			50.00mL	Colorless-Clear		
16	R2407792-011	2408150826A 300-002-GSV	.02	50mL	6010D/Ag T, Al T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Se T, Sn T, Sr T, V T, Zn T	<2			50.00mL	Colorless-Clear		
17	R2407812-002	WD-SP0001-AUG-XL 0824	.01	50mL	6010D/Fe T	<2			50.00mL	Colorless-Clear		
18	R2407825-021	W-27	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
19	R2407825-023	W-30	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Cloudy/Colorless-Cloudy		
20	R2407825-039	W-2R DUP	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
21	R2407827-001	Well B	.03	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
22	R2407827-002	Well C	.03	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Cloudy/Colorless-Cloudy		

Spiking Solutions

Name:	Custom LCS STD A Metals	Inventory ID	233429	Logbook Ref:	233429	Expires On:	07/31/2025	Lot #: 2400837-5
Name:	Custom LCS STD B Metals	Inventory ID	236119	Logbook Ref:	236119	Expires On:	11/02/2024	
Name:	C Spike	Inventory ID	236800	Logbook Ref:	236800	Expires On:	01/31/2025	

Preparation Materials

1:1 HCl Metals Grade 1:1 235981 (235982) Hot Block Cups 50mL Lot L223102601 (235558) Nitric Acid Metals Grade HNO3 235979 (235979)
Thermometer 460 (230830)

Preparation Steps

Step: Digestion
Started: 8/20/24 18:40
Finished: 8/21/24 22:10
By: CDISTEFANO
Comments

Comments: _____

Reviewed By: Nicole Mansen Date: 8/21/24

Preparation Information Benchsheet

Prep Run#: 443448
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

7708 8/30
7919 8/26
7723 (N) 8/26
7724 8/26
7792 8/27
7812 8/27
7825 8/27
7827 8/27

Chain of Custody

Relinquished By:	CD	Date:	8/21/24	Extracts Examined
Received By:	CD - AO.	Date:	8/21/24	Yes No

ICP ICV/CCV Standard

Standard is prepared daily

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)
Cal Std 1	Ca	233888	5000	1.00	200	25.00
	Mg		5000			25.00
	K		5000			25.00
	Na		5000			25.00
Cal Std 2	Ag	233889	100	1.00		0.50
	Cr		100			0.50
	Mn		150			0.75
	Ni		400			2.00
	Zn		200			1.00
Cal Std 3	Al	235477	2000	1.00		10.00
	Ba		2000			10.00
	Be		50			0.25
	Co		500			2.50
	Cu		250			1.25
	Fe		1000			5.00
	V		500			2.50
Cal Std 4	As	235157	100	2.00		1.00
	Cd		50			0.50
	Pb		50			0.50
	Se		50			0.50
	Tl		100			1.00
	Sb	235285	1000	1.00		5.00
	Sn	235152	1000	1.00		5.00
	B	231910	1000	0.50		2.50
	Mo	233427	1000	0.50		2.50
	Ti	233840	1000	0.50		2.50
	Sr	230304	1000	0.50		2.50
	Si	235479	1000	2.00		10.00

Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
16% HNO3 5% HCl	NM 7/25/24	A	235979	234782	7/26/24	M36
2% HNO3 5% HCl	EC 7/26/24	B	235979	234782	7/27/24	M36
16% HNO3 5% HCl	NM 7/29/24	C	235979	234782	7/30/24	M36
10% HNO3 5% HCl	EC 7/31/24	D	238979	235981	8/1/24	M40
2% HNO3 5% HCl	NM 7/31/24	E	235979	235981	8/1/24	M40
10% HNO3 5% HCl	NM 8/2/24	F	235979	235981	8/3/24	M36
2% HNO3 5% HCl	NM 8/5/24	G	235979	235981	8/6/24	M36
10% HNO3 5% HCl	NM 8/6/24	H	235979	235981	8/7/24	M36
2% HNO3 5% HNO3	NM 8/7/24	I	235979	235981	8/8/24	M40
10% HNO3 5% HCl	NM 8/8/24	J	235979	235981	8/9/24	M40
10% HNO3 5% HCl	NM 8/9/24	K	235979	235981	8/10/24	M40
10% HNO3 5% HCl	NM 8/13/24	L	235979	235981	8/14/24	M40
2% HNO3 5% HCl	NM 8/14/24	M	235979	235981	8/15/24	M40
10% HNO3 5% HCl	NM 8/15/24	N	235979	235981	8/16/24	M36
10% HNO3 5% HCl	NM 8/19/24	O	235979	235981	8/20/24	M40
2% HNO3 5% HCl	NM 8/21/24	P	235979	235981	8/22/24	M36
10% HNO3 5% HCl	NM 8/21/24	Q	235979	235981	8/22/24	M40
		R				
		S				
		T				
		U				
		V				
		W				
		X				
		Y				
		Z				
		AA				
		BB				
		CC				
		DD				

ICP Calibration Standard #1

Metal	ALS Lot #	Conc. (ppm)	Vol (mls)	Final Vol (mls)	Final Conc. (ppm)
Al	233887	10000	0.01	1000	0.100
As	230302	1000	0.01		0.010
Ba	233717	1000	0.02		0.020
Be	230311 (1/10)	100	0.03		0.003
Cd	234567 (1/10)	100	0.05		0.005
Cu	230454	1000	0.01		0.010
Mn	233718	1000	0.01		0.010
Mo	233720	1000	0.025		0.025
Pb	233694 (1/10)	100	0.05		0.050
Sb	230313	1000	0.06		0.060
Tl	233695	1000	0.01		0.010

Standard is prepared every 6 months or as necessary

Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
2% HNO_3 5% HCl	NM 6/28/24	**A**	235024	234782	12/28/24	M39
10% HNO_3 5% HCl	NM 7/29/24	**B**	235979	234782	TS: 1/14/25	M37
		C				
		D				
		E				
		F				
		G				
		H				
		I				
		J				
		K				
		L				
		M				
		N				
		O				
		P				
		Q				
		R				
		S				
		T				
		U				
		V				
		W				
		X				
		Y				
		Z				

ICP Calibration Standard 6

Standard is prepared every 6 months or as necessary

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)
Cal Std 2	Ag	234476	100	5.00	500	1.00
	Cr		100			1.00
	Mn		150			1.50
	Ni		400			4.00
	Zn		200			2.00
Cal Std 3	Al	233055	2000	5.00		20.00
	Ba		2000			20.00
	Be		50			0.50
	Co		500			5.00
	Cu		250			2.50
	Fe		1000			10.00
	V		500			5.00
Cal Std 4	As	231798	100	10.00		2.00
	Cd		50			1.00
	Pb		50			1.00
	Se		50			1.00
	Tl		100			2.00
	Ca	230305	10000	2.50		50.00
	Mg	230307	10000	2.50		50.00
	K	233452	10000	2.50		50.00
	Na	230308	10000	2.50		50.00
	Sb	230313	1000	5.00		10.00
	Sn	234660	1000	5.00		10.00
	B	233693	1000	5.00		10.00
	Mo	233720	1000	2.50		5.00
	Ti	235397	1000	2.50		5.00
	Sr	230310	1000	2.50		5.00
	Si	234659	10000	~~25.00~~ 2.50 NM 7/29/24		50.00

Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
10% HNO3 5% HCl	NM 7/29/24	A	235979	234782	11/2/24	M38
		B				
		C				
		D				
		E				
		F				
		G				
		H				
		I				
		J				
		K				
		L				
		M				
		N				
		O				
		P				
		Q				
		R				
		S				
		T				
		U				
		V				
		W				
		X				
		Y				
		Z				

ICP HLCCV Standard

Standard is prepared every 6 months or as necessary

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)
Cal Std 2	Ag	234476	100	4.00	200	2.00
	Cr		100			Below
	Mn		150			Below
	Ni		400			8.00
	Zn		200			Below
Cal Std 3	Al	233055	2000	4.00		Below
	Ba		2000			40.00
	Be		50			1.00
	Co		500			10.00
	Cu		250			Below
	Fe		1000			Below
	V		500			10.00
Cal Std 4	As	231798	100	8.00		4.00
	Cd		50			2.00
	Pb		50			Below
	Se		50			Below
	Tl		100			4.00
	Ca	230305	10000	5.00		250.00
	K	233452	10000	2.00		100.00
	Mg	230307	10000	10.00		500.00
	Na	230308	10000	5.00		250.00
	Al	233887	10000	9.20		500.00
	Fe	230306	1000	1.60		100.00
	B	233693	1000	10.00		50.00
	Mo	233720	1000	2.00		10.00
	Ti	235397	1000	2.00		10.00
	Sr	230310	1000	2.00		10.00
	Cr	230312	1000	1.60		10.00
	Pb	233694	1000	1.60		10.00
	Se	230309	1000	1.60		10.00
	Mn	233718	1000	1.40		10.00
	Zn	233723	1000	1.20		10.00
	Cu	230454	1000	3.00		20.00
	Si	234659	10000	~~20.00~~ 2.00		100.00

Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
10% HNO3 5% HCl	NM 7/12/24	A	235979	234782	11/2/24	M38 M36
2% HNO3 5% HCl	NM 7/26/24	B	235979	234782	11/2/24	M38 M40
		C				
		D				
		E				
		F				
		G				
		H				
		I				
		J				
		K				
		L				
		M				
		N				
		O				
		P				
		Q				
		R				
		S				
		T				
		U				
		V				
		W				
		X				
		Y				
		Z				

ICP HLCCV3 (Standard is prepared every 6 months or as necessary)

/HLCCVB

Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)
CA	230305	10,000	~~2.000~~ 4.000	~~100~~ 200
CU	230454	1000	~~0.400~~ 0.800	
FE	230306	10,000	~~0.400~~ 0.800	
K	233452	10,000	~~1.000~~ 2.000	
TL	233695	1000	~~0.300~~ 0.600	
NA	230308	10,000	~~1.500~~ 3.000	
MG	230307	10,000	~~4.000~~ 8.000	

Final Conc. (ppm)	Matrix	Analyst / Date	Letter ID	Nitric Acid Lot #	HCL Lot #	Expiration Date	Pipet ID
200.00	2% HNO_3 5% HNO_3	MFM 4/24/24	A	233477	233283	10/24/24	M36 M38
4.00	10% HNO_3 5% HCl	NM 5/16/24	B	233477	233283	11/2/24	M40 M38
40.00			C				
100.00			D				
3.00			E				
150.00			F				
400.00			G				
			H				
			I				
			J				
			K				
			L				
			M				
			N				
			O				
			P				
			Q				
			R				
			S				
			T				
			U				

ICP Mixed SIC/ ICSA Standard

Standard is prepared every 6 months or as necessary

	Metal	ALS Lot #	Conc. (ppm)	Vol (mls)	Final Vol (mls)	Final Conc. (ppm)
Inter. A Soln	**Al**	236126	5000	50	500	500.0
	Ca	↓	5000			500.0
	Fe		2000			100.0
	Mg		5000			250.0

Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
10% HNO3 5% HCl	NM 7/12/24	**A**	235929 ~~235924~~ NM 7/12/24	234782	1/12/25	dispo
		B				
		C				
		D				
		E				
		F				
		G				
		H				
		I				
		J				
		K				
		L				
		M				
		N				
		O				
		P				
		Q				
		R				
		S				
		T				
		U				
		V				
		W				
		X				
		Y				
		Z				

ICP Internal Standard Solution

Standard is prepared every 6 months or as necessary

(Added In-line)

Metal	ALS Lot #	Conc. (ppm)	Vol (mls)	Final Vol (mls)	Final Conc. (ppm)
Y	233696	10000	2.00	2000	10.0
Cs	233726	10000	2		10.0

Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
2% HNO3/ 5% HCl	NM 6/11/24	A	235024	233783	12/11/24	M36
	NM 6/11/24	B	235024	233783	12/11/24	M36
	NM 6/25/24	C	235024	234782	12/25/24	M36
	NM 6/25/24	D	235024	234782	12/25/24	M36
	NM 7/16/24	E	235979	234782	1/16/25	M36
	NM 7/16/24	F	235979	234782	1/16/25	M36
	NM 8/6/24	G	235979	235981	2/6/25	M36
	NM 8/6/24	H	235979	235981	2/6/25	M36
		I				
		J				
		K				
		L				
		M				
		N				
		O				
		P				
		Q				
		R				
		S				
		T				
		U				
		V				
		W				
		X				
		Y				
		Z				

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	MIXED SIC CHECK
File Name	064SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\071224-MS7900.b
Acq Time	07/12/24 15:33:03
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	017CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.544	ppb	10.0	971.15	
Al	27	72	No Gas	322444.426	ppb	4.5	5612154514.77	>LDR
V	51	72	He	0.436	ppb	6.1	2732.49	
Cr	52	72	No Gas	1.521	ppb	5.3	73591.58	
Mn	55	72	No Gas	2.187	ppb	6.5	107919.86	
Co	59	72	He	1.801	ppb	2.1	20840.82	
Ni	60	72	No Gas	3.840	ppb	3.3	36625.17	
Cu	63	72	No Gas	1.557	ppb	5.7	37782.21	
Zn	66	72	No Gas	13.477	ppb	6.3	87873.52	
As	75	72	No Gas	0.337	ppb	187.4	1856.60	
Se	78	72	He	0.284	ppb	39.3	79.33	
Se	82	72	No Gas	1.412	ppb	13.9	636.20	
Mo	98	89	No Gas	0.609	ppb	8.2	11393.09	
Ag	107	89	No Gas	0.525	ppb	39.0	15625.66	
Cd	111	89	No Gas	0.040	ppb	41.4	1844.92	
Sb	123	89	No Gas	1.599	ppb	36.3	31605.47	
Ba	137	115	No Gas	1.096	ppb	5.8	9460.01	
Tl	203	115	No Gas	0.136	ppb	54.6	1867.95	
Pb	208	115	No Gas	3.825	ppb	3.1	158862.77	
Th	232	115	No Gas	5.755	ppb	74.8	203228.61	
U	238	115	No Gas	0.101	ppb	69.9	3412.86	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	4808164.11	4.6	4532583.29	106.08	60	125	
Sc	45	He	234013.32	1.7	213409.89	109.65	60	125	
Ge	72	No Gas	3656053.33	4.9	3361580.56	108.76	60	125	
Ge	72	He	510426.87	2.0	432580.99	118	60	125	
Y	89	No Gas	5149165.63	1.0	4860989.67	105.93	60	125	
Y	89	He	747082.99	2.6	669269.97	111.63	60	125	
Rh	103	No Gas	4007497.76	3.8	4190673.03	95.63	60	125	
Rh	103	He	1858212.01	2.7	1872215.83	99.25	60	125	
In	115	No Gas	4446155.24	1.0	4430208.29	100.36	60	125	
Lu	175	No Gas	20700.78	3.8	17529.44	118.09	60	125	

Sample Dilutions 6010C/6010D/200.7

Final Volume: 6-8mL

Analyst: NM
strument: ICP7

Date 8/21/24
Analysis 6010D

Common Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor
1/2	2%HNO3/ 5%HCL	3	3	**1/2**												
1/3	2%HNO3/ 5%HCL	2	4	**1/3**												
1/4	2%HNO3/ 5%HCL	2	6	**1/4**												
1/5	2%HNO3/ 5%HCL	1.2	4.8	**1/5**												
1/10	2%HNO3/ 5%HCL	0.6	5.4	**1/10**												
1/10	2%HNO3/ 5%HCL	0.8	7.2	**1/10**												
1/20	2%HNO3/ 5%HCL	0.3	5.7	**1/20**												
1/20	2%HNO3/ 5%HCL	0.4	7.6	**1/20**												
1/50	2%HNO3/ 5%HCL	1	4	**1/5**	0.6	5.4	**1/50**									
1/100	2%HNO3/ 5%HCL	0.6	5.4	**1/10**	0.6	5.4	**1/100**									
1/200	2%HNO3/ 5%HCL	1	1	**1/2**	0.6	5.4	**1/20**	0.6	5.4	**1/200**						
1/500	2%HNO3/ 5%HCL	1	4	**1/5**	0.6	5.4	**1/50**	0.6	5.4	**1/500**						
1/1000	2%HNO3/ 5%HCL	0.6	5.4	**1/10**	0.6	5.4	**1/100**	0.6	5.4	**1/1000**						
1/2000	2%HNO3/ 5%HCL	1	1	**1/2**	0.6	5.4	**1/20**	0.6	5.4	**1/200**	0.6	5.4	**1/2000**			
1/5000	2%HNO3/ 5%HCL	1	4	**1/5**	0.6	5.4	**1/50**	0.6	5.4	**1/500**	0.6	5.4	**1/5000**			
1/10000	2%HNO3/ 5%HCL	0.6	5.4	**1/10**	0.6	5.4	**1/100**	0.6	5.4	**1/1000**	0.6	5.4	**1/10000**			
1/20000	2%HNO3/ 5%HCL	1	1	**1/2**	0.6	5.4	**1/20**	0.6	5.4	**1/200**	0.6	5.4	**1/2000**	0.6	5.4	**1/20000**

Special Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor

Metals Data Cover Sheet

Run Date: 8/27/2024

Data File: 082724-MS7900

Primary Reviewer: N. Mansen

Secondary Reviewer: C.Kutzer

LIMS Runs:	LIMS Preps:	
852204	443503,443501	CCV3
852205	443640	CCV5
852207	443667	CCV3
852208	443643	CCV4
852209	443641	CCV4

Comments:
N/A

Agilent 7900 (R-ICP-MS-2) Run Log

Serial Number: JP16491642

Analyst: NM Date: 8/27/24

Data File: 082724-MS7900 Method: ~~6020A~~ / 200.8 6020B

	Prep Date	Lot #
Instrument Tune Solution	5/13/24	M8740116A
Mass Tune Solution	↓	↓
Internal Standard	8/23/24	M8740112B
ICSA ISIC	8/27/24	M8740091Y
ICSAB	—	—
HNO3	NA	235979
HLCCV2	8/6/24	M8740051I

	Prep Date	Lot #
Cal Srt 1 ~~/CRDL~~	8/9/24	M8740006A
Cal Std 2	8/9/24	M8740014A
Cal Std 3	8/9/24	M8740024A
Cal Std 4 ~~/HLCCV1~~	8/9/24	M8740034A
ICV / CCV	8/27/24	M8740074M
HCL	NA	235981
HLCCV3	8/6/24	M8740061I
Cal Std 5	8/9/24	M8740044A

Pipet Used	DOD Pipet Verification
M37, M36	—

3101	PBW-443503	3202	PBW-443640	3409	PBW-443667	4102	PBW-443643	4308	PBW-443641
3102	LCSW-443503	3203	LCSW-443640	3410	LCSW-443667	4103	LCSW-443643	4309	LCSW-443641
3103	R2407554-002 2X	3204	R2407792-003	3411	R2407909-001	4104	R2407734-002	4310	R2407734-001
3104	R2407554-004 2X	3205	R2407792-008	3412	R2407950-001 5X	4105	R2407734-004	4311	R2407734-003
3105	R2407729-002	3206	R2407792-011	3501	R2407958-001	4106	R2407734-006	4312	R2407734-005
3106	R2407685-006 5X	3207	R2407794-001	3502	R2407958-002	4107	R2407734-008	4401	R2407734-007
3107	R2407685-006L 25X	3208	R2407794-003 ~~5X~~ ~~10X~~	3503	R2408031-001	4108	R2407734-008S	4402	R2407734-009
1201	CCV	3209	R2407794-004 ~~5X~~ ~~10X~~	3504	R2408031-009	4109	R2407734-008SD	4403	R2407734-011
1202	CCB	3210	R2407794-005	3505	R2408042-002	4110	R2407734-008A	4404	R2407734-013
3108	PBW-443501	3211	R2407794-006 5X	3506	R2408047-001	4111	R2407734-008L 5X	4405	R2407734-015
3109	LCSW-443501	1201	CCV	1201	CCV	1203	CCV	1203	CCV
3110	R2407454-004	1202	CCB	1202	CCB	1204	CCB	1204	CCB
3111	R2407455-002	3212	R2407808-001	3507	R2408047-002	4112	R2407734-010	4406	R2407734-017
3112	R2407455-004 3X	3301	R2407808-001S	3508	R2408047-002S	4201	R2407734-012	4407	R2407734-017S
3201	R2407455-004L 15X	3302	R2407808-001SD	3509	R2408047-002SD	4202	R2407734-014	4408	R2407734-017SD
		3303	R2407808-001A	3510	R2408047-002A	4203	R2407734-016	4409	R2407734-017A
		3304	R2407808-001L 5X	3511	R2408047-002L 5X	4204	R2407734-018	4410	R2407734-017L 5X
		3305	R2407808-002	3512	R2408031-001 10X	4205	R2407734-020	4411	R2407734-019
		3306	R2407808-003	4101	R2408031-009 10X	4206	R2407805-002	4412	R2407805-001
		3307	R2407879-005			4207	R2407805-004	4501	R2407805-003
		3308	R2407879-006			4208	R2407805-006	4502	R2407805-005
		3309	R2407879-011			4209	R2407805-008	4503	R2407805-007
		1201	CCV			1203	CCV	1203	CCV
		1202	CCB			1204	CCB	1204	CCB
		3310	R2407879-014			4210	R2407805-010	4504	R2407805-009
		3311	R2407879-023			4211	R2407805-010S	4505	R2407805-009S
		3312	R2407879-024			4212	R2407805-010SD	4506	R2407805-009SD
		3401	R2407879-024S			4301	R2407805-010A	4507	R2407805-009A
		3402	R2407879-024SD			4302	R2407805-010L 5X	4508	R2407805-009L 5X
		3403	R2407879-024A			4303	R2407807-002	4509	R2407807-001
		3404	R2407879-024L 5X			4304	R2407807-004	4510	R2407807-003
		1201	CCV			4305	R2407807-006	4511	R2407807-005
		1202	CCB			4306	R2407807-008	4512	R2407807-007
		3405	R2407948-001 10X			4307	R2407807-010		
		3406	R2407949-001						
		3407	R2407961-001						
		3408	R2407949-001 5X						

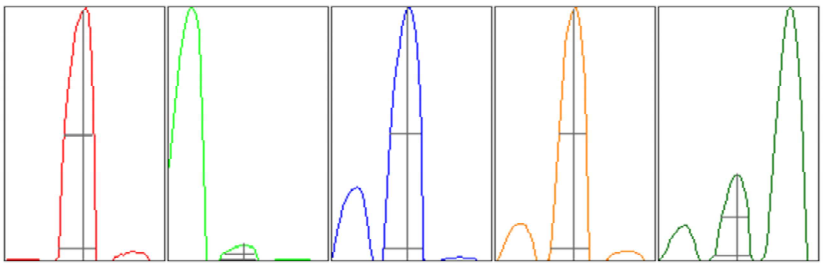
NM 8/27/24

US EPA Tune Check Report

Operator Name	ALRCE Metals05
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq. Date-Time	08/27/24 11:23:12
Report Comment	---
Instrument Name	G8403A JP16491642

[No Gas]

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	717.38	9.00	8.90 - 9.10	
24	4088.84	23.95	23.90 - 24.10	
59	7440.54	58.95	58.90 - 59.10	
115	19147.91	115.00	114.90 - 115.10	
208	7281.65	208.00	207.90 - 208.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.55	0.689	0.900	
24	0.57	0.693	0.900	
59	0.57	0.732	0.900	
115	0.52	0.723	0.900	
208	0.50	0.705	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	157.399999999999
Y Axis	Linear

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.07 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.6 V	Deflect	15.0 V
Extract 2	-250.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-80 V	Cell Exit	-50 V		

Cell Parameters

US EPA Tune Check Report

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	128	Axis Gain	0.9997	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	-0.07		

Hardware Settings

Torch

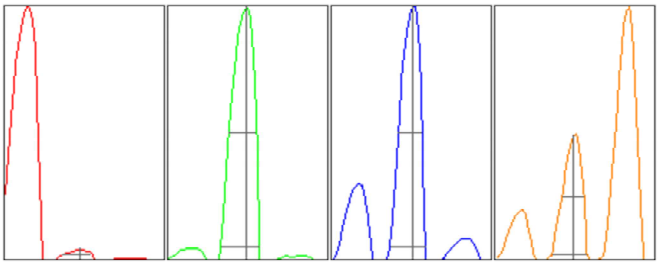
Torch H	0.3 mm	Torch V	-0.2 mm		

EM

Discriminator	5.0 mV	Analog HV	2111 V	Pulse HV	1536 V

[He]

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
24	73.35	23.95	23.90 - 24.10	
59	1584.69	59.00	58.90 - 59.10	
115	2707.93	115.05	114.90 - 115.10	
208	3528.62	208.00	207.90 - 208.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
24	0.53	0.688	0.900	
59	0.52	0.721	0.900	
115	0.45	0.675	0.900	
208	0.41	0.646	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	125.92
Y Axis	Linear

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.07 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.6 V	Deflect	2.0 V

Extract 2	-250.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-80 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.3 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	128	Axis Gain	0.9997	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.07		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	-0.2 mm		

EM

Discriminator	5.0 mV	Analog HV	2111 V	Pulse HV	1536 V

7900 ICP-MS 200.8/6020A
Calibration Blank Report

Sample Name	Blank
File Name	021CALB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 12:56:14
Sample Type	CalBlk
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
Operator	NM 8/27/24

QC Analyte Table

Name	Mass	ISTD	Tune	CPS	RSD
Be	9	45	No Gas	2.22	86.6
Al	27	72	No Gas	22515.25	2.3
V	51	72	He	292.23	21.5
Cr	52	72	No Gas	33412.34	0.8
Mn	55	72	No Gas	3946.11	1.7
Co	59	72	He	60.00	9.6
Ni	60	72	No Gas	441.12	5.7
Ni	60	72	He	107.78	11.7
Cu	63	72	No Gas	2327.97	2.8
Cu	63	72	He	686.69	3.9
Zn	66	72	No Gas	2419.10	2.8
Se	78	72	He	61.33	5.7
Se	82	72	No Gas	65.53	28.0
Mo	98	89	No Gas	94.65	25.5
Ag	107	89	No Gas	264.45	9.3
Cd	111	89	No Gas	4611.34	1.9
Sb	123	89	No Gas	1300.06	3.0
Ba	137	115	No Gas	211.11	0.9
Tl	203	115	No Gas	137.78	19.7
Pb	208	115	No Gas	782.23	2.2
U	238	115	No Gas	521.12	9.3

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Sc	45	No Gas	8181334.67	2.6
Ge	72	No Gas	7270733.04	1.7
Ge	72	He	958105.21	1.1
Y	89	No Gas	10023893.77	1.5
Rh	103	No Gas	9143531.58	2.8
In	115	No Gas	9650137.39	1.1

7900 ICP-MS 200.8/6020A
Calibration Standard Report

Sample Name	1
File Name	022CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 12:58:55
Sample Type	CalStd
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	CPS	RSD	Conc.
Be	9	45	No Gas	4058.35	2.0	0.748
Al	27	72	No Gas	248637.16	0.9	5.307
V	51	72	He	11531.33	1.1	1.168
Cr	52	72	No Gas	112126.41	2.2	1.219
Mn	55	72	No Gas	95839.18	1.4	1.072
Co	59	72	He	21120.12	0.5	0.937
Ni	60	72	No Gas	19247.47	1.5	1.036
Ni	60	72	He	5834.55	2.9	0.926
Cu	63	72	No Gas	47678.89	1.5	1.079
Cu	63	72	He	16286.03	1.2	0.901
Zn	66	72	No Gas	58181.28	1.0	4.688
As	75	72	No Gas	12825.11	16.4	1.094
Se	78	72	He	188.67	5.1	1.184
Se	82	72	No Gas	807.51	6.2	0.949
Mo	98	89	No Gas	33455.52	0.9	0.984
Ag	107	89	No Gas	51578.29	0.9	0.909
Cd	111	89	No Gas	16008.41	0.3	0.906
Sb	123	89	No Gas	36758.25	1.9	0.951
Ba	137	115	No Gas	19034.48	0.2	1.096
Tl	203	115	No Gas	34086.80	1.5	0.817
Pb	208	115	No Gas	109107.87	0.6	0.792
U	238	115	No Gas	96809.03	0.5	0.710

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8367837.72	1.2	8181334.67	102.28	60	125	
Ge	72	No Gas	7279329.43	1.2	7270733.04	100.12	60	125	
Ge	72	He	945785.90	0.9	958105.21	98.71	60	125	
Y	89	No Gas	10387895.42	2.4	10023893.77	103.63	60	125	
Rh	103	No Gas	8985583.53	1.7	9143531.58	98.27	60	125	
In	115	No Gas	9552933.51	2.2	9650137.39	98.99	60	125	

7900 ICP-MS 200.8/6020A
Calibration Standard Report

Sample Name	10
File Name	023CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:01:08
Sample Type	CalStd
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	CPS	RSD	Conc.
Be	9	45	No Gas	41528.73	2.5	7.437
Al	27	72	No Gas	456449.25	3.4	10.343
V	51	72	He	102575.68	0.6	10.497
Cr	52	72	No Gas	683651.76	1.6	10.232
Mn	55	72	No Gas	892893.96	1.0	10.526
Co	59	72	He	204634.73	1.0	9.004
Ni	60	72	No Gas	183999.93	0.8	10.257
Ni	60	72	He	55881.58	0.7	8.925
Cu	63	72	No Gas	441377.15	2.1	10.593
Cu	63	72	He	149621.26	0.8	8.512
Zn	66	72	No Gas	115486.98	0.7	9.650
As	75	72	No Gas	122366.75	1.1	10.060
Se	78	72	He	1329.06	1.6	11.561
Se	82	72	No Gas	7704.59	1.0	9.911
Mo	98	89	No Gas	332465.35	1.9	10.053
Ag	107	89	No Gas	507281.51	1.9	9.218
Cd	111	89	No Gas	116623.45	1.7	9.264
Sb	123	89	No Gas	347691.39	0.6	9.534
Ba	137	115	No Gas	186039.83	1.6	10.784
Tl	203	115	No Gas	337111.35	1.7	8.095
Pb	208	115	No Gas	1078939.56	0.4	7.872
U	238	115	No Gas	953999.96	1.0	7.033

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8631960.77	0.3	8181334.67	105.51	60	125	
Ge	72	No Gas	7174448.60	1.7	7270733.04	98.68	60	125	
Ge	72	He	956751.28	0.7	958105.21	99.86	60	125	
Y	89	No Gas	10137998.21	2.0	10023893.77	101.14	60	125	
Rh	103	No Gas	8991946.59	1.7	9143531.58	98.34	60	125	
In	115	No Gas	9582912.12	2.9	9650137.39	99.3	60	125	

7900 ICP-MS 200.8/6020A
Calibration Standard Report

Sample Name	20
File Name	024CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:03:21
Sample Type	CalStd
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	CPS	RSD	Conc.
Be	9	45	No Gas	79760.71	1.1	14.785
Al	27	72	No Gas	835061.50	1.3	19.654
V	51	72	He	202776.63	3.1	20.718
Cr	52	72	No Gas	1536468.97	0.6	23.965
Mn	55	72	No Gas	1768743.16	1.4	21.139
Co	59	72	He	411407.53	0.5	18.126
Ni	60	72	No Gas	410014.99	1.8	23.142
Ni	60	72	He	124263.83	1.1	19.919
Cu	63	72	No Gas	872828.87	1.0	21.245
Cu	63	72	He	297380.06	2.1	17.000
Zn	66	72	No Gas	225262.81	1.1	19.283
As	75	72	No Gas	243102.25	1.4	20.173
Se	78	72	He	2603.91	1.6	23.025
Se	82	72	No Gas	15389.65	0.3	20.124
Mo	98	89	No Gas	657069.91	1.0	19.399
Ag	107	89	No Gas	1024232.11	0.3	18.221
Cd	111	89	No Gas	225703.12	0.7	17.903
Sb	123	89	No Gas	685393.60	1.6	18.438
Ba	137	115	No Gas	367810.38	1.9	21.298
Tl	203	115	No Gas	667731.93	1.3	16.155
Pb	208	115	No Gas	2143246.60	1.2	15.761
U	238	115	No Gas	1844970.90	1.4	13.745

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8405729.39	0.3	8181334.67	102.74	60	125	
Ge	72	No Gas	7084838.88	0.4	7270733.04	97.44	60	125	
Ge	72	He	958561.07	1.2	958105.21	100.05	60	125	
Y	89	No Gas	10398352.37	1.7	10023893.77	103.74	60	125	
Rh	103	No Gas	9052164.64	1.3	9143531.58	99	60	125	
In	115	No Gas	9583687.12	2.7	9650137.39	99.31	60	125	

7900 ICP-MS 200.8/6020A
Calibration Standard Report

Sample Name	50
File Name	025CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:05:30
Sample Type	CalStd
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	CPS	RSD	Conc.
Be	9	45	No Gas	203658.21	1.0	39.252
Al	27	72	No Gas	2117117.70	6.3	49.227
V	51	72	He	513904.47	1.7	51.984
Cr	52	72	No Gas	3075129.04	5.2	47.572
Mn	55	72	No Gas	4231274.97	1.4	49.198
Co	59	72	He	1029394.23	0.9	46.102
Ni	60	72	No Gas	903038.61	0.8	49.254
Ni	60	72	He	278550.63	1.1	45.541
Cu	63	72	No Gas	2182776.37	0.7	51.251
Cu	63	72	He	736431.52	1.8	43.372
Zn	66	72	No Gas	559611.21	1.1	47.313
As	75	72	No Gas	612454.59	0.6	49.307
Se	78	72	He	6440.47	0.6	55.908
Se	82	72	No Gas	38602.52	0.4	49.165
Mo	98	89	No Gas	1622550.10	2.5	48.684
Ag	107	89	No Gas	2534028.23	3.1	46.319
Cd	111	89	No Gas	567966.63	1.1	46.951
Sb	123	89	No Gas	1698289.41	0.5	47.092
Ba	137	115	No Gas	925061.91	1.0	53.520
Tl	203	115	No Gas	1670951.74	0.7	42.494
Pb	208	115	No Gas	5337279.68	0.8	41.555
U	238	115	No Gas	4618101.62	1.0	37.100

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8526560.77	4.3	8181334.67	104.22	60	125	
Ge	72	No Gas	7320636.65	1.6	7270733.04	100.69	60	125	
Ge	72	He	960851.70	1.2	958105.21	100.29	60	125	
Y	89	No Gas	10306177.93	2.1	10023893.77	102.82	60	125	
Rh	103	No Gas	9115795.47	1.5	9143531.58	99.7	60	125	
In	115	No Gas	9477799.35	2.5	9650137.39	98.21	60	125	

7900 ICP-MS 200.8/6020A
Calibration Standard Report

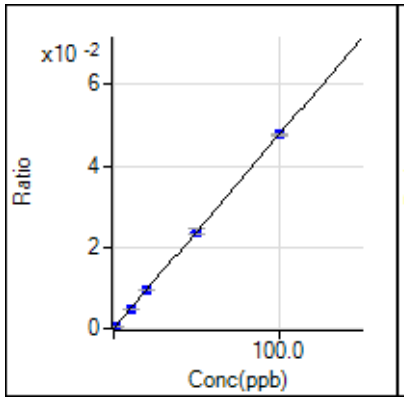
Sample Name	100
File Name	026CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:07:29
Sample Type	CalStd
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

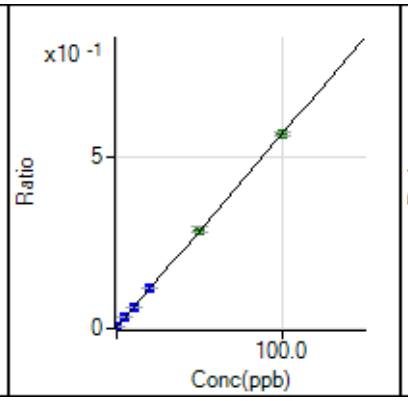
Name	Mass	ISTD	Tune	CPS	RSD	Conc.
Be	9	45	No Gas	408647.50	0.8	99.970
Al	27	72	No Gas	4100885.95	4.0	99.566
V	51	72	He	1026479.09	1.0	99.728
Cr	52	72	No Gas	6302726.14	1.0	100.057
Mn	55	72	No Gas	8599583.27	1.7	100.347
Co	59	72	He	2037309.57	1.2	99.467
Ni	60	72	No Gas	1795928.12	2.8	99.579
Ni	60	72	He	559484.79	0.4	99.448
Cu	63	72	No Gas	4255458.16	3.9	99.572
Cu	63	72	He	1516926.99	0.4	100.357
Zn	66	72	No Gas	1138893.98	2.0	100.584
As	75	72	No Gas	1232945.24	1.8	100.291
Se	78	72	He	12764.11	1.5	99.611
Se	82	72	No Gas	77487.82	1.3	100.270
Mo	98	89	No Gas	3288157.90	4.0	100.466
Ag	107	89	No Gas	5073918.00	3.9	100.218
Cd	111	89	No Gas	1129895.50	0.4	100.266
Sb	123	89	No Gas	3321545.63	1.7	99.679
Ba	137	115	No Gas	1841958.54	0.5	99.991
Tl	203	115	No Gas	3256710.15	2.1	99.466
Pb	208	115	No Gas	10469790.35	1.1	99.605
U	238	115	No Gas	8967188.53	0.7	99.364

QC ISTD Table

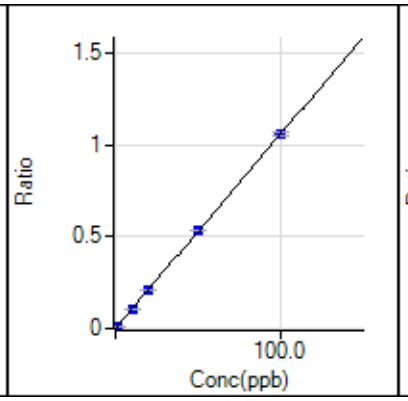
Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8560906.05	1.1	8181334.67	104.64	60	125	
Ge	72	No Gas	7241101.10	2.2	7270733.04	99.59	60	125	
Ge	72	He	972921.07	1.1	958105.21	101.55	60	125	
Y	89	No Gas	10209574.04	0.4	10023893.77	101.85	60	125	
Rh	103	No Gas	9078899.92	1.5	9143531.58	99.29	60	125	
In	115	No Gas	9462435.74	0.7	9650137.39	98.05	60	125	



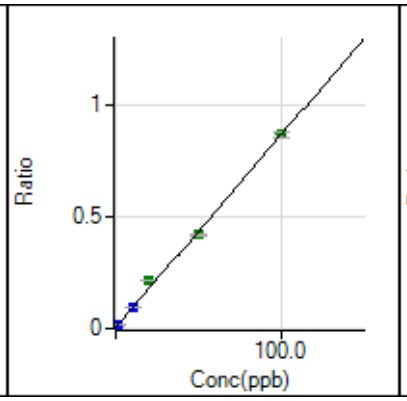
9 Be [No Gas] / ISTD: 45 Sc
y = 4.775E-4 x + 2.673E-7
R 1.0000
DL 0.001455
BEC 0.0005599



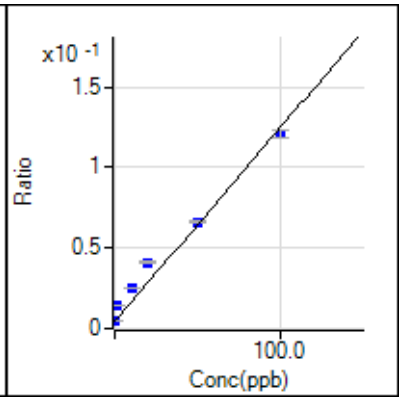
27 Al [No Gas] / ISTD: 72 Ge
y = 5.656E-3 x + 3.097E-3
R 1.0000
DL 0.02791
BEC 0.5475



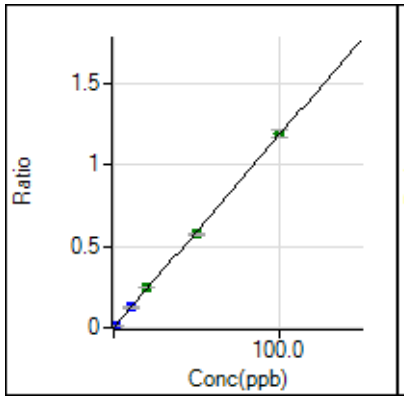
51 V [He] / ISTD: 72 Ge
y = 1.058E-2 x + 3.046E-4
R 1.0000
DL 0.01789
BEC 0.0288



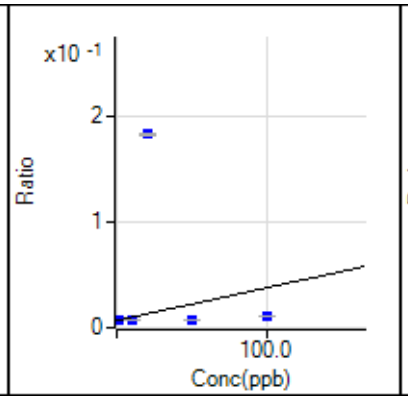
52 Cr [No Gas] / ISTD: 72 Ge
y = 8.657E-3 x + 4.597E-3
R 0.9985
DL 0.03672
BEC 0.531



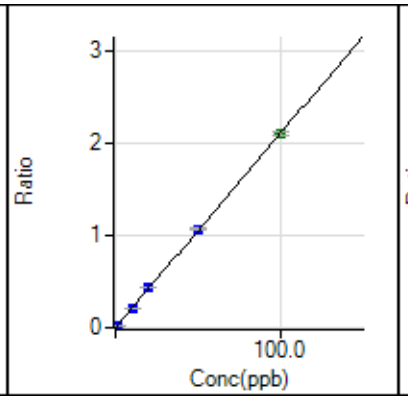
53 (Cr) [No Gas] / ISTD: 72 Ge
y = 1.206E-3 x + 4.260E-3
R 0.9935
DL 0.1394
BEC 3.532



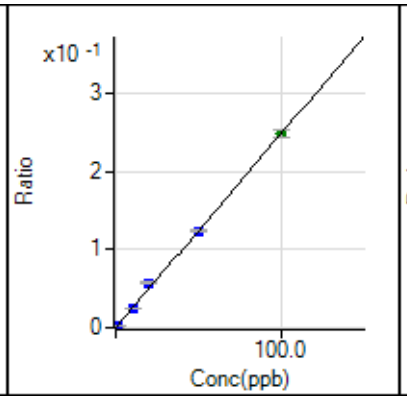
55 Mn [No Gas] / ISTD: 72 Ge
y = 1.184E-2 x + 5.428E-4
R 0.9998
DL 0.002478
BEC 0.04586



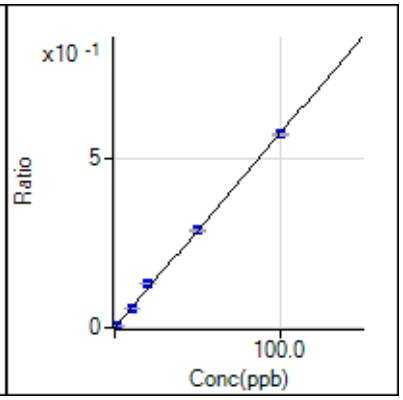
56 Fe [He] / ISTD: 72 Ge
y = 3.104E-4 x + 6.826E-3
R -0.1082
DL 5.308
BEC 21.99



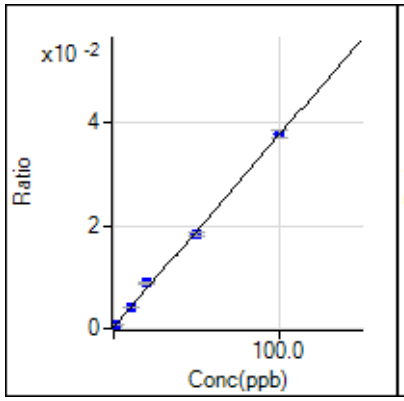
59 Co [He] / ISTD: 72 Ge
y = 2.106E-2 x + 6.267E-5
R 0.9999
DL 0.0009394
BEC 0.002976



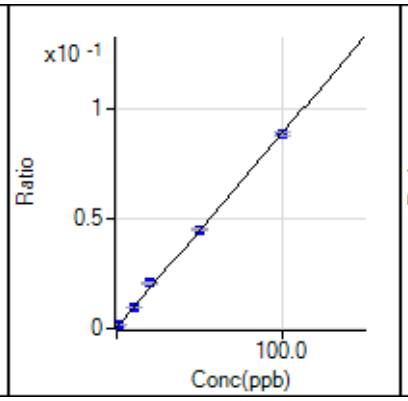
60 Ni [No Gas] / ISTD: 72 Ge
y = 2.491E-3 x + 6.068E-5
R 0.9994
DL 0.004294
BEC 0.02436



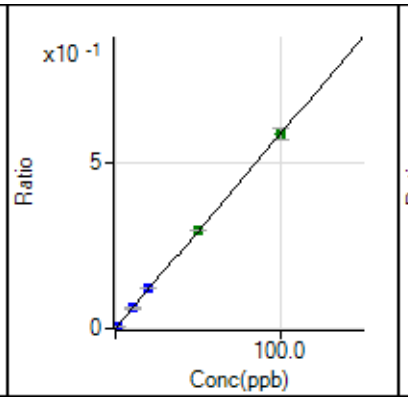
60 Ni [He] / ISTD: 72 Ge
y = 5.782E-3 x + 1.124E-4
R 0.9997
DL 0.006456
BEC 0.01945



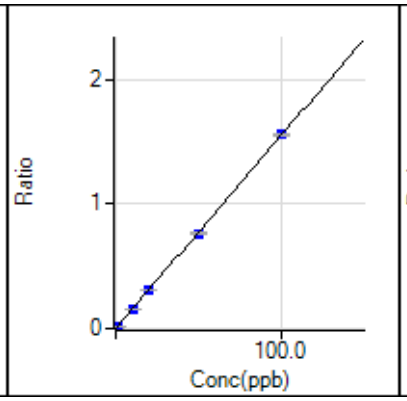
62 (Ni) [No Gas] / ISTD: 72 Ge
y = 3.742E-4 x + 2.576E-4
R 0.9993
DL 0.03646
BEC 0.6884



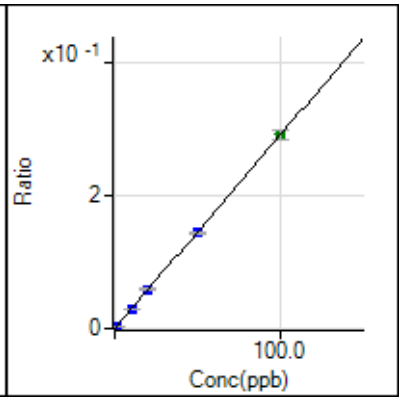
62 (Ni) [He] / ISTD: 72 Ge
y = 8.818E-4 x + 4.568E-4
R 0.9995
DL 0.07885
BEC 0.518



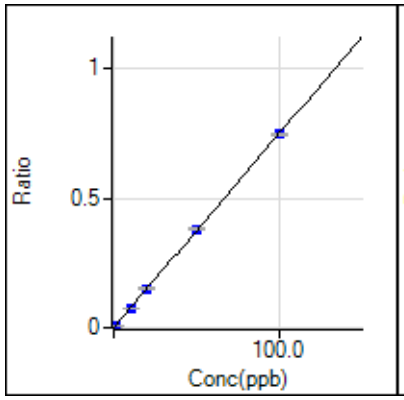
63 Cu [No Gas] / ISTD: 72 Ge
y = 5.904E-3 x + 3.203E-4
R 1.0000
DL 0.005747
BEC 0.05425



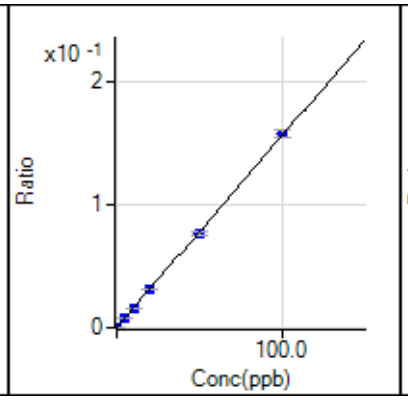
63 Cu [He] / ISTD: 72 Ge
y = 1.553E-2 x + 7.169E-4
R 1.0000
DL 0.006362
BEC 0.04616



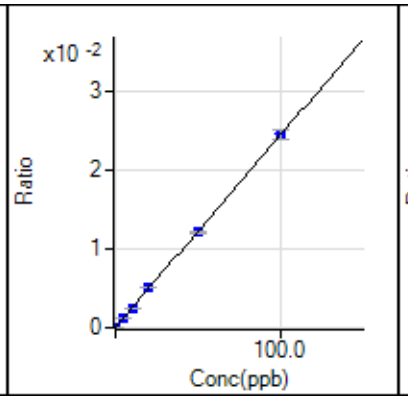
65 (Cu) [No Gas] / ISTD: 72 Ge
y = 2.907E-3 x + 1.600E-4
R 1.0000
DL 0.003125
BEC 0.05505



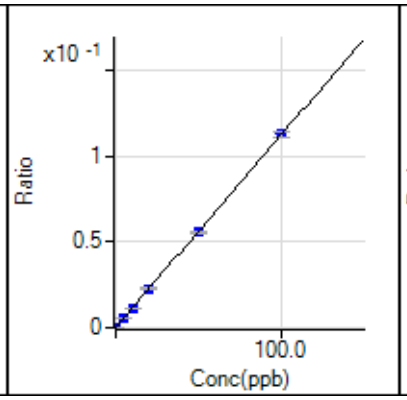
65 (Cu) [He] / ISTD: 72 Ge
y = 7.493E-3 x + 3.120E-4
R 1.0000
DL 0.01281
BEC 0.04165



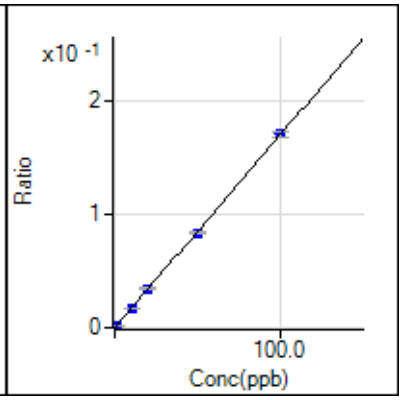
66 Zn [No Gas] / ISTD: 72 Ge
y = 1.561E-3 x + 3.329E-4
R 0.9999
DL 0.02851
BEC 0.2132



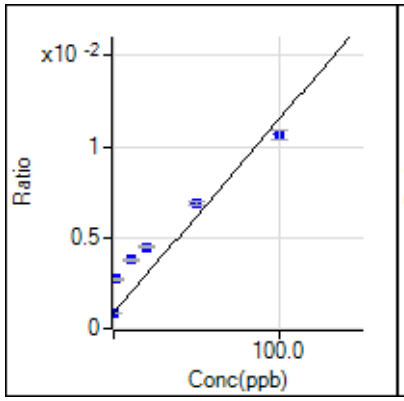
67 (Zn) [No Gas] / ISTD: 72 Ge
y = 2.444E-4 x + 5.774E-5
R 0.9999
DL 0.08855
BEC 0.2362



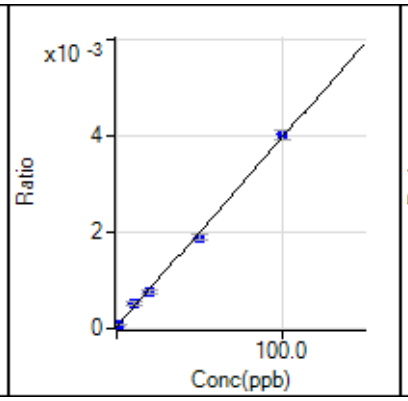
68 (Zn) [No Gas] / ISTD: 72 Ge
y = 1.122E-3 x + 2.547E-4
R 1.0000
DL 0.03793
BEC 0.227



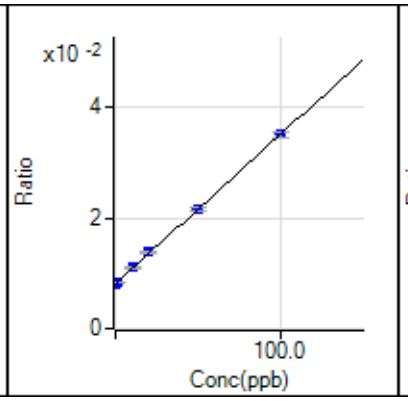
75 As [No Gas] / ISTD: 72 Ge
y = 1.700E-3 x - 1.060E-4
R 1.0000
DL 0.2186
BEC -0.06238



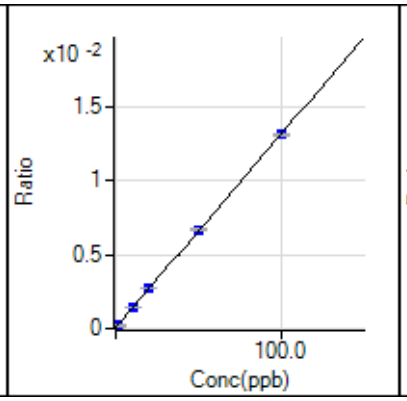
77 (Se) [No Gas] / ISTD: 72 Ge
y = 1.066E-4 x + 8.479E-4
R 0.9750
DL 1.237
BEC 7.95



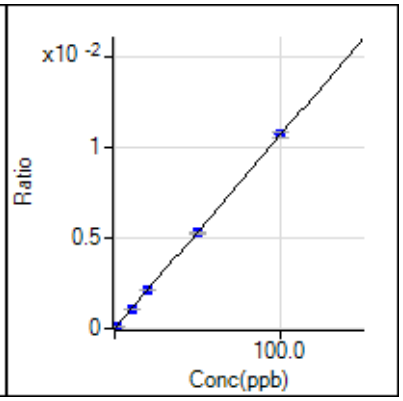
77 (Se) [He] / ISTD: 72 Ge
y = 3.930E-5 x + 3.822E-5
R 0.9988
DL 1.2
BEC 0.9725



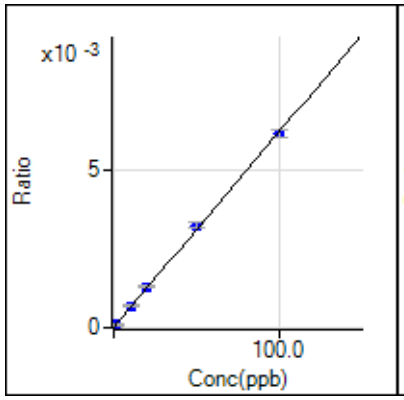
78 (Se) [No Gas] / ISTD: 72 Ge
y = 2.701E-4 x + 8.091E-3
R 0.9999
DL 1.53
BEC 29.95



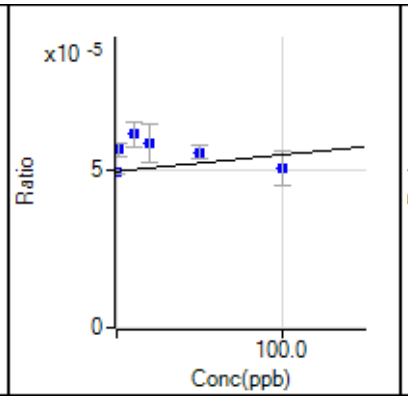
78 Se [He] / ISTD: 72 Ge
y = 1.311E-4 x + 6.401E-5
R 1.0000
DL 0.08104
BEC 0.4884



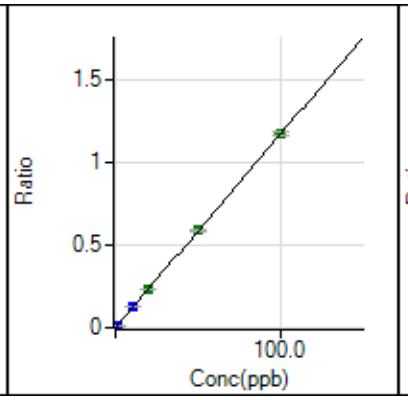
82 Se [No Gas] / ISTD: 72 Ge
y = 1.067E-4 x + 8.987E-6
R 1.0000
DL 0.06634
BEC 0.08424



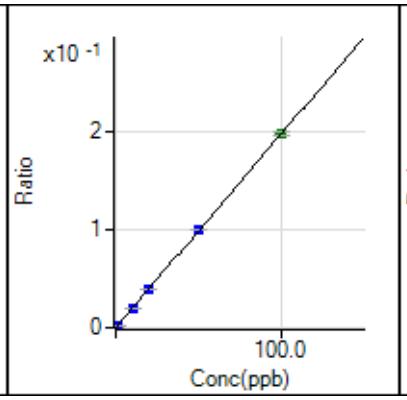
82 (Se) [He] / ISTD: 72 Ge
y = 6.209E-5 x + 1.405E-5
R 0.9996
DL 1.176
BEC 0.2263



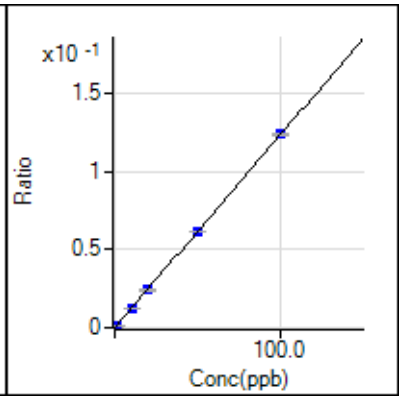
83 [As] [No Gas] / ISTD: 72 Ge
y = 5.239E-8 x + 4.952E-5
R -0.3951
DL 68.12
BEC 945.1



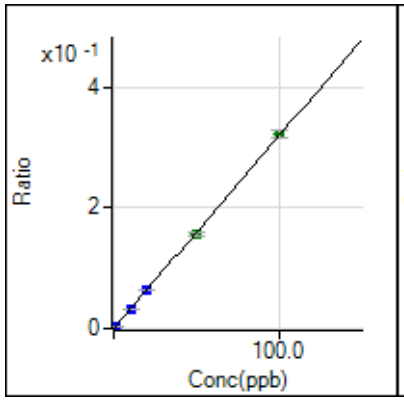
88 Sr [No Gas] / ISTD: 89 Y
y = 1.173E-2 x + 6.620E-5
R 1.0000
DL 0.0008616
BEC 0.005644



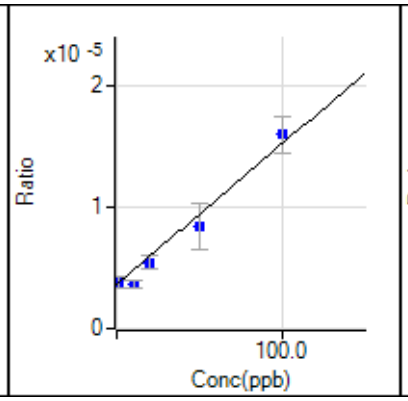
95 (Mo) [No Gas] / ISTD: 89 Y
y = 1.971E-3 x + 5.219E-6
R 1.0000
DL 0.002009
BEC 0.002648



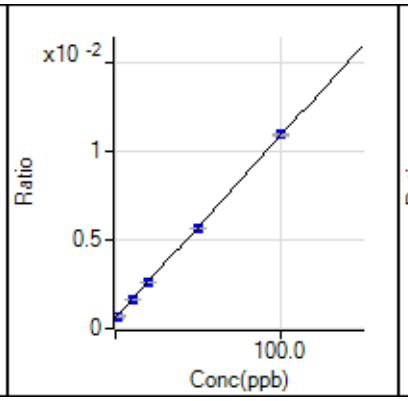
97 (Mo) [No Gas] / ISTD: 89 Y
y = 1.234E-3 x + 7.311E-6
R 1.0000
DL 0.002786
BEC 0.005923



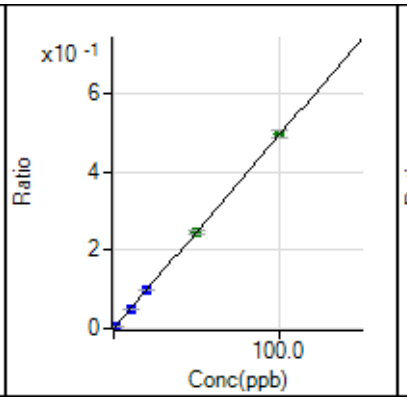
98 Mo [No Gas] / ISTD: 89 Y
y = 3.206E-3 x + 9.459E-6
R 0.9999
DL 0.00236
BEC 0.002951



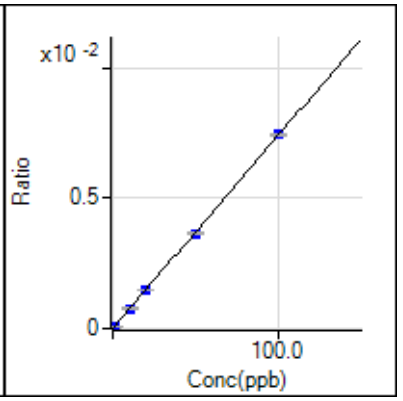
99 [Mo] [No Gas] / ISTD: 89 Y
y = 1.161E-7 x + 3.654E-6
R 0.9907
DL 13.98
BEC 31.48



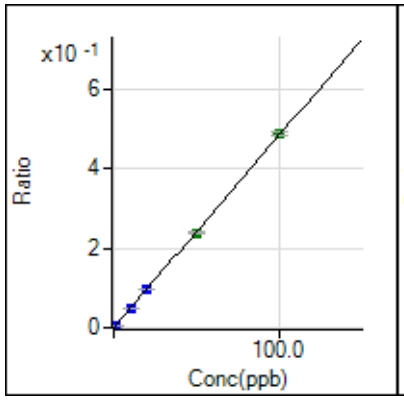
106 (Cd) [No Gas] / ISTD: 89 Y
y = 1.029E-4 x + 6.052E-4
R 0.9999
DL 0.5659
BEC 5.884



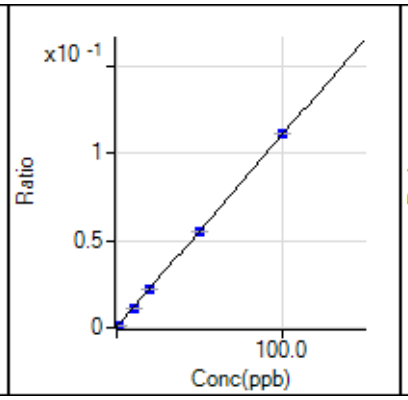
107 Ag [No Gas] / ISTD: 89 Y
y = 4.959E-3 x + 2.637E-5
R 1.0000
DL 0.001372
BEC 0.005318



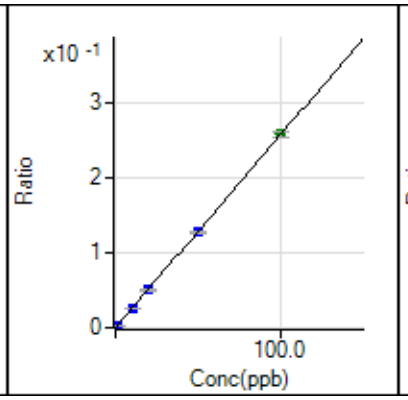
108 (Cd) [No Gas] / ISTD: 89 Y
y = 7.425E-5 x + 4.660E-6
R 0.9999
DL 0.08929
BEC 0.06276



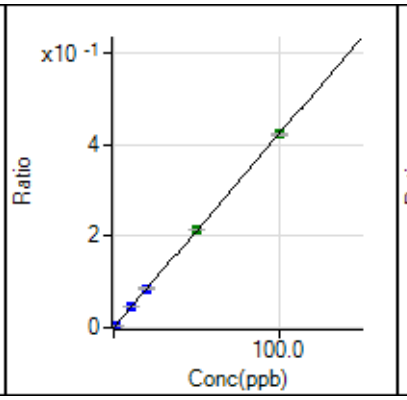
109 (Ag) [No Gas] / ISTD: 89 Y
y = 4.846E-3 x + 2.039E-5
R 0.9999
DL 0.002704
BEC 0.004207



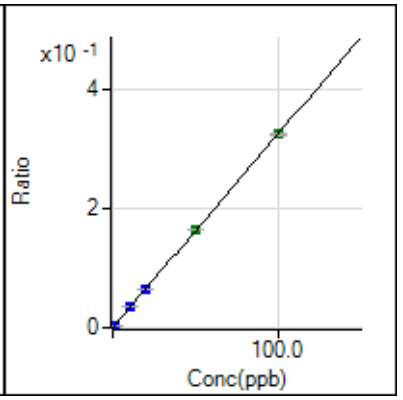
111 Cd [No Gas] / ISTD: 89 Y
y = 1.099E-3 x + 4.602E-4
R 1.0000
DL 0.0419
BEC 0.4187



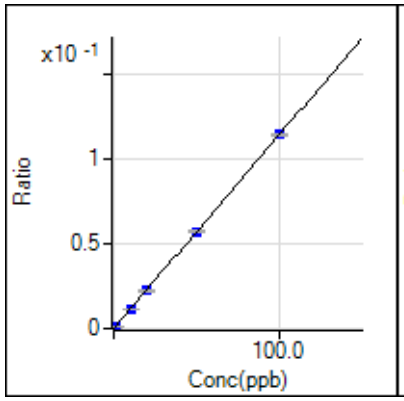
114 (Cd) [No Gas] / ISTD: 89 Y
y = 2.582E-3 x + 8.981E-6
R 1.0000
DL 0.001419
BEC 0.003479



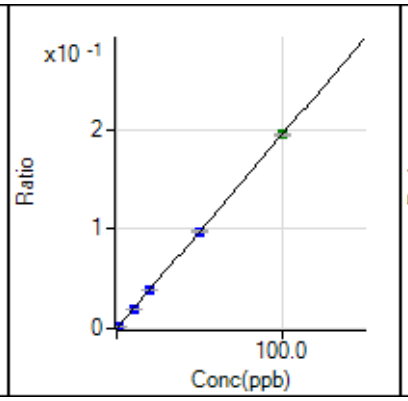
121 (Sb) [No Gas] / ISTD: 89 Y
y = 4.233E-3 x + 1.690E-4
R 1.0000
DL 0.009714
BEC 0.03992



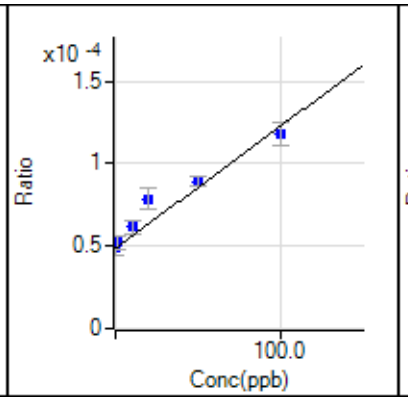
123 Sb [No Gas] / ISTD: 89 Y
y = 3.262E-3 x + 1.297E-4
R 1.0000
DL 0.002494
BEC 0.03975



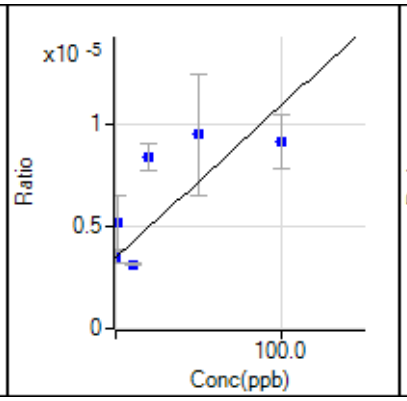
135 (Ba) [No Gas] / ISTD: 115 In
y = 1.139E-3 x + 1.381E-5
R 1.0000
DL 0.008239
BEC 0.01213



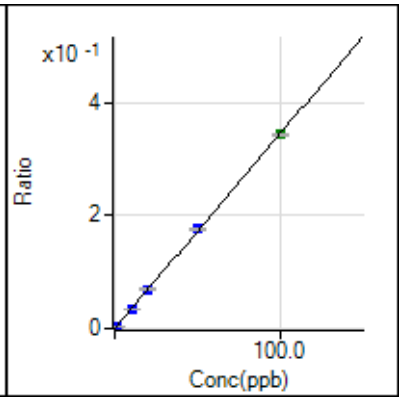
137 Ba [No Gas] / ISTD: 115 In
y = 1.947E-3 x + 2.188E-5
R 1.0000
DL 0.0006549
BEC 0.01124



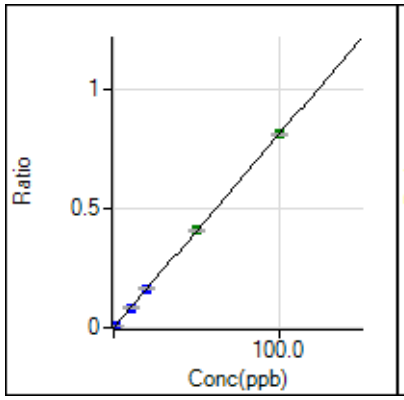
184 W [No Gas] / ISTD: 115 In
y = 7.427E-7 x + 4.865E-5
R 0.9742
DL 35.23
BEC 65.5



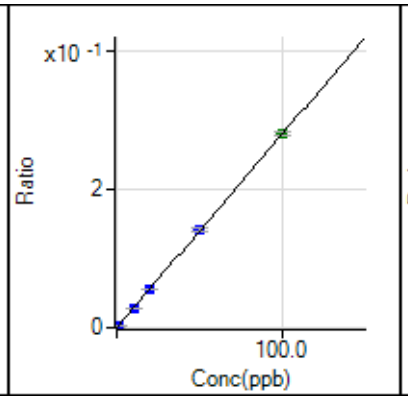
195 Pt [No Gas] / ISTD: 115 In
y = 7.437E-8 x + 3.454E-6
R 0.7550
DL 23.93
BEC 46.44



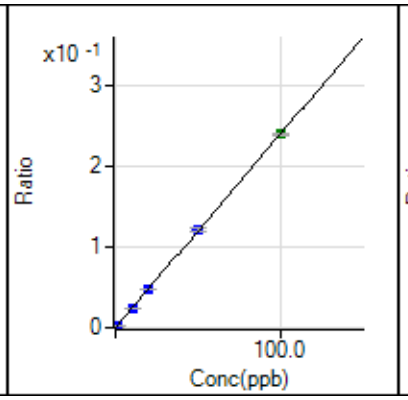
203 Tl [No Gas] / ISTD: 115 In
y = 3.460E-3 x + 1.426E-5
R 0.9999
DL 0.002325
BEC 0.004121



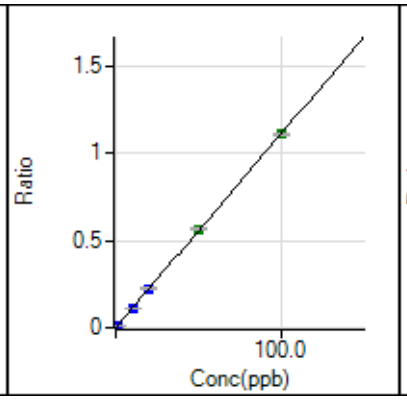
205 (Tl) [No Gas] / ISTD: 115 In
y = 8.134E-3 x + 3.745E-5
R 1.0000
DL 0.001293
BEC 0.004603



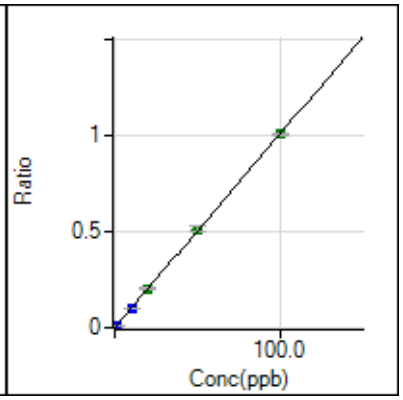
206 (Pb) [No Gas] / ISTD: 115 In
y = 2.796E-3 x + 1.959E-5
R 1.0000
DL 0.002646
BEC 0.007006



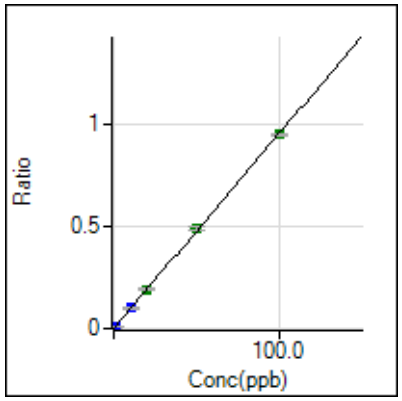
207 (Pb) [No Gas] / ISTD: 115 In
y = 2.408E-3 x + 1.647E-5
R 1.0000
DL 0.001889
BEC 0.006839



208 Pb [No Gas] / ISTD: 115 In
y = 1.111E-2 x + 8.107E-5
R 1.0000
DL 0.0006371
BEC 0.007299



232 Th [No Gas] / ISTD: 115 In
y = 1.013E-2 x + 8.014E-5
R 1.0000
DL 0.002255
BEC 0.00791



238 U [No Gas] / ISTD: 115 In

y = 9.537E-3 x + 5.404E-5

R	0.9999
DL	0.001753
BEC	0.005666

Relative Error for ICP-MS Calibration

Date: 8/27/2024 Data File: 082724-MS7900

Be	TV	Conc	%RE	%RD
	1	1.015	0.015	1.015
	10	10.076	0.0076	1.0076
	20	19.872	-0.0064	0.9936
	50	50.095	0.0019	1.0019
	100	99.97	-0.0003	0.9997
Al				
	5	5.492	0.0984	1.0984
	10	10.701	0.0701	1.0701
	20	24.521	0.22605	1.22605
	50	50.561	0.01122	1.01122
	100	99.566	-0.00434	0.99566
V				
	1	1.124	0.124	1.124
	10	10.107	0.0107	1.0107
	20	19.967	-0.00165	0.99835
	50	50.533	0.01066	1.01066
	100	99.728	-0.00272	0.99728
Cr				
	1	1.249	0.249	1.249
	10	10.477	0.0477	1.0477
	20	24.521	0.22605	1.22605
	50	47.977	-0.04046	0.95954
	100	100.057	0.00057	1.00057
Mn				
	1	1.067	0.067	1.067
	10	10.472	0.0472	1.0472
	20	21.045	0.05225	1.05225
	50	48.793	-0.02414	0.97586
	100	100.347	0.00347	1.00347
Co				
	1	1.058	0.058	1.058
	10	10.156	0.0156	1.0156
	20	20.383	0.01915	1.01915
	50	50.881	0.01762	1.01762
	100	99.467	-0.00533	0.99467
Ni60				
No gas	1	1.037	0.037	1.037
	10	10.272	0.0272	1.0272
	20	23.208	0.1604	1.1604
	50	49.504	-0.00992	0.99008
	100	99.579	-0.00421	0.99579
Ni60				
He	1	1.047	0.047	1.047
	10	10.083	0.0083	1.0083
	20	22.404	0.1202	1.1202
	50	50.124	0.00248	1.00248
	100	99.448	-0.00552	0.99448
Zn				
	5	4.907	-0.0186	0.9814
	10	10.098	0.0098	1.0098
	20	20.152	0.0076	1.0076
	50	48.76	-0.0248	0.9752
	100	100.584	0.00584	1.00584
Pb				
	1	1.021	0.021	1.021
	10	10.134	0.0134	1.0134
	20	20.132	0.0066	1.0066
	50	50.709	0.01418	1.01418
	100	99.605	-0.00395	0.99605
U				
	1	1.057	0.057	1.057
	10	10.439	0.0439	1.0439
	20	20.191	0.00955	1.00955
	50	51.107	0.02214	1.02214
	100	99.364	-0.00636	0.99364

As	TV	Conc	%RE	%RD
	1	1.098	0.098	1.098
	10	10.099	0.0099	1.0099
	20	20.252	0.0126	1.0126
	50	49.295	-0.0141	0.9859
	100	100.291	0.00291	1.00291
Se78				
	1	1.034	0.034	1.034
	10	10.111	0.0111	1.0111
	20	20.242	0.0121	1.0121
	50	50.659	0.01318	1.01318
	100	99.611	-0.00389	0.99611
Se82				
	1	0.956	-0.044	0.956
	10	9.983	-0.0017	0.9983
	20	20.277	0.01385	1.01385
	50	49.353	-0.01294	0.98706
	100	100.27	0.0027	1.0027
Mo				
	1	1.002	0.002	1.002
	10	10.231	0.0231	1.0231
	20	19.711	-0.01445	0.98555
	50	49.138	-0.01724	0.98276
	100	100.466	0.00466	1.00466
Ag				
	1	0.996	-0.004	0.996
	10	10.089	0.0089	1.0089
	20	19.86	-0.007	0.993
	50	49.602	-0.00796	0.99204
	100	100.218	0.00218	1.00218
Cd				
	1	0.984	-0.016	0.984
	10	10.047	0.0047	1.0047
	20	19.334	-0.0333	0.9667
	50	49.725	-0.0055	0.9945
	100	100.266	0.00266	1.00266
Sb				
	1	1.046	0.046	1.046
	10	10.475	0.0475	1.0475
	20	20.164	0.0082	1.0082
	50	50.481	0.00962	1.00962
	100	99.679	-0.00321	0.99679
Ba				
	1	1.013	0.013	1.013
	10	9.968	-0.0032	0.9968
	20	19.707	-0.01465	0.98535
	50	50.142	0.00284	1.00284
	100	99.991	-9E-05	0.99991
Tl				
	1	1.027	0.027	1.027
	10	10.166	0.0166	1.0166
	20	20.139	0.00695	1.00695
	50	50.978	0.01956	1.01956
	100	99.466	-0.00534	0.99466
Cu63				
No gas	1	1.055	0.055	1.055
	10	10.366	0.0366	1.0366
	20	20.813	0.04065	1.04065
	50	50.457	0.00914	1.00914
	100	99.572	-0.00428	0.99572
Cu63				
He	1	1.063	0.063	1.063
	10	10.024	0.0024	1.0024
	20	19.929	-0.00355	0.99645
	50	49.308	-0.01384	0.98616
	100	100.357	0.00357	1.00357

Relative Error for ICP-MS Calibration

Th				
	1	0.948	-0.052	0.948
	10	10.141	0.0141	1.0141
	20	19.9	-0.005	0.995
	50	50.717	0.01434	1.01434
	100	99.648	-0.00352	0.99648

7900 ICP-MS 200.8/6020A
Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	027_ICV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:09:15
Sample Type	ICV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	48.695	ppb	7.2	195459.31	97.39	
Al	27	72	No Gas	45.440	ppb	14.8	1881948.81	90.88	
V	51	72	He	50.940	ppb	0.1	520934.05	101.88	
Cr	52	72	No Gas	45.915	ppb	9.4	2909360.72	91.83	
Mn	55	72	No Gas	47.896	ppb	11.3	4106204.28	95.79	
Co	59	72	He	50.254	ppb	0.9	1022309.58	100.51	
Ni	60	72	No Gas	46.546	ppb	10.4	839442.47	93.09	
Ni	60	72	He	50.017	ppb	1.0	279493.39	100.03	
Cu	63	72	No Gas	48.760	ppb	9.4	2085327.83	97.52	
Cu	63	72	He	51.464	ppb	1.0	772883.22	102.93	
Zn	66	72	No Gas	47.899	ppb	9.3	543516.42	95.8	
As	75	72	No Gas	48.733	ppb	9.3	598520.91	97.47	
Se	78	72	He	52.491	ppb	1.1	6709.60	104.98	
Se	82	72	No Gas	48.599	ppb	8.6	37578.34	97.2	
Mo	98	89	No Gas	48.551	ppb	6.6	1594322.63	97.1	
Ag	107	89	No Gas	48.798	ppb	6.5	2479337.96	97.6	
Cd	111	89	No Gas	48.143	ppb	6.1	546760.98	96.29	
Sb	123	89	No Gas	49.297	ppb	7.8	1649219.00	98.59	
Ba	137	115	No Gas	47.804	ppb	6.0	898989.69	95.61	
Tl	203	115	No Gas	49.785	ppb	6.8	1663588.48	99.57	
Pb	208	115	No Gas	47.613	ppb	6.9	5108148.38	95.23	
U	238	115	No Gas	49.472	ppb	8.1	4557903.99	98.94	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8401549.94	1.4	8181334.67	102.69	60	125	
Ge	72	No Gas	7234106.10	0.5	7270733.04	99.5	60	125	
Ge	72	He	966218.99	2.1	958105.21	100.85	60	125	
Y	89	No Gas	10235062.37	2.2	10023893.77	102.11	60	125	
Rh	103	No Gas	9036513.53	1.6	9143531.58	98.83	60	125	
In	115	No Gas	9656603.51	2.2	9650137.39	100.07	60	125	

7900 ICP-MS 200.8/6020A
Initial Calibration Blank (ICB) Report

Sample Name	ICB
File Name	028_ICB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:11:01
Sample Type	ICB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	34.3	20.00	
Al	27	72	No Gas	-0.034	ppb	N/A	21082.28	
V	51	72	He	0.010	ppb	8.0	385.56	
Cr	52	72	No Gas	0.059	ppb	18.9	37091.44	
Mn	55	72	No Gas	0.007	ppb	72.2	4526.29	
Co	59	72	He	0.003	ppb	12.7	114.44	
Ni	60	72	No Gas	0.002	ppb	237.2	482.23	
Ni	60	72	He	0.003	ppb	43.6	122.22	
Cu	63	72	No Gas	-0.007	ppb	N/A	2004.59	
Cu	63	72	He	-0.003	ppb	N/A	638.91	
Zn	66	72	No Gas	-0.035	ppb	N/A	2024.60	
As	75	72	No Gas	0.067	ppb	72.0	51.62	
Se	78	72	He	0.133	ppb	39.1	77.33	
Se	82	72	No Gas	-0.053	ppb	N/A	23.57	
Mo	98	89	No Gas	0.038	ppb	3.8	1332.56	
Ag	107	89	No Gas	0.042	ppb	33.2	2362.44	
Cd	111	89	No Gas	-0.008	ppb	N/A	4554.83	
Sb	123	89	No Gas	0.044	ppb	4.7	2753.62	
Ba	137	115	No Gas	0.002	ppb	130.8	243.34	
Tl	203	115	No Gas	0.021	ppb	13.4	798.92	
Pb	208	115	No Gas	0.010	ppb	12.7	1783.39	
U	238	115	No Gas	0.003	ppb	75.7	742.25	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8367901.34	2.8	8181334.67	102.28	60	125	
Ge	72	No Gas	7268146.93	1.7	7270733.04	99.96	60	125	
Ge	72	He	949127.85	1.2	958105.21	99.06	60	125	
Y	89	No Gas	10106749.04	4.7	10023893.77	100.83	60	125	
Rh	103	No Gas	8873023.81	2.5	9143531.58	97.04	60	125	
In	115	No Gas	9333810.19	1.1	9650137.39	96.72	60	125	

7900 ICP-MS 200.8/6020A
High-Level Continuing Calibration Verification (HLCCV) Report

Sample Name	HLCCV2
File Name	029HCCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:12:57
Sample Type	HLCCV2
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	%Rec	QC Flag
Be	9	45	No Gas	192.900	ppb	12.3	781096.91	96.45	
Al	27	72	No Gas	179.494	ppb	6.5	7315191.38	89.75 90	> +/-10%
V	51	72	He	197.355	ppb	2.7	2031065.34	98.68	
Cr	52	72	No Gas	184.984	ppb	13.9	11533839.54	92.49	
Mn	55	72	No Gas	187.566	ppb	13.4	15949550.20	93.78	
Co	59	72	He	200.942	ppb	1.0	4115390.67	100.47	
Ni	60	72	No Gas	189.432	ppb	11.6	3389645.98	94.72	
Ni	60	72	He	202.178	ppb	0.8	1137260.41	101.09	
Cu	63	72	No Gas	188.126	ppb	9.7	7980845.79	94.06	
Cu	63	72	He	196.479	ppb	0.8	2969013.01	98.24	
Zn	66	72	No Gas	185.301	ppb	11.1	2081025.20	92.65	
As	75	72	No Gas	191.063	ppb	11.6	2330226.80	95.53	
Se	78	72	He	204.421	ppb	0.4	26125.20	102.21	
Se	82	72	No Gas	190.610	ppb	10.7	146085.76	95.3	
Mo	98	89	No Gas	177.923	ppb	5.7	6042624.58	88.96	> +/-10%
Ag	107	89	No Gas	101.794	ppb	9.1	5351518.26	50.9	> +/-10%
Cd	111	89	No Gas	181.700	ppb	5.6	2120717.64	90.85	
Sb	123	89	No Gas	181.480	ppb	8.6	6277413.08	90.74	
Ba	137	115	No Gas	182.664	ppb	6.9	3424322.16	91.33	
Tl	203	115	No Gas	184.048	ppb	9.0	6135132.53	92.02	
Pb	208	115	No Gas	185.866	ppb	8.9	19893457.96	92.93	
U	238	115	No Gas	189.818	ppb	8.8	17437819.86	94.91	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8481702.72	0.3	8181334.67	103.67	60	125	
Ge	72	No Gas	7179916.38	2.0	7270733.04	98.75	60	125	
Ge	72	He	972750.17	1.4	958105.21	101.53	60	125	
Y	89	No Gas	10579965.97	3.8	10023893.77	105.55	60	125	
Rh	103	No Gas	8799668.82	2.2	9143531.58	96.24	60	125	
In	115	No Gas	9622296.28	2.6	9650137.39	99.71	60	125	

7900 ICP-MS 200.8/6020A
High-Level Continuing Calibration Verification (HLCCV) Report

Sample Name	HLCCV3
File Name	030_QC1.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:14:25
Sample Type	QC1
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	%Rec	QC Flag
Be	9	45	No Gas	385.695	ppb	9.1	1554696.08	96.42	
Al	27	72	No Gas	351.406	ppb	15.3	14496617.20	87.85	> +/-10%
V	51	72	He	405.719	ppb	2.4	4177279.28	101.43	
Cr	52	72	No Gas	348.945	ppb	14.7	22033022.46	87.24	> +/-10%
Mn	55	72	No Gas	367.900	ppb	12.1	31709950.96	91.98	
Co	59	72	He	403.101	ppb	2.9	8260496.89	100.78	
Ni	60	72	No Gas	353.492	ppb	11.1	6410979.74	88.37	> +/-10%
Ni	60	72	He	405.653	ppb	2.3	2282970.81	101.41	
Cu	63	72	No Gas	363.947	ppb	12.6	15647717.99	90.99	
Cu	63	72	He	389.252	ppb	4.3	5883882.55	97.31	
Zn	66	72	No Gas	359.098	ppb	11.4	4084147.48	89.77 90	> +/-10%
As	75	72	No Gas	365.652	ppb	12.8	4524275.27	91.41	
Se	78	72	He	414.097	ppb	1.2	52886.33	103.52	
Se	82	72	No Gas	371.984	ppb	11.9	288986.55	93	
Mo	98	89	No Gas	351.243	ppb	10.6	11749150.02	87.81	> +/-10%
Ag	107	89	No Gas	125.086	ppb	9.1	6470973.08	31.27	> +/-10%
Cd	111	89	No Gas	356.459	ppb	9.2	4092237.15	89.11	> +/-10%
Sb	123	89	No Gas	369.889	ppb	8.4	12589078.67	92.47	
Ba	137	115	No Gas	366.454	ppb	12.5	6805754.31	91.61	
Tl	203	115	No Gas	368.585	ppb	13.9	12163183.40	92.15	
Pb	208	115	No Gas	371.437	ppb	12.8	39358660.10	92.86	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8430786.61	3.5	8181334.67	103.05	60	125	
Ge	72	No Gas	7271447.21	1.6	7270733.04	100.01	60	125	
Ge	72	He	973342.70	0.5	958105.21	101.59	60	125	
Y	89	No Gas	10412077.09	3.3	10023893.77	103.87	60	125	
Rh	103	No Gas	9048367.42	0.8	9143531.58	98.96	60	125	
In	115	No Gas	9545318.51	1.4	9650137.39	98.91	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	031_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:15:51
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	46.722	ppb	6.7	192117.92	93.44	
Al	27	72	No Gas	46.257	ppb	12.8	1927128.95	92.51	
V	51	72	He	50.815	ppb	1.8	516493.69	101.63	
Cr	52	72	No Gas	47.296	ppb	12.0	3013575.36	94.59	
Mn	55	72	No Gas	46.971	ppb	14.5	4051810.19	93.94	
Co	59	72	He	50.615	ppb	1.7	1023243.71	101.23	
Ni	60	72	No Gas	46.707	ppb	9.4	847494.53	93.41	
Ni	60	72	He	49.899	ppb	0.8	277153.56	99.8	
Cu	63	72	No Gas	49.080	ppb	10.2	2111763.39	98.16	
Cu	63	72	He	51.974	ppb	1.1	775817.90	103.95	
Zn	66	72	No Gas	48.056	ppb	9.7	548671.10	96.11	
As	75	72	No Gas	48.914	ppb	9.7	604480.54	97.83	
Se	78	72	He	52.733	ppb	1.4	6697.26	105.47	
Se	82	72	No Gas	48.908	ppb	9.6	38056.62	97.82	
Mo	98	89	No Gas	48.985	ppb	4.9	1618172.88	97.97	
Ag	107	89	No Gas	49.153	ppb	6.8	2512947.75	98.31	
Cd	111	89	No Gas	48.137	ppb	5.6	550000.17	96.27	
Sb	123	89	No Gas	49.503	ppb	4.9	1665313.82	99.01	
Ba	137	115	No Gas	48.908	ppb	8.3	904336.91	97.82	
Tl	203	115	No Gas	51.060	ppb	8.8	1677827.92	102.12	
Pb	208	115	No Gas	49.361	ppb	9.5	5206859.24	98.72	
U	238	115	No Gas	50.015	ppb	7.9	4530757.18	100.03	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8611062.44	0.4	8181334.67	105.25	60	125	
Ge	72	No Gas	7282778.04	1.2	7270733.04	100.17	60	125	
Ge	72	He	960262.81	1.6	958105.21	100.23	60	125	
Y	89	No Gas	10294341.53	2.9	10023893.77	102.7	60	125	
Rh	103	No Gas	9280927.69	0.4	9143531.58	101.5	60	125	
In	115	No Gas	9499789.34	1.2	9650137.39	98.44	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	032_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:17:37
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.008	ppb	31.8	34.44	
Al	27	72	No Gas	-0.041	ppb	N/A	20381.29	
V	51	72	He	0.012	ppb	18.9	410.01	
Cr	52	72	No Gas	0.030	ppb	46.2	34538.37	
Mn	55	72	No Gas	0.011	ppb	36.5	4801.93	
Co	59	72	He	0.003	ppb	11.6	125.56	
Ni	60	72	No Gas	0.005	ppb	78.3	522.23	
Ni	60	72	He	0.005	ppb	37.2	132.22	
Cu	63	72	No Gas	-0.002	ppb	N/A	2199.06	
Cu	63	72	He	-0.001	ppb	N/A	660.02	
Zn	66	72	No Gas	-0.032	ppb	N/A	2012.37	
As	75	72	No Gas	-0.010	ppb	N/A	-871.76	
Se	78	72	He	0.104	ppb	48.0	73.67	
Se	82	72	No Gas	-0.117	ppb	N/A	-24.18	
Mo	98	89	No Gas	0.067	ppb	14.0	2273.18	
Ag	107	89	No Gas	0.046	ppb	15.2	2591.37	
Cd	111	89	No Gas	0.006	ppb	284.3	4735.62	
Sb	123	89	No Gas	0.100	ppb	11.2	4630.80	
Ba	137	115	No Gas	0.003	ppb	19.5	260.00	
Tl	203	115	No Gas	0.030	ppb	20.2	1107.83	
Pb	208	115	No Gas	0.019	ppb	19.4	2741.23	
U	238	115	No Gas	0.005	ppb	23.8	955.59	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8325281.06	2.1	8181334.67	101.76	60	125	
Ge	72	No Gas	7117352.49	1.5	7270733.04	97.89	60	125	
Ge	72	He	949621.21	0.7	958105.21	99.11	60	125	
Y	89	No Gas	10152303.76	2.0	10023893.77	101.28	60	125	
Rh	103	No Gas	8872741.59	3.4	9143531.58	97.04	60	125	
In	115	No Gas	9394649.35	4.7	9650137.39	97.35	60	125	

7900 ICP-MS 200.8/6020A
Prep Blank (PB) Report

Sample Name	PBW-443503
File Name	033_PB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:19:34
Sample Type	PB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.005	ppb	9.7	21.11	
Al	27	72	No Gas	1.069	ppb	6.2	67254.06	
V	51	72	He	0.058	ppb	7.5	868.92	
Cr	52	72	No Gas	0.287	ppb	12.1	52057.06	
Mn	55	72	No Gas	0.037	ppb	5.6	7255.19	
Co	59	72	He	0.003	ppb	16.8	122.22	
Ni	60	72	No Gas	0.018	ppb	27.8	773.36	
Ni	60	72	He	0.012	ppb	21.7	173.33	
Cu	63	72	No Gas	0.009	ppb	22.6	2755.83	
Cu	63	72	He	0.008	ppb	23.3	802.24	
Zn	66	72	No Gas	0.138	ppb	2.3	4035.03	
As	75	72	No Gas	0.141	ppb	108.9	1020.54	
Se	78	72	He	0.025	ppb	507.1	64.00	
Se	82	72	No Gas	-0.023	ppb	N/A	47.52	
Mo	98	89	No Gas	0.042	ppb	12.0	1502.10	
Ag	107	89	No Gas	0.046	ppb	10.4	2640.26	
Cd	111	89	No Gas	-0.009	ppb	N/A	4678.76	
Sb	123	89	No Gas	0.136	ppb	20.6	5958.02	
Ba	137	115	No Gas	0.027	ppb	5.3	721.13	
Tl	203	115	No Gas	0.016	ppb	11.5	665.57	
Pb	208	115	No Gas	0.015	ppb	7.8	2428.98	
U	238	115	No Gas	0.002	ppb	48.8	710.02	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8628752.43	0.5	8181334.67	105.47	60	125	
Ge	72	No Gas	7355194.71	3.6	7270733.04	101.16	60	125	
Ge	72	He	950498.85	0.6	958105.21	99.21	60	125	
Y	89	No Gas	10396803.20	2.2	10023893.77	103.72	60	125	
Rh	103	No Gas	9065788.81	0.5	9143531.58	99.15	60	125	
In	115	No Gas	9595069.34	1.4	9650137.39	99.43	60	125	

7900 ICP-MS 200.8/6020A
Laboratory Control Sample (LCS) Report

Sample Name	LCSW-443503
File Name	034_LCS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:21:32
Sample Type	LCS
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	20.811	ppb	6.0	83823.82	104.06	
Al	27	72	No Gas	41.352	ppb	10.8	1730366.11	103.38	
V	51	72	He	21.952	ppb	3.0	224292.50	109.76	
Cr	52	72	No Gas	20.725	ppb	8.1	1343999.08	103.63	
Mn	55	72	No Gas	21.861	ppb	12.3	1893272.70	109.3	
Co	59	72	He	21.635	ppb	1.1	439610.56	108.18	
Ni	60	72	No Gas	20.356	ppb	6.6	370847.90	101.78	
Ni	60	72	He	21.500	ppb	0.4	120065.93	107.5	
Cu	63	72	No Gas	21.731	ppb	7.7	939496.00	108.66	
Cu	63	72	He	22.484	ppb	1.8	337588.23	112.42	
Zn	66	72	No Gas	21.011	ppb	6.7	242076.09	105.06	
As	75	72	No Gas	21.301	ppb	7.9	263691.01	106.5	
Se	78	72	He	22.170	ppb	1.7	2865.29	110.85	
Se	82	72	No Gas	21.449	ppb	7.9	16781.50	107.25	
Mo	98	89	No Gas	21.480	ppb	6.3	713612.29	107.4	
Ag	107	89	No Gas	21.975	ppb	7.1	1129639.57	109.88	
Cd	111	89	No Gas	20.767	ppb	5.7	241315.93	103.84	
Sb	123	89	No Gas	22.255	ppb	5.0	753796.13	111.28	
Ba	137	115	No Gas	22.038	ppb	4.0	415341.10	110.19	
Tl	203	115	No Gas	21.455	ppb	5.1	718440.53	107.28	
Pb	208	115	No Gas	21.177	ppb	5.2	2277005.08	105.88	
U	238	115	No Gas	22.554	ppb	5.5	2082009.99	112.77	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8426585.78	3.4	8181334.67	103	60	125	
Ge	72	No Gas	7307926.38	1.7	7270733.04	100.51	60	125	
Ge	72	He	965041.07	2.1	958105.21	100.72	60	125	
Y	89	No Gas	10364367.92	1.1	10023893.77	103.4	60	125	
Rh	103	No Gas	9194050.75	1.4	9143531.58	100.55	60	125	
In	115	No Gas	9675894.89	0.3	9650137.39	100.27	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407554-002 2X
File Name	035SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:23:26
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.005	ppb	37.8	24.44	
Al	27	72	No Gas	31.329	ppb	12.3	1335533.25	
V	51	72	He	0.429	ppb	4.7	4588.52	
Cr	52	72	No Gas	0.496	ppb	10.7	65943.05	
Mn	55	72	No Gas	4.647	ppb	10.4	411573.18	
Co	59	72	He	0.096	ppb	6.0	1962.36	
Ni	60	72	No Gas	0.399	ppb	10.6	7816.64	
Ni	60	72	He	0.322	ppb	5.6	1866.79	
Cu	63	72	No Gas	1.076	ppb	11.3	49427.95	
Cu	63	72	He	0.866	ppb	2.3	13408.56	
Zn	66	72	No Gas	1.256	ppb	7.8	17005.87	
As	75	72	No Gas	0.405	ppb	53.6	4285.64	
Se	78	72	He	0.115	ppb	61.2	75.00	
Se	82	72	No Gas	0.021	ppb	317.0	83.11	
Mo	98	89	No Gas	0.230	ppb	4.0	7624.62	
Ag	107	89	No Gas	0.067	ppb	39.7	3608.30	
Cd	111	89	No Gas	0.009	ppb	116.6	4790.22	
Sb	123	89	No Gas	0.174	ppb	13.7	7108.56	
Ba	137	115	No Gas	10.042	ppb	5.0	189382.15	
Tl	203	115	No Gas	0.018	ppb	5.9	753.36	
Pb	208	115	No Gas	0.121	ppb	2.9	13824.09	
U	238	115	No Gas	0.081	ppb	3.8	7954.74	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8613046.60	1.9	8181334.67	105.28	60	125	
Ge	72	No Gas	7421329.98	2.3	7270733.04	102.07	60	125	
Ge	72	He	947239.09	2.5	958105.21	98.87	60	125	
Y	89	No Gas	10195728.48	2.7	10023893.77	101.71	60	125	
Rh	103	No Gas	8828199.93	4.6	9143531.58	96.55	60	125	
In	115	No Gas	9674799.06	2.1	9650137.39	100.26	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407554-004 2X
File Name	036SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:25:22
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	62.1	18.89	
Al	27	72	No Gas	16.202	ppb	5.7	688315.67	
V	51	72	He	0.400	ppb	4.4	4336.22	
Cr	52	72	No Gas	0.662	ppb	8.5	75054.81	
Mn	55	72	No Gas	2.003	ppb	7.7	176218.09	
Co	59	72	He	0.190	ppb	3.7	3880.54	
Ni	60	72	No Gas	0.454	ppb	6.2	8660.45	
Ni	60	72	He	0.383	ppb	3.4	2222.40	
Cu	63	72	No Gas	1.320	ppb	2.8	58947.50	
Cu	63	72	He	1.116	ppb	0.7	17241.58	
Zn	66	72	No Gas	0.814	ppb	6.9	11654.83	
As	75	72	No Gas	0.493	ppb	27.6	5329.48	
Se	78	72	He	0.082	ppb	149.9	71.33	
Se	82	72	No Gas	-0.031	ppb	N/A	41.48	
Mo	98	89	No Gas	0.227	ppb	12.4	7610.46	
Ag	107	89	No Gas	0.024	ppb	9.7	1524.53	
Cd	111	89	No Gas	-0.002	ppb	N/A	4729.85	
Sb	123	89	No Gas	0.195	ppb	12.8	7912.33	
Ba	137	115	No Gas	10.520	ppb	5.6	194118.42	
Tl	203	115	No Gas	0.010	ppb	5.9	446.68	
Pb	208	115	No Gas	0.072	ppb	4.4	8356.62	
U	238	115	No Gas	0.085	ppb	7.3	8201.55	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8688745.77	0.8	8181334.67	106.2	60	125	
Ge	72	No Gas	7265264.71	0.7	7270733.04	99.92	60	125	
Ge	72	He	955468.68	1.4	958105.21	99.72	60	125	
Y	89	No Gas	10336313.48	3.2	10023893.77	103.12	60	125	
Rh	103	No Gas	8862529.93	1.6	9143531.58	96.93	60	125	
In	115	No Gas	9468688.23	0.4	9650137.39	98.12	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407729-002
File Name	037SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:27:18
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.007	ppb	22.3	30.00	
Al	27	72	No Gas	20.547	ppb	5.2	853902.76	
V	51	72	He	0.302	ppb	5.8	3287.05	
Cr	52	72	No Gas	0.686	ppb	8.7	75430.79	
Mn	55	72	No Gas	3.911	ppb	3.7	335164.23	
Co	59	72	He	0.067	ppb	2.9	1377.85	
Ni	60	72	No Gas	0.411	ppb	5.3	7755.48	
Ni	60	72	He	0.361	ppb	4.4	2065.71	
Cu	63	72	No Gas	1.156	ppb	5.0	51135.22	
Cu	63	72	He	0.750	ppb	2.9	11631.44	
Zn	66	72	No Gas	3.748	ppb	3.2	44249.73	
As	75	72	No Gas	1.738	ppb	3.2	20376.29	
Se	78	72	He	0.142	ppb	22.8	77.67	
Se	82	72	No Gas	0.094	ppb	119.1	137.19	
Mo	98	89	No Gas	0.172	ppb	3.6	5843.89	
Ag	107	89	No Gas	0.015	ppb	10.3	1072.27	
Cd	111	89	No Gas	0.003	ppb	545.7	4830.07	
Sb	123	89	No Gas	0.135	ppb	8.2	5929.09	
Ba	137	115	No Gas	3.210	ppb	6.6	58521.81	
Tl	203	115	No Gas	0.005	ppb	4.2	291.12	
Pb	208	115	No Gas	0.148	ppb	7.8	16134.04	
U	238	115	No Gas	0.024	ppb	11.4	2654.73	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8351435.78	3.0	8181334.67	102.08	60	125	
Ge	72	No Gas	7152353.88	2.1	7270733.04	98.37	60	125	
Ge	72	He	940179.82	0.8	958105.21	98.13	60	125	
Y	89	No Gas	10411108.75	1.3	10023893.77	103.86	60	125	
Rh	103	No Gas	8783530.21	3.3	9143531.58	96.06	60	125	
In	115	No Gas	9339100.46	1.4	9650137.39	96.78	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407685-006 5X
File Name	038SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:29:14
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.005	ppb	26.6	22.22	
Al	27	72	No Gas	50.823	ppb	8.7	2078743.60	
V	51	72	He	0.368	ppb	7.0	3989.46	
Cr	52	72	No Gas	0.525	ppb	5.5	65379.45	
Mn	55	72	No Gas	36.031	ppb	6.6	3055558.28	
Co	59	72	He	0.092	ppb	1.5	1902.35	
Ni	60	72	No Gas	0.330	ppb	5.4	6318.09	
Ni	60	72	He	0.295	ppb	3.3	1729.00	
Cu	63	72	No Gas	0.690	ppb	5.8	31430.72	
Cu	63	72	He	0.542	ppb	4.6	8677.11	
Zn	66	72	No Gas	0.827	ppb	6.7	11618.15	
As	75	72	No Gas	0.553	ppb	35.1	5988.79	
Se	78	72	He	0.052	ppb	110.2	67.33	
Se	82	72	No Gas	-0.024	ppb	N/A	47.03	
Mo	98	89	No Gas	0.153	ppb	3.4	5159.10	
Ag	107	89	No Gas	0.020	ppb	2.0	1274.51	
Cd	111	89	No Gas	-0.010	ppb	N/A	4634.55	
Sb	123	89	No Gas	0.089	ppb	6.1	4347.37	
Ba	137	115	No Gas	5.678	ppb	4.7	102247.50	
Tl	203	115	No Gas	0.004	ppb	26.5	257.78	
Pb	208	115	No Gas	0.092	ppb	7.3	10212.71	
U	238	115	No Gas	0.089	ppb	6.6	8357.23	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8486663.55	4.2	8181334.67	103.73	60	125	
Ge	72	No Gas	7151861.11	2.1	7270733.04	98.37	60	125	
Ge	72	He	950859.89	1.6	958105.21	99.24	60	125	
Y	89	No Gas	10336919.04	3.4	10023893.77	103.12	60	125	
Rh	103	No Gas	8652574.10	2.1	9143531.58	94.63	60	125	
In	115	No Gas	9232598.25	2.9	9650137.39	95.67	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407685-006L 25X
File Name	039SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:31:10
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	92.1	11.11	
Al	27	72	No Gas	10.718	ppb	2.9	458886.53	
V	51	72	He	0.161	ppb	5.4	1919.02	
Cr	52	72	No Gas	0.420	ppb	8.7	59252.73	
Mn	55	72	No Gas	7.231	ppb	8.3	619942.87	
Co	59	72	He	0.020	ppb	8.1	464.45	
Ni	60	72	No Gas	0.082	ppb	3.4	1901.24	
Ni	60	72	He	0.067	ppb	16.3	475.57	
Cu	63	72	No Gas	0.136	ppb	6.3	8095.69	
Cu	63	72	He	0.110	ppb	8.2	2314.64	
Zn	66	72	No Gas	0.107	ppb	6.9	3598.24	
As	75	72	No Gas	0.148	ppb	82.2	1048.17	
Se	78	72	He	0.079	ppb	73.3	71.00	
Se	82	72	No Gas	-0.129	ppb	N/A	-34.64	
Mo	98	89	No Gas	0.036	ppb	9.8	1280.13	
Ag	107	89	No Gas	0.015	ppb	18.4	1028.93	
Cd	111	89	No Gas	0.002	ppb	709.6	4701.63	
Sb	123	89	No Gas	0.062	ppb	16.3	3365.98	
Ba	137	115	No Gas	1.075	ppb	3.3	20334.30	
Tl	203	115	No Gas	0.001	ppb	42.6	182.22	
Pb	208	115	No Gas	0.018	ppb	1.5	2697.90	
U	238	115	No Gas	0.013	ppb	6.3	1707.90	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8472963.55	3.3	8181334.67	103.56	60	125	
Ge	72	No Gas	7201838.60	1.6	7270733.04	99.05	60	125	
Ge	72	He	955085.28	1.9	958105.21	99.68	60	125	
Y	89	No Gas	10171256.82	1.9	10023893.77	101.47	60	125	
Rh	103	No Gas	9110612.69	2.0	9143531.58	99.64	60	125	
In	115	No Gas	9608776.28	3.3	9650137.39	99.57	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	040_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:33:05
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	48.593	ppb	6.4	193992.92	97.19	
Al	27	72	No Gas	45.594	ppb	6.7	1830794.79	91.19	
V	51	72	He	49.484	ppb	1.3	497544.86	98.97	
Cr	52	72	No Gas	46.768	ppb	4.8	2871320.72	93.54	
Mn	55	72	No Gas	48.422	ppb	7.7	4023925.40	96.84	
Co	59	72	He	48.898	ppb	1.6	978072.74	97.8	
Ni	60	72	No Gas	48.042	ppb	8.3	840047.97	96.08	
Ni	60	72	He	48.812	ppb	2.2	268216.47	97.62	
Cu	63	72	No Gas	49.115	ppb	7.6	2036483.46	98.23	
Cu	63	72	He	49.919	ppb	3.0	737116.47	99.84	
Zn	66	72	No Gas	48.213	ppb	7.9	530389.11	96.43	
As	75	72	No Gas	49.422	ppb	7.5	588544.63	98.84	
Se	78	72	He	51.948	ppb	1.7	6528.52	103.9	
Se	82	72	No Gas	49.691	ppb	7.7	37253.10	99.38	
Mo	98	89	No Gas	49.485	ppb	10.1	1582972.98	98.97	
Ag	107	89	No Gas	49.669	ppb	9.5	2458278.65	99.34	
Cd	111	89	No Gas	48.814	ppb	8.9	540023.58	97.63	
Sb	123	89	No Gas	50.650	ppb	10.6	1650093.58	101.3	
Ba	137	115	No Gas	48.681	ppb	6.8	886884.88	97.36	
Tl	203	115	No Gas	50.350	ppb	7.7	1630175.15	100.7	
Pb	208	115	No Gas	48.805	ppb	7.1	5073410.60	97.61	
U	238	115	No Gas	50.489	ppb	7.6	4506114.12	100.98	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8362032.72	2.6	8181334.67	102.21	60	125	
Ge	72	No Gas	7010402.64	1.6	7270733.04	96.42	60	125	
Ge	72	He	950004.62	1.0	958105.21	99.15	60	125	
Y	89	No Gas	9982914.05	0.7	10023893.77	99.59	60	125	
Rh	103	No Gas	8863350.48	1.3	9143531.58	96.94	60	125	
In	115	No Gas	9353448.80	0.9	9650137.39	96.93	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	041_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:34:52
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.007	ppb	64.1	23.33	
Al	27	72	No Gas	0.182	ppb	53.1	24932.16	
V	51	72	He	0.016	ppb	7.6	444.45	
Cr	52	72	No Gas	0.190	ppb	67.4	37395.54	
Mn	55	72	No Gas	0.019	ppb	72.9	4612.98	
Co	59	72	He	0.002	ppb	62.3	90.00	
Ni	60	72	No Gas	0.009	ppb	74.2	497.79	
Ni	60	72	He	0.003	ppb	84.3	120.00	
Cu	63	72	No Gas	0.004	ppb	276.1	2061.27	
Cu	63	72	He	-0.002	ppb	N/A	640.02	
Zn	66	72	No Gas	0.017	ppb	315.8	2144.63	
As	75	72	No Gas	0.056	ppb	81.8	-86.61	
Se	78	72	He	0.085	ppb	10.9	70.00	
Se	82	72	No Gas	-0.015	ppb	N/A	38.34	
Mo	98	89	No Gas	0.032	ppb	21.7	970.59	
Ag	107	89	No Gas	0.047	ppb	48.4	2273.58	
Cd	111	89	No Gas	-0.026	ppb	N/A	3869.75	
Sb	123	89	No Gas	0.055	ppb	17.7	2762.51	
Ba	137	115	No Gas	0.007	ppb	54.1	298.89	
Tl	203	115	No Gas	0.018	ppb	32.6	631.13	
Pb	208	115	No Gas	0.009	ppb	42.8	1460.04	
U	238	115	No Gas	0.002	ppb	128.8	635.58	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7321118.60	17.9	8181334.67	89.49	60	125	
Ge	72	No Gas	6116316.14	17.2	7270733.04	84.12	60	125	
Ge	72	He	931702.57	1.3	958105.21	97.24	60	125	
Y	89	No Gas	8988317.98	17.7	10023893.77	89.67	60	125	
Rh	103	No Gas	7722841.78	14.5	9143531.58	84.46	60	125	
In	115	No Gas	8443013.28	14.6	9650137.39	87.49	60	125	

7900 ICP-MS 200.8/6020A
Prep Blank (PB) Report

Sample Name	PBW-443501
File Name	042_PB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:36:50
Sample Type	PB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	48.1	11.11	
Al	27	72	No Gas	1.113	ppb	4.2	67110.64	
V	51	72	He	0.071	ppb	4.7	992.26	
Cr	52	72	No Gas	0.289	ppb	2.8	50725.44	
Mn	55	72	No Gas	0.051	ppb	5.4	8226.82	
Co	59	72	He	0.003	ppb	35.4	118.89	
Ni	60	72	No Gas	0.012	ppb	27.4	654.46	
Ni	60	72	He	0.013	ppb	33.1	173.33	
Cu	63	72	No Gas	0.014	ppb	7.9	2884.74	
Cu	63	72	He	0.010	ppb	15.6	821.14	
Zn	66	72	No Gas	0.064	ppb	16.1	3097.02	
As	75	72	No Gas	0.060	ppb	34.7	-32.92	
Se	78	72	He	0.023	ppb	85.3	63.00	
Se	82	72	No Gas	-0.116	ppb	N/A	-23.72	
Mo	98	89	No Gas	0.013	ppb	16.3	516.33	
Ag	107	89	No Gas	0.026	ppb	19.0	1598.99	
Cd	111	89	No Gas	-0.001	ppb	N/A	4740.17	
Sb	123	89	No Gas	0.054	ppb	14.8	3181.49	
Ba	137	115	No Gas	0.018	ppb	15.6	537.79	
Tl	203	115	No Gas	0.005	ppb	20.1	306.67	
Pb	208	115	No Gas	0.003	ppb	12.7	1131.14	
U	238	115	No Gas	-0.003	ppb	N/A	256.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8280085.23	5.9	8181334.67	101.21	60	125	
Ge	72	No Gas	7146122.22	1.2	7270733.04	98.29	60	125	
Ge	72	He	938631.14	2.0	958105.21	97.97	60	125	
Y	89	No Gas	10346358.76	4.1	10023893.77	103.22	60	125	
Rh	103	No Gas	9182351.02	3.4	9143531.58	100.42	60	125	
In	115	No Gas	9541631.29	4.8	9650137.39	98.88	60	125	

7900 ICP-MS 200.8/6020A
Laboratory Control Sample (LCS) Report

Sample Name	LCSW-443501
File Name	043_LCS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:38:47
Sample Type	LCS
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	20.140	ppb	3.5	79399.28	100.7	
Al	27	72	No Gas	38.219	ppb	11.5	1558220.81	95.55	
V	51	72	He	20.955	ppb	0.3	209931.38	104.78	
Cr	52	72	No Gas	20.316	ppb	6.4	1282785.64	101.58	
Mn	55	72	No Gas	21.484	ppb	9.3	1811671.66	107.42	
Co	59	72	He	20.968	ppb	2.6	417496.04	104.84	
Ni	60	72	No Gas	19.900	ppb	7.1	352783.86	99.5	
Ni	60	72	He	20.969	ppb	0.4	114762.55	104.85	
Cu	63	72	No Gas	21.072	ppb	7.2	886530.34	105.36	
Cu	63	72	He	21.838	ppb	2.4	321386.15	109.19	
Zn	66	72	No Gas	20.455	ppb	6.7	229363.28	102.27	
As	75	72	No Gas	20.944	ppb	6.9	252246.92	104.72	
Se	78	72	He	22.040	ppb	1.7	2792.94	110.2	
Se	82	72	No Gas	20.795	ppb	7.3	15832.75	103.98	
Mo	98	89	No Gas	20.574	ppb	6.6	679182.50	102.87	
Ag	107	89	No Gas	20.950	ppb	5.4	1069892.67	104.75	
Cd	111	89	No Gas	19.684	ppb	5.8	227455.06	98.42	
Sb	123	89	No Gas	21.498	ppb	5.7	723450.16	107.49	
Ba	137	115	No Gas	21.427	ppb	7.5	394157.90	107.14	
Tl	203	115	No Gas	20.843	ppb	7.8	681263.77	104.21	
Pb	208	115	No Gas	20.652	ppb	7.7	2167178.48	103.26	
U	238	115	No Gas	21.320	ppb	8.6	1920770.96	106.6	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8258194.67	2.6	8181334.67	100.94	60	125	
Ge	72	No Gas	7107770.83	0.7	7270733.04	97.76	60	125	
Ge	72	He	945774.20	1.6	958105.21	98.71	60	125	
Y	89	No Gas	10293639.31	2.0	10023893.77	102.69	60	125	
Rh	103	No Gas	8970624.92	3.9	9143531.58	98.11	60	125	
In	115	No Gas	9452763.79	2.5	9650137.39	97.95	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407454-004
File Name	044SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:40:42
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	60.9	14.44	
Al	27	72	No Gas	10.144	ppb	4.9	440765.66	
V	51	72	He	0.114	ppb	6.9	1431.18	
Cr	52	72	No Gas	1.473	ppb	5.4	126425.00	
Mn	55	72	No Gas	1.301	ppb	5.8	116182.35	
Co	59	72	He	0.023	ppb	13.2	511.12	
Ni	60	72	No Gas	0.307	ppb	7.7	6009.08	
Ni	60	72	He	0.316	ppb	5.3	1835.68	
Cu	63	72	No Gas	1.263	ppb	5.4	56654.07	
Cu	63	72	He	1.306	ppb	2.4	19897.29	
Zn	66	72	No Gas	4.535	ppb	5.8	54047.69	
As	75	72	No Gas	0.380	ppb	31.1	3950.54	
Se	78	72	He	0.083	ppb	23.3	71.00	
Se	82	72	No Gas	-0.067	ppb	N/A	13.05	
Mo	98	89	No Gas	0.038	ppb	14.4	1343.95	
Ag	107	89	No Gas	0.047	ppb	38.1	2610.28	
Cd	111	89	No Gas	0.006	ppb	265.9	4723.68	
Sb	123	89	No Gas	0.088	ppb	9.8	4216.23	
Ba	137	115	No Gas	14.176	ppb	3.8	265422.17	
Tl	203	115	No Gas	0.011	ppb	2.6	510.01	
Pb	208	115	No Gas	0.028	ppb	3.1	3721.33	
U	238	115	No Gas	0.001	ppb	51.7	580.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8266258.56	1.6	8181334.67	101.04	60	125	
Ge	72	No Gas	7282802.49	3.2	7270733.04	100.17	60	125	
Ge	72	He	947682.50	3.6	958105.21	98.91	60	125	
Y	89	No Gas	10119553.77	3.5	10023893.77	100.95	60	125	
Rh	103	No Gas	8926237.42	1.4	9143531.58	97.62	60	125	
In	115	No Gas	9606344.62	1.8	9650137.39	99.55	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407455-002
File Name	045SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:42:39
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	63.3	14.44	
Al	27	72	No Gas	13.928	ppb	5.9	596148.10	
V	51	72	He	0.178	ppb	1.1	2062.38	
Cr	52	72	No Gas	0.678	ppb	2.6	76145.25	
Mn	55	72	No Gas	2.318	ppb	4.4	203714.21	
Co	59	72	He	0.075	ppb	9.0	1544.53	
Ni	60	72	No Gas	0.640	ppb	4.1	12054.09	
Ni	60	72	He	0.553	ppb	2.3	3130.35	
Cu	63	72	No Gas	1.152	ppb	5.9	51875.84	
Cu	63	72	He	1.070	ppb	3.0	16387.26	
Zn	66	72	No Gas	18.681	ppb	4.6	214753.15	
As	75	72	No Gas	0.271	ppb	50.7	2574.06	
Se	78	72	He	0.116	ppb	136.5	75.00	
Se	82	72	No Gas	0.144	ppb	37.0	176.60	
Mo	98	89	No Gas	0.061	ppb	9.4	2157.25	
Ag	107	89	No Gas	0.018	ppb	16.8	1222.28	
Cd	111	89	No Gas	-0.016	ppb	N/A	4641.56	
Sb	123	89	No Gas	0.111	ppb	12.0	5179.89	
Ba	137	115	No Gas	45.516	ppb	4.8	836031.23	
Tl	203	115	No Gas	0.004	ppb	13.0	271.11	
Pb	208	115	No Gas	0.091	ppb	3.7	10300.54	
U	238	115	No Gas	0.009	ppb	12.2	1326.74	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8589488.27	1.2	8181334.67	104.99	60	125	
Ge	72	No Gas	7276299.99	2.6	7270733.04	100.08	60	125	
Ge	72	He	944989.16	0.7	958105.21	98.63	60	125	
Y	89	No Gas	10489582.64	2.3	10023893.77	104.65	60	125	
Rh	103	No Gas	8661041.04	2.0	9143531.58	94.72	60	125	
In	115	No Gas	9426472.12	2.6	9650137.39	97.68	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407455-004 3X
File Name	046SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:44:35
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.008	ppb	47.7	33.33	
Al	27	72	No Gas	36.139	ppb	8.5	1501229.04	
V	51	72	He	0.197	ppb	1.8	2260.18	
Cr	52	72	No Gas	0.537	ppb	15.8	66880.01	
Mn	55	72	No Gas	13.435	ppb	9.2	1154244.71	
Co	59	72	He	0.041	ppb	9.2	872.25	
Ni	60	72	No Gas	0.258	ppb	6.8	5095.37	
Ni	60	72	He	0.260	ppb	2.9	1532.31	
Cu	63	72	No Gas	0.450	ppb	10.2	21542.08	
Cu	63	72	He	0.451	ppb	3.4	7326.34	
Zn	66	72	No Gas	36.486	ppb	8.0	414478.40	
As	75	72	No Gas	0.324	ppb	70.9	3212.32	
Se	78	72	He	0.150	ppb	53.5	79.33	
Se	82	72	No Gas	0.077	ppb	192.2	122.97	
Mo	98	89	No Gas	0.021	ppb	6.6	805.02	
Ag	107	89	No Gas	0.015	ppb	12.2	1060.04	
Cd	111	89	No Gas	0.013	ppb	124.1	4880.19	
Sb	123	89	No Gas	0.060	ppb	12.6	3362.65	
Ba	137	115	No Gas	37.992	ppb	5.6	708345.23	
Tl	203	115	No Gas	0.002	ppb	13.7	196.67	
Pb	208	115	No Gas	0.099	ppb	4.9	11318.66	
U	238	115	No Gas	0.006	ppb	10.9	1023.38	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8411935.50	2.3	8181334.67	102.82	60	125	
Ge	72	No Gas	7241421.66	2.4	7270733.04	99.6	60	125	
Ge	72	He	948176.80	0.7	958105.21	98.96	60	125	
Y	89	No Gas	10296253.76	3.2	10023893.77	102.72	60	125	
Rh	103	No Gas	8875461.04	0.1	9143531.58	97.07	60	125	
In	115	No Gas	9575484.34	0.6	9650137.39	99.23	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407455-004L 15X
File Name	047SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:46:32
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	39.2	16.67	
Al	27	72	No Gas	7.702	ppb	2.8	331550.06	
V	51	72	He	0.118	ppb	2.9	1447.85	
Cr	52	72	No Gas	0.373	ppb	10.8	55590.48	
Mn	55	72	No Gas	2.755	ppb	6.9	235440.16	
Co	59	72	He	0.009	ppb	6.8	232.23	
Ni	60	72	No Gas	0.058	ppb	8.3	1457.86	
Ni	60	72	He	0.063	ppb	4.2	444.45	
Cu	63	72	No Gas	0.090	ppb	4.8	6067.98	
Cu	63	72	He	0.087	ppb	6.1	1920.13	
Zn	66	72	No Gas	7.558	ppb	5.6	86214.94	
As	75	72	No Gas	0.157	ppb	46.7	1152.51	
Se	78	72	He	0.044	ppb	288.3	65.00	
Se	82	72	No Gas	-0.138	ppb	N/A	-40.67	
Mo	98	89	No Gas	0.009	ppb	38.9	402.16	
Ag	107	89	No Gas	0.010	ppb	9.6	802.25	
Cd	111	89	No Gas	-0.005	ppb	N/A	4723.30	
Sb	123	89	No Gas	0.043	ppb	19.4	2785.85	
Ba	137	115	No Gas	7.812	ppb	5.3	144886.40	
Tl	203	115	No Gas	0.000	ppb	N/A	126.67	
Pb	208	115	No Gas	0.020	ppb	1.1	2851.24	
U	238	115	No Gas	-0.003	ppb	N/A	277.78	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8317343.56	0.9	8181334.67	101.66	60	125	
Ge	72	No Gas	7105036.94	2.4	7270733.04	97.72	60	125	
Ge	72	He	931553.99	0.5	958105.21	97.23	60	125	
Y	89	No Gas	10392324.87	3.0	10023893.77	103.68	60	125	
Rh	103	No Gas	8997976.03	1.9	9143531.58	98.41	60	125	
In	115	No Gas	9509808.79	1.2	9650137.39	98.55	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	048_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:48:28
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	47.725	ppb	8.5	187307.12	95.45	
Al	27	72	No Gas	46.188	ppb	7.4	1853597.88	92.38	
V	51	72	He	51.280	ppb	1.8	503217.03	102.56	
Cr	52	72	No Gas	46.101	ppb	8.8	2830947.87	92.2	
Mn	55	72	No Gas	50.589	ppb	11.6	4204494.83	101.18	
Co	59	72	He	50.895	ppb	2.3	993568.47	101.79	
Ni	60	72	No Gas	47.487	ppb	8.6	829988.18	94.97	
Ni	60	72	He	50.004	ppb	1.5	268172.22	100.01	
Cu	63	72	No Gas	49.837	ppb	4.7	2065016.51	99.67	
Cu	63	72	He	52.435	ppb	1.5	755764.81	104.87	
Zn	66	72	No Gas	48.803	ppb	8.2	536656.56	97.61	
As	75	72	No Gas	49.941	ppb	7.1	594421.13	99.88	
Se	78	72	He	53.070	ppb	3.0	6508.17	106.14	
Se	82	72	No Gas	50.071	ppb	8.2	37522.18	100.14	
Mo	98	89	No Gas	48.733	ppb	5.1	1585786.97	97.47	
Ag	107	89	No Gas	50.468	ppb	6.5	2541098.72	100.94	
Cd	111	89	No Gas	47.895	ppb	6.9	539180.79	95.79	
Sb	123	89	No Gas	50.016	ppb	6.4	1658320.21	100.03	
Ba	137	115	No Gas	48.978	ppb	7.5	890434.88	97.96	
Tl	203	115	No Gas	51.017	ppb	8.2	1648264.21	102.03	
Pb	208	115	No Gas	49.613	ppb	7.9	5146361.74	99.23	
U	238	115	No Gas	50.469	ppb	8.6	4494789.54	100.94	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8236219.67	6.2	8181334.67	100.67	60	125	
Ge	72	No Gas	7007274.44	1.5	7270733.04	96.38	60	125	
Ge	72	He	927436.11	2.3	958105.21	96.8	60	125	
Y	89	No Gas	10150222.10	3.2	10023893.77	101.26	60	125	
Rh	103	No Gas	8859322.70	2.6	9143531.58	96.89	60	125	
In	115	No Gas	9336749.07	0.2	9650137.39	96.75	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	049_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:50:15
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.006	ppb	24.2	24.44	
Al	27	72	No Gas	-0.032	ppb	N/A	20838.67	
V	51	72	He	0.015	ppb	38.3	435.56	
Cr	52	72	No Gas	0.071	ppb	20.3	37245.11	
Mn	55	72	No Gas	0.010	ppb	11.3	4724.12	
Co	59	72	He	0.001	ppb	53.7	85.56	
Ni	60	72	No Gas	0.003	ppb	217.0	483.34	
Ni	60	72	He	-0.002	ppb	N/A	93.33	
Cu	63	72	No Gas	-0.008	ppb	N/A	1947.92	
Cu	63	72	He	-0.004	ppb	N/A	611.13	
Zn	66	72	No Gas	-0.048	ppb	N/A	1839.01	
As	75	72	No Gas	-0.029	ppb	N/A	-1105.04	
Se	78	72	He	-0.019	ppb	N/A	57.33	
Se	82	72	No Gas	-0.062	ppb	N/A	16.60	
Mo	98	89	No Gas	0.026	ppb	12.4	956.00	
Ag	107	89	No Gas	0.035	ppb	28.8	2047.94	
Cd	111	89	No Gas	-0.001	ppb	N/A	4673.55	
Sb	123	89	No Gas	0.041	ppb	9.8	2690.27	
Ba	137	115	No Gas	0.002	ppb	47.1	243.34	
Tl	203	115	No Gas	0.013	ppb	8.1	555.57	
Pb	208	115	No Gas	0.004	ppb	27.1	1194.46	
U	238	115	No Gas	0.000	ppb	N/A	463.34	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8109372.18	1.9	8181334.67	99.12	60	125	
Ge	72	No Gas	7149718.60	1.0	7270733.04	98.34	60	125	
Ge	72	He	932626.35	0.9	958105.21	97.34	60	125	
Y	89	No Gas	10193646.82	1.8	10023893.77	101.69	60	125	
Rh	103	No Gas	8777962.43	0.6	9143531.58	96	60	125	
In	115	No Gas	9297792.97	2.7	9650137.39	96.35	60	125	

7900 ICP-MS 200.8/6020A
Prep Blank (PB) Report

Sample Name	PBW-443640
File Name	050_PB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:52:12
Sample Type	PB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	91.2	7.78	
Al	27	72	No Gas	1.154	ppb	1.5	70287.85	
V	51	72	He	0.062	ppb	6.2	901.14	
Cr	52	72	No Gas	0.276	ppb	10.1	50995.34	
Mn	55	72	No Gas	0.029	ppb	10.2	6507.04	
Co	59	72	He	0.002	ppb	58.2	100.00	
Ni	60	72	No Gas	0.009	ppb	41.7	607.79	
Ni	60	72	He	0.012	ppb	49.2	172.22	
Cu	63	72	No Gas	0.008	ppb	34.5	2673.59	
Cu	63	72	He	0.007	ppb	18.6	766.69	
Zn	66	72	No Gas	0.050	ppb	25.9	2999.21	
As	75	72	No Gas	-0.002	ppb	N/A	-806.12	
Se	78	72	He	0.082	ppb	128.8	70.00	
Se	82	72	No Gas	-0.050	ppb	N/A	26.68	
Mo	98	89	No Gas	0.012	ppb	16.1	497.36	
Ag	107	89	No Gas	0.025	ppb	10.2	1516.75	
Cd	111	89	No Gas	-0.005	ppb	N/A	4628.00	
Sb	123	89	No Gas	0.053	ppb	24.8	3091.48	
Ba	137	115	No Gas	-0.001	ppb	N/A	195.56	
Tl	203	115	No Gas	0.004	ppb	9.1	278.89	
Pb	208	115	No Gas	0.005	ppb	16.8	1263.36	
U	238	115	No Gas	-0.003	ppb	N/A	236.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8329798.28	1.3	8181334.67	101.81	60	125	
Ge	72	No Gas	7307311.10	3.3	7270733.04	100.5	60	125	
Ge	72	He	935481.56	1.5	958105.21	97.64	60	125	
Y	89	No Gas	10190766.54	4.1	10023893.77	101.66	60	125	
Rh	103	No Gas	8924389.92	3.4	9143531.58	97.6	60	125	
In	115	No Gas	9398443.79	0.8	9650137.39	97.39	60	125	

7900 ICP-MS 200.8/6020A
Laboratory Control Sample (LCS) Report

Sample Name	LCSW-443640
File Name	051_LCS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:54:10
Sample Type	LCS
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	19.172	ppb	4.5	77096.71	95.86	
Al	27	72	No Gas	38.978	ppb	9.0	1627460.11	97.44	
V	51	72	He	20.200	ppb	0.9	200956.70	101	
Cr	52	72	No Gas	18.876	ppb	6.8	1222918.36	94.38	
Mn	55	72	No Gas	19.553	ppb	7.9	1688926.53	97.76	
Co	59	72	He	20.129	ppb	2.2	398028.14	100.65	
Ni	60	72	No Gas	18.606	ppb	7.1	337872.52	93.03	
Ni	60	72	He	19.991	ppb	2.9	108625.98	99.96	
Cu	63	72	No Gas	19.760	ppb	7.9	851610.76	98.8	
Cu	63	72	He	20.713	ppb	1.9	302745.82	103.56	
Zn	66	72	No Gas	19.034	ppb	6.0	218745.07	95.17	
As	75	72	No Gas	19.355	ppb	5.1	238675.30	96.78	
Se	78	72	He	20.538	ppb	1.2	2588.57	102.69	
Se	82	72	No Gas	18.935	ppb	6.5	14771.28	94.68	
Mo	98	89	No Gas	19.270	ppb	3.8	633770.21	96.35	
Ag	107	89	No Gas	20.426	ppb	5.2	1039561.28	102.13	
Cd	111	89	No Gas	18.952	ppb	3.7	218412.45	94.76	
Sb	123	89	No Gas	20.102	ppb	4.9	674278.20	100.51	
Ba	137	115	No Gas	20.714	ppb	5.9	377366.69	103.57	
Tl	203	115	No Gas	20.091	ppb	6.8	650215.75	100.46	
Pb	208	115	No Gas	19.870	ppb	6.5	2065065.00	99.35	
U	238	115	No Gas	20.167	ppb	6.5	1799731.25	100.84	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8411239.11	4.5	8181334.67	102.81	60	125	
Ge	72	No Gas	7276176.65	1.4	7270733.04	100.07	60	125	
Ge	72	He	939252.40	2.6	958105.21	98.03	60	125	
Y	89	No Gas	10254741.26	2.8	10023893.77	102.3	60	125	
Rh	103	No Gas	9026789.36	2.8	9143531.58	98.72	60	125	
In	115	No Gas	9354357.13	1.3	9650137.39	96.93	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407792-003
File Name	052SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:56:05
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.015	ppb	11.1	62.22	
Al	27	72	No Gas	39.025	ppb	6.6	1527441.92	
V	51	72	He	3.080	ppb	0.8	29441.34	
Cr	52	72	No Gas	1.369	ppb	13.6	112223.38	
Mn	55	72	No Gas	149.938	ppb	10.2	12113153.41	>LDR
Co	59	72	He	1.164	ppb	2.3	21988.09	
Ni	60	72	No Gas	2.005	ppb	10.4	34500.32	
Ni	60	72	He	1.211	ppb	2.7	6371.44	
Cu	63	72	No Gas	5.973	ppb	8.5	242821.63	
Cu	63	72	He	0.757	ppb	1.1	11172.19	
Zn	66	72	No Gas	19.423	ppb	7.5	209222.39	
As	75	72	No Gas	1.038	ppb	15.6	11312.22	
Se	78	72	He	3.359	ppb	5.8	451.68	
Se	82	72	No Gas	4.350	ppb	8.8	3227.80	
Mo	98	89	No Gas	7.411	ppb	4.6	234535.49	
Ag	107	89	No Gas	0.052	ppb	23.3	2785.86	
Cd	111	89	No Gas	0.006	ppb	316.4	4597.64	
Sb	123	89	No Gas	0.306	ppb	7.1	11125.72	
Ba	137	115	No Gas	36.282	ppb	6.0	620863.80	
Tl	203	115	No Gas	0.196	ppb	4.7	6092.56	
Pb	208	115	No Gas	0.083	ppb	6.6	8831.20	
U	238	115	No Gas	7.222	ppb	5.8	605700.20	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8251249.67	0.5	8181334.67	100.85	60	125	
Ge	72	No Gas	6827316.40	0.9	7270733.04	93.9	60	125	
Ge	72	He	895463.23	1.6	958105.21	93.46	60	125	
Y	89	No Gas	9866703.50	2.1	10023893.77	98.43	60	125	
Rh	103	No Gas	7759639.69	2.3	9143531.58	84.86	60	125	
In	115	No Gas	8790504.10	2.2	9650137.39	91.09	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407792-008
File Name	053SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:58:01
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.026	ppb	7.7	104.44	
Al	27	72	No Gas	2.992	ppb	4.3	137950.36	
V	51	72	He	0.599	ppb	3.3	6039.06	
Cr	52	72	No Gas	1.883	ppb	7.1	144014.11	
Mn	55	72	No Gas	9.548	ppb	7.2	782498.60	
Co	59	72	He	0.175	ppb	1.6	3414.86	
Ni	60	72	No Gas	3.181	ppb	6.5	55017.61	
Ni	60	72	He	2.335	ppb	1.4	12378.73	
Cu	63	72	No Gas	2.565	ppb	6.2	106549.08	
Cu	63	72	He	0.848	ppb	3.1	12627.85	
Zn	66	72	No Gas	20.235	ppb	5.5	219995.69	
As	75	72	No Gas	0.480	ppb	47.8	4900.29	
Se	78	72	He	0.157	ppb	52.0	77.00	
Se	82	72	No Gas	0.955	ppb	27.6	764.22	
Mo	98	89	No Gas	0.135	ppb	4.7	4513.67	
Ag	107	89	No Gas	0.039	ppb	4.8	2259.08	
Cd	111	89	No Gas	0.050	ppb	40.3	5239.34	
Sb	123	89	No Gas	0.146	ppb	18.7	6168.12	
Ba	137	115	No Gas	23.117	ppb	5.2	398457.60	
Tl	203	115	No Gas	0.005	ppb	116.3	292.24	
Pb	208	115	No Gas	0.102	ppb	8.6	10705.14	
U	238	115	No Gas	0.310	ppb	7.2	26609.18	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8370961.89	0.1	8181334.67	102.32	60	125	
Ge	72	No Gas	6888944.59	1.0	7270733.04	94.75	60	125	
Ge	72	He	909226.56	1.6	958105.21	94.9	60	125	
Y	89	No Gas	10185755.70	3.4	10023893.77	101.61	60	125	
Rh	103	No Gas	8235638.84	1.9	9143531.58	90.07	60	125	
In	115	No Gas	8850114.37	0.7	9650137.39	91.71	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407792-011
File Name	054SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 13:59:58
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	32.3	20.00	
Al	27	72	No Gas	38.860	ppb	2.6	1550963.20	
V	51	72	He	0.548	ppb	3.4	5596.66	
Cr	52	72	No Gas	1.129	ppb	6.3	100024.07	
Mn	55	72	No Gas	450.861	ppb	2.8	37147258.52	>LDR
Co	59	72	He	1.954	ppb	2.0	37844.64	
Ni	60	72	No Gas	4.149	ppb	3.9	72361.92	
Ni	60	72	He	3.545	ppb	1.9	18922.61	
Cu	63	72	No Gas	3.317	ppb	3.0	138543.62	
Cu	63	72	He	0.915	ppb	1.9	13709.97	
Zn	66	72	No Gas	286.770	ppb	5.8	3119353.42	>LDR
As	75	72	No Gas	4.526	ppb	8.1	52797.92	
Se	78	72	He	0.701	ppb	23.1	143.00	
Se	82	72	No Gas	1.759	ppb	10.8	1369.70	
Mo	98	89	No Gas	35.091	ppb	0.4	1124612.56	
Ag	107	89	No Gas	0.028	ppb	2.9	1652.32	
Cd	111	89	No Gas	0.043	ppb	68.4	5059.03	
Sb	123	89	No Gas	0.473	ppb	3.6	16729.26	
Ba	137	115	No Gas	71.601	ppb	4.4	1249798.42	
Tl	203	115	No Gas	0.239	ppb	5.8	7534.44	
Pb	208	115	No Gas	0.290	ppb	6.7	29621.28	
U	238	115	No Gas	4.590	ppb	4.6	392695.90	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8324373.00	4.3	8181334.67	101.75	60	125	
Ge	72	No Gas	6957321.67	2.1	7270733.04	95.69	60	125	
Ge	72	He	918444.86	2.0	958105.21	95.86	60	125	
Y	89	No Gas	9997098.21	5.3	10023893.77	99.73	60	125	
Rh	103	No Gas	8060089.68	1.9	9143531.58	88.15	60	125	
In	115	No Gas	8965086.59	3.8	9650137.39	92.9	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407794-001
File Name	055SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:01:53
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.031	ppb	24.7	117.78	
Al	27	72	No Gas	256.015	ppb	6.8	9493857.96	>LDR
V	51	72	He	1.750	ppb	1.6	16185.84	
Cr	52	72	No Gas	3.922	ppb	4.8	252247.04	
Mn	55	72	No Gas	523.538	ppb	6.1	40573442.83	>LDR
Co	59	72	He	14.819	ppb	2.4	268334.70	
Ni	60	72	No Gas	5.548	ppb	6.0	90871.88	
Ni	60	72	He	4.994	ppb	2.1	24927.38	
Cu	63	72	No Gas	29.652	ppb	7.1	1147859.02	
Cu	63	72	He	17.256	ppb	1.9	231045.65	
Zn	66	72	No Gas	473.868	ppb	5.4	4845030.22	>LDR
As	75	72	No Gas	3.410	ppb	5.8	37263.51	
Se	78	72	He	0.354	ppb	4.4	95.00	
Se	82	72	No Gas	0.684	ppb	18.6	535.07	
Mo	98	89	No Gas	4.230	ppb	3.2	129176.02	
Ag	107	89	No Gas	0.222	ppb	3.3	10729.79	
Cd	111	89	No Gas	3.695	ppb	3.0	43023.42	
Sb	123	89	No Gas	0.524	ppb	5.4	17510.21	
Ba	137	115	No Gas	60.443	ppb	8.3	993509.33	
Tl	203	115	No Gas	0.203	ppb	7.9	6060.32	
Pb	208	115	No Gas	56.078	ppb	7.2	5260595.97	
U	238	115	No Gas	9.125	ppb	7.7	735232.52	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7795367.19	2.3	8181334.67	95.28	60	125	
Ge	72	No Gas	6545310.16	2.4	7270733.04	90.02	60	125	
Ge	72	He	860074.15	2.1	958105.21	89.77	60	125	
Y	89	No Gas	9515990.73	4.2	10023893.77	94.93	60	125	
Rh	103	No Gas	7481101.37	2.3	9143531.58	81.82	60	125	
In	115	No Gas	8457183.27	3.2	9650137.39	87.64	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407794-003 5X
File Name	056SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:03:45
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	39.5	7.78	
Al	27	72	No Gas	3.566	ppb	10.3	165408.85	
V	51	72	He	0.209	ppb	3.8	2326.86	
Cr	52	72	No Gas	1.112	ppb	10.9	101132.03	
Mn	55	72	No Gas	205.574	ppb	7.8	17303167.65	>LDR
Co	59	72	He	0.077	ppb	5.9	1550.09	
Ni	60	72	No Gas	0.707	ppb	7.9	12953.79	
Ni	60	72	He	0.381	ppb	5.2	2145.72	
Cu	63	72	No Gas	1.688	ppb	5.1	73147.86	
Cu	63	72	He	0.465	ppb	2.0	7346.36	
Zn	66	72	No Gas	1.074	ppb	5.5	14289.49	
As	75	72	No Gas	0.099	ppb	75.3	442.90	
Se	78	72	He	0.017	ppb	258.7	61.33	
Se	82	72	No Gas	0.121	ppb	15.6	155.82	
Mo	98	89	No Gas	0.053	ppb	0.3	1795.46	
Ag	107	89	No Gas	0.030	ppb	8.8	1740.11	
Cd	111	89	No Gas	0.052	ppb	42.5	5161.34	
Sb	123	89	No Gas	0.068	ppb	33.6	3516.04	
Ba	137	115	No Gas	10.193	ppb	5.5	183447.73	
Tl	203	115	No Gas	-0.001	ppb	N/A	96.67	
Pb	208	115	No Gas	0.414	ppb	5.7	43161.80	
U	238	115	No Gas	0.000	ppb	97.9	521.13	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8420442.72	3.9	8181334.67	102.92	60	125	
Ge	72	No Gas	7111317.77	1.2	7270733.04	97.81	60	125	
Ge	72	He	925848.82	1.7	958105.21	96.63	60	125	
Y	89	No Gas	9982381.55	3.9	10023893.77	99.59	60	125	
Rh	103	No Gas	8687417.16	4.4	9143531.58	95.01	60	125	
In	115	No Gas	9238209.08	1.8	9650137.39	95.73	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407794-004 5X
File Name	057SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:05:41
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	73.3	10.00	
Al	27	72	No Gas	3.947	ppb	6.1	179925.72	
V	51	72	He	0.213	ppb	5.0	2332.42	
Cr	52	72	No Gas	1.358	ppb	10.4	115749.76	
Mn	55	72	No Gas	230.845	ppb	6.6	19356424.79	>LDR
Co	59	72	He	0.082	ppb	5.5	1626.77	
Ni	60	72	No Gas	0.819	ppb	7.2	14872.34	
Ni	60	72	He	0.543	ppb	5.8	2966.98	
Cu	63	72	No Gas	1.654	ppb	4.9	71394.67	
Cu	63	72	He	0.502	ppb	2.6	7771.03	
Zn	66	72	No Gas	1.667	ppb	3.6	20790.90	
As	75	72	No Gas	0.171	ppb	113.7	1271.91	
Se	78	72	He	-0.007	ppb	N/A	57.67	
Se	82	72	No Gas	0.207	ppb	31.6	220.22	
Mo	98	89	No Gas	0.048	ppb	7.3	1627.67	
Ag	107	89	No Gas	0.028	ppb	24.0	1621.22	
Cd	111	89	No Gas	0.039	ppb	21.2	4983.66	
Sb	123	89	No Gas	0.115	ppb	18.9	4993.17	
Ba	137	115	No Gas	10.225	ppb	4.3	180774.02	
Tl	203	115	No Gas	-0.002	ppb	N/A	72.22	
Pb	208	115	No Gas	0.181	ppb	4.3	18984.44	
U	238	115	No Gas	-0.001	ppb	N/A	441.12	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8164024.95	1.6	8181334.67	99.79	60	125	
Ge	72	No Gas	7082572.91	2.8	7270733.04	97.41	60	125	
Ge	72	He	912983.26	0.6	958105.21	95.29	60	125	
Y	89	No Gas	9905867.94	1.4	10023893.77	98.82	60	125	
Rh	103	No Gas	8480719.66	3.5	9143531.58	92.75	60	125	
In	115	No Gas	9073192.14	2.9	9650137.39	94.02	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407794-005
File Name	058SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:07:36
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	219.7	4.44	
Al	27	72	No Gas	1.741	ppb	4.2	91652.37	
V	51	72	He	0.048	ppb	6.5	761.14	
Cr	52	72	No Gas	0.386	ppb	5.2	56196.94	
Mn	55	72	No Gas	0.123	ppb	0.1	14114.78	
Co	59	72	He	0.003	ppb	33.6	118.89	
Ni	60	72	No Gas	0.080	ppb	7.3	1849.02	
Ni	60	72	He	0.068	ppb	7.2	474.45	
Cu	63	72	No Gas	6.882	ppb	5.6	290013.10	
Cu	63	72	He	7.020	ppb	0.5	103017.42	
Zn	66	72	No Gas	2.623	ppb	5.5	31357.22	
As	75	72	No Gas	0.131	ppb	60.5	821.28	
Se	78	72	He	0.067	ppb	65.8	68.33	
Se	82	72	No Gas	-0.056	ppb	N/A	20.88	
Mo	98	89	No Gas	0.014	ppb	19.8	552.79	
Ag	107	89	No Gas	0.015	ppb	6.3	995.59	
Cd	111	89	No Gas	0.088	ppb	15.3	5627.10	
Sb	123	89	No Gas	0.083	ppb	12.9	4036.17	
Ba	137	115	No Gas	0.112	ppb	4.9	2267.97	
Tl	203	115	No Gas	-0.001	ppb	N/A	102.22	
Pb	208	115	No Gas	0.093	ppb	3.8	10456.13	
U	238	115	No Gas	-0.005	ppb	N/A	73.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8025862.46	2.4	8181334.67	98.1	60	125	
Ge	72	No Gas	7077449.44	2.2	7270733.04	97.34	60	125	
Ge	72	He	938789.65	2.3	958105.21	97.98	60	125	
Y	89	No Gas	10099487.65	1.0	10023893.77	100.75	60	125	
Rh	103	No Gas	8983530.76	1.1	9143531.58	98.25	60	125	
In	115	No Gas	9419845.46	4.5	9650137.39	97.61	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407794-006 5X
File Name	059SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:09:33
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.017	ppb	19.5	65.56	
Al	27	72	No Gas	51.210	ppb	6.0	1882110.51	
V	51	72	He	1.141	ppb	2.1	10729.59	
Cr	52	72	No Gas	1.071	ppb	4.5	89135.73	
Mn	55	72	No Gas	374.900	ppb	5.9	28532917.76	>LDR
Co	59	72	He	0.197	ppb	6.7	3658.26	
Ni	60	72	No Gas	0.980	ppb	5.8	16089.26	
Ni	60	72	He	0.719	ppb	3.4	3702.71	
Cu	63	72	No Gas	10.041	ppb	6.6	383219.41	
Cu	63	72	He	1.134	ppb	1.2	15902.28	
Zn	66	72	No Gas	10.321	ppb	5.7	105737.83	
As	75	72	No Gas	1.622	ppb	6.9	17042.62	
Se	78	72	He	0.185	ppb	24.1	76.67	
Se	82	72	No Gas	0.104	ppb	135.0	129.49	
Mo	98	89	No Gas	0.185	ppb	1.4	5697.80	
Ag	107	89	No Gas	0.017	ppb	21.7	1034.49	
Cd	111	89	No Gas	0.037	ppb	102.1	4733.00	
Sb	123	89	No Gas	0.191	ppb	1.6	7148.58	
Ba	137	115	No Gas	23.089	ppb	6.1	378393.54	
Tl	203	115	No Gas	0.000	ppb	N/A	117.78	
Pb	208	115	No Gas	1.341	ppb	5.5	126017.53	
U	238	115	No Gas	0.007	ppb	20.6	995.60	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7667823.03	1.0	8181334.67	93.72	60	125	
Ge	72	No Gas	6427399.05	0.9	7270733.04	88.4	60	125	
Ge	72	He	867648.19	2.4	958105.21	90.56	60	125	
Y	89	No Gas	9478375.18	6.6	10023893.77	94.56	60	125	
Rh	103	No Gas	7641691.92	0.9	9143531.58	83.57	60	125	
In	115	No Gas	8416650.22	1.3	9650137.39	87.22	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	060_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:11:29
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	45.399	ppb	7.3	173823.04	90.8	
Al	27	72	No Gas	42.860	ppb	5.6	1757025.49	85.72	> +/-10%
V	51	72	He	50.421	ppb	1.2	496062.06	100.84	
Cr	52	72	No Gas	44.903	ppb	5.4	2816072.88	89.81	> +/-10%
Mn	55	72	No Gas	47.459	ppb	4.8	4026711.37	94.92	
Co	59	72	He	50.539	ppb	0.7	989012.32	101.08	
Ni	60	72	No Gas	46.234	ppb	6.6	825603.72	92.47	
Ni	60	72	He	49.156	ppb	1.3	264250.80	98.31	
Cu	63	72	No Gas	48.474	ppb	5.3	2050556.24	96.95	
Cu	63	72	He	51.722	ppb	0.8	747187.45	103.44	
Zn	66	72	No Gas	46.819	ppb	5.2	525911.53	93.64	
As	75	72	No Gas	48.349	ppb	5.0	587764.67	96.7	
Se	78	72	He	53.762	ppb	0.8	6608.88	107.52	
Se	82	72	No Gas	48.071	ppb	4.6	36785.96	96.14	
Mo	98	89	No Gas	48.563	ppb	9.4	1569671.07	97.13	
Ag	107	89	No Gas	49.339	ppb	7.9	2467490.32	98.68	
Cd	111	89	No Gas	48.031	ppb	7.4	537014.30	96.06	
Sb	123	89	No Gas	50.392	ppb	6.7	1659013.02	100.78	
Ba	137	115	No Gas	47.725	ppb	7.9	868085.26	95.45	
Tl	203	115	No Gas	49.485	ppb	7.4	1599550.84	98.97	
Pb	208	115	No Gas	48.446	ppb	6.9	5027440.53	96.89	
U	238	115	No Gas	47.827	ppb	8.8	4260810.25	95.65	

repeated

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8019234.40	2.1	8181334.67	98.02	60	125	
Ge	72	No Gas	7151910.83	4.4	7270733.04	98.37	60	125	
Ge	72	He	929442.05	1.6	958105.21	97.01	60	125	
Y	89	No Gas	10082470.99	1.0	10023893.77	100.58	60	125	
Rh	103	No Gas	8859578.82	3.3	9143531.58	96.89	60	125	
In	115	No Gas	9339928.80	1.3	9650137.39	96.79	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	061_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:13:15
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	50.6	12.22	
Al	27	72	No Gas	-0.084	ppb	N/A	18081.39	
V	51	72	He	0.001	ppb	92.0	292.23	
Cr	52	72	No Gas	0.007	ppb	328.5	32124.98	
Mn	55	72	No Gas	0.042	ppb	5.8	7210.73	
Co	59	72	He	0.002	ppb	58.2	91.11	
Ni	60	72	No Gas	0.010	ppb	7.7	598.90	
Ni	60	72	He	-0.002	ppb	N/A	94.44	
Cu	63	72	No Gas	0.039	ppb	7.2	3791.62	
Cu	63	72	He	0.038	ppb	8.3	1186.72	
Zn	66	72	No Gas	-0.046	ppb	N/A	1799.01	
As	75	72	No Gas	0.024	ppb	299.5	-470.31	
Se	78	72	He	0.014	ppb	310.5	60.00	
Se	82	72	No Gas	-0.049	ppb	N/A	25.84	
Mo	98	89	No Gas	0.026	ppb	13.7	921.97	
Ag	107	89	No Gas	0.033	ppb	22.5	1883.47	
Cd	111	89	No Gas	0.013	ppb	157.2	4730.07	
Sb	123	89	No Gas	0.041	ppb	9.2	2628.04	
Ba	137	115	No Gas	0.000	ppb	86.8	206.67	
Tl	203	115	No Gas	0.010	ppb	4.5	461.12	
Pb	208	115	No Gas	0.005	ppb	15.7	1227.80	
U	238	115	No Gas	-0.001	ppb	N/A	391.12	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7690896.08	1.5	8181334.67	94.01	60	125	
Ge	72	No Gas	6907368.89	3.6	7270733.04	95	60	125	
Ge	72	He	912073.89	1.7	958105.21	95.2	60	125	
Y	89	No Gas	9977007.94	0.9	10023893.77	99.53	60	125	
Rh	103	No Gas	8568032.16	2.3	9143531.58	93.71	60	125	
In	115	No Gas	9165319.36	2.6	9650137.39	94.98	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	062_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:15:12
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	43.167	ppb	9.0	168695.12	86.33	> +/-10%
Al	27	72	No Gas	43.343	ppb	7.7	1700546.88	86.69	> +/-10%
V	51	72	He	48.877	ppb	1.7	482267.10	97.75	
Cr	52	72	No Gas	46.744	ppb	9.0	2803929.33	93.49	
Mn	55	72	No Gas	47.598	ppb	9.1	3864431.86	95.2	
Co	59	72	He	49.706	ppb	2.1	975703.22	99.41	
Ni	60	72	No Gas	47.030	ppb	9.2	803220.97	94.06	
Ni	60	72	He	48.560	ppb	0.8	261862.57	97.12	
Cu	63	72	No Gas	49.769	ppb	7.0	2015357.08	99.54	
Cu	63	72	He	50.334	ppb	0.6	729469.92	100.67	
Zn	66	72	No Gas	48.093	ppb	8.2	516737.22	96.19	
As	75	72	No Gas	49.967	ppb	7.3	581125.04	99.93	
Se	78	72	He	52.228	ppb	2.9	6440.47	104.46	
Se	82	72	No Gas	50.388	ppb	7.9	36892.29	100.78	
Mo	98	89	No Gas	45.421	ppb	9.0	1500454.20	90.84	
Ag	107	89	No Gas	48.108	ppb	8.2	2458589.83	96.22	
Cd	111	89	No Gas	45.878	ppb	9.0	524396.22	91.76	
Sb	123	89	No Gas	47.497	ppb	7.0	1597978.97	94.99	
Ba	137	115	No Gas	48.694	ppb	9.3	866268.68	97.39	
Tl	203	115	No Gas	50.060	ppb	9.5	1582668.06	100.12	
Pb	208	115	No Gas	48.764	ppb	9.1	4951269.28	97.53	
U	238	115	No Gas	50.013	ppb	10.6	4357364.83	100.03	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8187773.29	0.8	8181334.67	100.08	60	125	
Ge	72	No Gas	6847760.56	1.2	7270733.04	94.18	60	125	
Ge	72	He	932413.40	2.1	958105.21	97.32	60	125	
Y	89	No Gas	10303273.20	0.7	10023893.77	102.79	60	125	
Rh	103	No Gas	8654652.15	0.9	9143531.58	94.65	60	125	
In	115	No Gas	9149261.31	2.9	9650137.39	94.81	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	063_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:16:58
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	31.3	13.33	
Al	27	72	No Gas	-0.085	ppb	N/A	18330.70	
V	51	72	He	0.001	ppb	399.7	290.00	
Cr	52	72	No Gas	0.013	ppb	129.1	33004.76	
Mn	55	72	No Gas	0.041	ppb	6.8	7206.28	
Co	59	72	He	0.003	ppb	31.0	110.00	
Ni	60	72	No Gas	0.002	ppb	160.2	454.45	
Ni	60	72	He	0.000	ppb	337386.3	103.33	
Cu	63	72	No Gas	0.021	ppb	17.7	3110.35	
Cu	63	72	He	0.017	ppb	6.2	903.37	
Zn	66	72	No Gas	-0.062	ppb	N/A	1652.33	
As	75	72	No Gas	-0.051	ppb	N/A	-1344.06	
Se	78	72	He	0.001	ppb	5344.6	59.00	
Se	82	72	No Gas	-0.096	ppb	N/A	-11.07	
Mo	98	89	No Gas	0.029	ppb	16.6	990.59	
Ag	107	89	No Gas	0.034	ppb	15.1	1871.25	
Cd	111	89	No Gas	0.023	ppb	77.5	4681.94	
Sb	123	89	No Gas	0.046	ppb	14.3	2689.16	
Ba	137	115	No Gas	0.001	ppb	226.2	210.00	
Tl	203	115	No Gas	0.011	ppb	12.7	473.34	
Pb	208	115	No Gas	0.005	ppb	15.7	1287.80	
U	238	115	No Gas	-0.001	ppb	N/A	437.78	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7678272.47	3.4	8181334.67	93.85	60	125	
Ge	72	No Gas	7007890.28	2.8	7270733.04	96.38	60	125	
Ge	72	He	919308.05	1.2	958105.21	95.95	60	125	
Y	89	No Gas	9639511.01	3.1	10023893.77	96.17	60	125	
Rh	103	No Gas	8635152.43	2.7	9143531.58	94.44	60	125	
In	115	No Gas	9161846.30	1.2	9650137.39	94.94	60	125	

7900 ICP-MS 200.8/6020A
Reference Sample Report

Sample Name	R2407808-001
File Name	064_ARF.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:18:55
Sample Type	AllRef
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS
Be	9	45	No Gas	0.002	ppb	106.3	8.89
Al	27	72	No Gas	1.051	ppb	2.4	64091.89
Cr	52	72	No Gas	0.621	ppb	4.6	70691.79
Mn	55	72	No Gas	0.380	ppb	4.3	35774.05
Ni	60	72	No Gas	0.117	ppb	2.1	2496.89
Cu	63	72	No Gas	0.082	ppb	9.2	5707.84
Zn	66	72	No Gas	3.623	ppb	2.3	42448.62
As	75	72	No Gas	0.001	ppb	3482.6	-737.78
Se	82	72	No Gas	-0.061	ppb	N/A	16.30
Mo	98	89	No Gas	0.023	ppb	15.6	824.40
Ag	107	89	No Gas	0.010	ppb	12.1	763.36
Cd	111	89	No Gas	0.014	ppb	114.3	4754.11
Sb	123	89	No Gas	0.028	ppb	26.8	2206.85
Ba	137	115	No Gas	0.114	ppb	6.6	2281.31
Tl	203	115	No Gas	0.002	ppb	29.1	213.33
Pb	208	115	No Gas	0.006	ppb	7.3	1423.36
U	238	115	No Gas	-0.004	ppb	N/A	162.22
V	51	72	He	0.005	ppb	54.3	330.01
Co	59	72	He	0.004	ppb	21.5	140.00
Ni	60	72	He	0.134	ppb	8.5	826.69
Cu	63	72	He	0.085	ppb	11.6	1905.69
Se	78	72	He	-0.030	ppb	N/A	56.00

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High
Sc	45	No Gas	7837396.08	4.9	8181334.67	95.8	60	125
Ge	72	No Gas	7085430.00	2.9	7270733.04	97.45	60	125
Ge	72	He	932106.32	1.6	958105.21	97.29	60	125
Y	89	No Gas	10005304.05	3.5	10023893.77	99.81	60	125
Rh	103	No Gas	8660348.55	4.2	9143531.58	94.72	60	125
In	115	No Gas	9349841.57	1.1	9650137.39	96.89	60	125

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407808-001S
File Name	065_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:20:53
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	064_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	17.498	ppb	2.8	68933.77	0.002	87.48	
Al	27	No Gas	36.497	ppb	6.6	1472217.82	1.051	88.9	
V	51	He	19.715	ppb	0.8	194278.91	0.005	98.55	
Cr	52	No Gas	19.535	ppb	5.3	1221295.51	0.621	94.73	
Mn	55	No Gas	20.290	ppb	8.6	1691771.57	0.38	99.55	
Co	59	He	19.719	ppb	0.7	386315.34	0.004	98.58	
Ni	60	No Gas	19.146	ppb	6.0	335715.01	0.117	95.17	
Ni	60	He	19.665	ppb	1.1	105880.60	0.134	97.67	
Cu	63	No Gas	20.253	ppb	5.5	842774.08	0.082	100.85	
Cu	63	He	20.745	ppb	1.0	300340.60	0.085	103.28	
Zn	66	No Gas	23.126	ppb	5.9	256127.62	3.623	97.9	
As	75	No Gas	19.765	ppb	4.7	235400.91	0.001	98.82	
Se	78	He	20.683	ppb	2.0	2581.57	-0.03	103.57	
Se	82	No Gas	19.450	ppb	4.4	14650.08	-0.061	97.55	
Mo	98	No Gas	19.711	ppb	3.1	638166.86	0.023	98.45	
Ag	107	No Gas	19.730	ppb	3.6	988392.39	0.01	98.6	
Cd	111	No Gas	19.080	ppb	3.5	216440.56	0.014	95.34	
Sb	123	No Gas	20.397	ppb	3.1	673322.87	0.028	101.84	
Ba	137	No Gas	20.258	ppb	3.1	366196.45	0.114	100.71	
Tl	203	No Gas	19.843	ppb	3.6	637363.08	0.002	99.2	
Pb	208	No Gas	19.586	ppb	4.9	2020053.34	0.006	97.9	
U	238	No Gas	20.275	ppb	6.1	1794779.86	-0.004	101.39	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8244219.95	4.5	8181334.67	100.77	60	125	
Ge	72	No Gas	7031536.39	1.8	7270733.04	96.71	60	125	
Ge	72	He	930238.19	1.3	958105.21	97.09	60	125	
Y	89	No Gas	10095711.27	1.5	10023893.77	100.72	60	125	
Rh	103	No Gas	8910329.64	1.2	9143531.58	97.45	60	125	
In	115	No Gas	9281387.41	2.5	9650137.39	96.18	60	125	

7900 ICP-MS 200.8/6020A
Matrix Spike Duplicate (MSD) Sample Report

Sample Name	R2407808-001SD
File Name	066_SpD.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:22:48
Sample Type	SpkDup
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	065_ Spk.d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	RPD	Flag
Be	9	No Gas	16.898	ppb	6.8	66750.26	17.498	3.49	
Al	27	No Gas	35.255	ppb	3.6	1410506.09	36.497	3.46	
V	51	He	19.734	ppb	2.0	195271.54	19.715	0.1	
Cr	52	No Gas	19.783	ppb	7.1	1224804.71	19.535	1.26	
Mn	55	No Gas	21.009	ppb	8.5	1736077.54	20.29	3.49	
Co	59	He	20.079	ppb	2.5	394953.42	19.719	1.81	
Ni	60	No Gas	19.053	ppb	9.1	331022.81	19.146	0.49	
Ni	60	He	19.788	ppb	2.6	106967.72	19.665	0.62	
Cu	63	No Gas	20.428	ppb	7.5	842276.76	20.253	0.86	
Cu	63	He	20.377	ppb	1.9	296267.77	20.745	1.79	
Zn	66	No Gas	22.283	ppb	7.2	244647.93	23.126	3.72	
As	75	No Gas	20.006	ppb	8.2	236132.42	19.765	1.22	
Se	78	He	20.908	ppb	3.5	2620.24	20.683	1.08	
Se	82	No Gas	19.932	ppb	6.9	14873.72	19.45	2.45	
Mo	98	No Gas	19.820	ppb	8.1	643541.86	19.711	0.55	
Ag	107	No Gas	20.656	ppb	8.0	1037661.17	19.73	4.59	
Cd	111	No Gas	18.987	ppb	8.9	216010.44	19.08	0.49	
Sb	123	No Gas	20.245	ppb	7.2	670278.15	20.397	0.75	
Ba	137	No Gas	20.262	ppb	8.4	373368.09	20.258	0.02	
Tl	203	No Gas	19.501	ppb	8.6	638412.34	19.843	1.74	
Pb	208	No Gas	19.310	ppb	7.3	2030232.16	19.586	1.42	
U	238	No Gas	20.365	ppb	8.7	1837915.27	20.275	0.45	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8274786.62	1.9	8181334.67	101.14	60	125	
Ge	72	No Gas	6966361.39	1.1	7270733.04	95.81	60	125	
Ge	72	He	934218.75	1.1	958105.21	97.51	60	125	
Y	89	No Gas	10132576.26	1.1	10023893.77	101.08	60	125	
Rh	103	No Gas	8628481.60	2.0	9143531.58	94.37	60	125	
In	115	No Gas	9473871.57	2.6	9650137.39	98.17	60	125	

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407808-001A
File Name	067_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:24:44
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	064_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	18.906	ppb	3.1	72327.30	0.002	94.52	
Al	27	No Gas	39.263	ppb	4.8	1559225.49	1.051	95.64	
V	51	He	22.253	ppb	1.1	217470.31	0.005	111.24	
Cr	52	No Gas	23.509	ppb	2.8	1440631.12	0.621	114	
Mn	55	No Gas	22.680	ppb	1.9	1861614.09	0.38	111.28	
Co	59	He	22.449	ppb	1.6	436151.08	0.004	112.22	
Ni	60	No Gas	22.687	ppb	3.5	391701.60	0.117	112.77	
Ni	60	He	23.738	ppb	1.3	126726.33	0.134	117.9	
Cu	63	No Gas	22.987	ppb	3.2	941752.83	0.082	114.46	
Cu	63	He	23.197	ppb	1.0	333043.54	0.085	115.49	
Zn	66	No Gas	25.557	ppb	2.8	278520.76	3.623	108.19	
As	75	No Gas	22.480	ppb	2.9	263749.32	0.001	112.39	
Se	78	He	22.623	ppb	1.9	2794.61	-0.03	113.28	
Se	82	No Gas	22.253	ppb	2.8	16495.86	-0.061	111.6	
Mo	98	No Gas	22.186	ppb	5.7	711293.54	0.023	110.8	
Ag	107	No Gas	20.656	ppb	5.3	1024521.31	0.01	103.23	
Cd	111	No Gas	21.751	ppb	5.7	243706.89	0.014	108.68	
Sb	123	No Gas	22.619	ppb	6.9	739320.84	0.028	112.94	
Ba	137	No Gas	20.378	ppb	3.5	372581.05	0.114	101.31	
Tl	203	No Gas	21.212	ppb	4.1	688601.76	0.002	106.05	
Pb	208	No Gas	21.444	ppb	3.8	2235590.19	0.006	107.18	
U	238	No Gas	22.656	ppb	2.4	2028685.82	-0.004	113.3	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8009460.51	2.1	8181334.67	97.9	60	125	
Ge	72	No Gas	6918354.59	3.3	7270733.04	95.15	60	125	
Ge	72	He	922678.26	1.4	958105.21	96.3	60	125	
Y	89	No Gas	10001455.16	1.6	10023893.77	99.78	60	125	
Rh	103	No Gas	8979220.20	2.1	9143531.58	98.2	60	125	
In	115	No Gas	9387889.63	5.3	9650137.39	97.28	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407808-001L 5X
File Name	068SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:26:39
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	38.4	12.22	
Al	27	72	No Gas	0.406	ppb	0.8	38498.89	
V	51	72	He	0.062	ppb	6.0	864.47	
Cr	52	72	No Gas	0.303	ppb	10.7	51535.23	
Mn	55	72	No Gas	0.124	ppb	5.2	14309.42	
Co	59	72	He	0.002	ppb	46.8	100.00	
Ni	60	72	No Gas	0.029	ppb	14.5	941.15	
Ni	60	72	He	0.030	ppb	1.3	258.89	
Cu	63	72	No Gas	0.014	ppb	15.0	2864.74	
Cu	63	72	He	0.013	ppb	18.0	832.25	
Zn	66	72	No Gas	0.679	ppb	4.6	9942.42	
As	75	72	No Gas	0.005	ppb	789.8	-694.61	
Se	78	72	He	0.007	ppb	428.4	58.67	
Se	82	72	No Gas	-0.048	ppb	N/A	27.99	
Mo	98	89	No Gas	0.019	ppb	11.0	730.71	
Ag	107	89	No Gas	0.040	ppb	42.1	2277.99	
Cd	111	89	No Gas	0.021	ppb	132.3	4896.60	
Sb	123	89	No Gas	0.085	ppb	5.4	4139.53	
Ba	137	115	No Gas	0.025	ppb	1.3	645.57	
Tl	203	115	No Gas	0.008	ppb	26.0	395.56	
Pb	208	115	No Gas	0.004	ppb	24.4	1111.14	
U	238	115	No Gas	-0.002	ppb	N/A	320.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8192586.06	1.1	8181334.67	100.14	60	125	
Ge	72	No Gas	7137451.66	0.5	7270733.04	98.17	60	125	
Ge	72	He	903856.94	1.0	958105.21	94.34	60	125	
Y	89	No Gas	10159274.88	5.1	10023893.77	101.35	60	125	
Rh	103	No Gas	8736243.26	2.7	9143531.58	95.55	60	125	
In	115	No Gas	9259611.02	0.2	9650137.39	95.95	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407808-002
File Name	069SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:28:37
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	70.1	6.67	
Al	27	72	No Gas	4.022	ppb	7.2	173746.31	
V	51	72	He	0.136	ppb	1.8	1595.65	
Cr	52	72	No Gas	0.877	ppb	7.5	81905.74	
Mn	55	72	No Gas	47.689	ppb	6.5	3798800.82	
Co	59	72	He	0.058	ppb	0.4	1172.27	
Ni	60	72	No Gas	0.440	ppb	2.9	7782.18	
Ni	60	72	He	0.241	ppb	6.2	1378.96	
Cu	63	72	No Gas	1.335	ppb	6.2	55171.34	
Cu	63	72	He	1.059	ppb	1.1	15728.72	
Zn	66	72	No Gas	3.033	ppb	4.0	34079.10	
As	75	72	No Gas	0.760	ppb	27.6	7972.20	
Se	78	72	He	0.094	ppb	62.3	70.00	
Se	82	72	No Gas	0.127	ppb	74.8	152.83	
Mo	98	89	No Gas	0.165	ppb	1.2	5393.84	
Ag	107	89	No Gas	0.017	ppb	17.9	1085.60	
Cd	111	89	No Gas	0.014	ppb	90.8	4761.40	
Sb	123	89	No Gas	0.083	ppb	4.1	4018.38	
Ba	137	115	No Gas	11.489	ppb	4.3	207777.58	
Tl	203	115	No Gas	0.003	ppb	26.1	214.45	
Pb	208	115	No Gas	0.023	ppb	7.5	3172.38	
U	238	115	No Gas	0.055	ppb	6.5	5368.92	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8139917.73	3.6	8181334.67	99.49	60	125	
Ge	72	No Gas	6723716.40	4.0	7270733.04	92.48	60	125	
Ge	72	He	916236.94	1.3	958105.21	95.63	60	125	
Y	89	No Gas	10014985.99	4.1	10023893.77	99.91	60	125	
Rh	103	No Gas	8543734.66	3.1	9143531.58	93.44	60	125	
In	115	No Gas	9279703.80	1.9	9650137.39	96.16	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407808-003
File Name	070SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:30:32
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	4.8	13.33	
Al	27	72	No Gas	8.864	ppb	8.7	366197.97	
V	51	72	He	0.371	ppb	0.5	3787.18	
Cr	52	72	No Gas	0.606	ppb	17.0	67681.93	
Mn	55	72	No Gas	43.243	ppb	9.0	3524430.21	
Co	59	72	He	0.193	ppb	1.5	3699.37	
Ni	60	72	No Gas	1.532	ppb	12.3	26658.78	
Ni	60	72	He	0.660	ppb	2.8	3515.99	
Cu	63	72	No Gas	1.959	ppb	8.3	81751.61	
Cu	63	72	He	0.525	ppb	3.0	7951.13	
Zn	66	72	No Gas	2.612	ppb	8.4	30346.16	
As	75	72	No Gas	1.004	ppb	13.4	11039.24	
Se	78	72	He	0.088	ppb	38.6	67.67	
Se	82	72	No Gas	0.504	ppb	9.2	431.40	
Mo	98	89	No Gas	0.698	ppb	7.7	22181.85	
Ag	107	89	No Gas	0.013	ppb	14.0	884.48	
Cd	111	89	No Gas	0.035	ppb	12.3	4916.43	
Sb	123	89	No Gas	0.116	ppb	10.1	5008.71	
Ba	137	115	No Gas	24.117	ppb	7.0	422384.98	
Tl	203	115	No Gas	0.002	ppb	47.1	181.11	
Pb	208	115	No Gas	0.052	ppb	5.7	5920.55	
U	238	115	No Gas	0.570	ppb	7.9	49389.59	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8187414.12	3.9	8181334.67	100.07	60	125	
Ge	72	No Gas	6885249.72	2.0	7270733.04	94.7	60	125	
Ge	72	He	895673.78	0.4	958105.21	93.48	60	125	
Y	89	No Gas	9867841.00	1.1	10023893.77	98.44	60	125	
Rh	103	No Gas	8140962.17	2.1	9143531.58	89.04	60	125	
In	115	No Gas	9000890.20	2.2	9650137.39	93.27	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407879-005
File Name	071SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:32:29
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	58.3	5.56	
Al	27	72	No Gas	2.507	ppb	7.6	117217.60	
V	51	72	He	3.137	ppb	0.8	30133.89	
Cr	52	72	No Gas	8.437	ppb	7.1	526712.06	
Mn	55	72	No Gas	0.527	ppb	8.3	46004.70	
Co	59	72	He	0.102	ppb	1.5	1989.03	
Ni	60	72	No Gas	8.517	ppb	7.1	144353.04	
Ni	60	72	He	8.271	ppb	1.7	43134.13	
Cu	63	72	No Gas	1.667	ppb	9.0	68949.96	
Cu	63	72	He	0.639	ppb	3.5	9576.59	
Zn	66	72	No Gas	8.357	ppb	7.8	90778.68	
As	75	72	No Gas	2.198	ppb	12.6	24603.82	
Se	78	72	He	2.882	ppb	3.6	397.68	
Se	82	72	No Gas	3.522	ppb	7.0	2610.39	
Mo	98	89	No Gas	11.336	ppb	2.7	364779.51	
Ag	107	89	No Gas	0.012	ppb	14.4	865.59	
Cd	111	89	No Gas	0.027	ppb	89.4	4913.42	
Sb	123	89	No Gas	0.173	ppb	9.4	6980.71	
Ba	137	115	No Gas	27.495	ppb	5.3	492256.68	
Tl	203	115	No Gas	0.018	ppb	9.3	702.24	
Pb	208	115	No Gas	0.005	ppb	15.3	1240.02	
U	238	115	No Gas	9.842	ppb	4.0	863569.37	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8005491.91	2.7	8181334.67	97.85	60	125	
Ge	72	No Gas	6789113.06	1.6	7270733.04	93.38	60	125	
Ge	72	He	900019.24	1.2	958105.21	93.94	60	125	
Y	89	No Gas	10030864.88	2.8	10023893.77	100.07	60	125	
Rh	103	No Gas	8240513.56	2.8	9143531.58	90.12	60	125	
In	115	No Gas	9192866.86	2.0	9650137.39	95.26	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407879-006
File Name	072SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:34:26
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	79.5	6.67	
Al	27	72	No Gas	1.726	ppb	9.6	89894.59	
V	51	72	He	0.114	ppb	0.7	1372.29	
Cr	52	72	No Gas	0.555	ppb	2.0	65715.69	
Mn	55	72	No Gas	0.150	ppb	0.6	16235.92	
Co	59	72	He	0.003	ppb	24.7	120.00	
Ni	60	72	No Gas	0.083	ppb	7.6	1865.68	
Ni	60	72	He	0.095	ppb	5.9	597.79	
Cu	63	72	No Gas	0.057	ppb	8.3	4598.53	
Cu	63	72	He	0.053	ppb	5.2	1400.08	
Zn	66	72	No Gas	1.013	ppb	3.3	13398.64	
As	75	72	No Gas	0.025	ppb	372.3	-468.78	
Se	78	72	He	0.033	ppb	308.2	62.00	
Se	82	72	No Gas	-0.086	ppb	N/A	-0.71	
Mo	98	89	No Gas	0.014	ppb	21.3	548.20	
Ag	107	89	No Gas	0.008	ppb	8.5	681.13	
Cd	111	89	No Gas	0.027	ppb	39.1	4908.04	
Sb	123	89	No Gas	0.044	ppb	22.8	2752.51	
Ba	137	115	No Gas	0.055	ppb	14.0	1227.84	
Tl	203	115	No Gas	-0.001	ppb	N/A	105.56	
Pb	208	115	No Gas	0.008	ppb	9.3	1630.05	
U	238	115	No Gas	-0.004	ppb	N/A	177.78	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8656722.43	2.8	8181334.67	105.81	60	125	
Ge	72	No Gas	6991140.70	4.1	7270733.04	96.15	60	125	
Ge	72	He	907262.40	1.8	958105.21	94.69	60	125	
Y	89	No Gas	10024813.77	1.3	10023893.77	100.01	60	125	
Rh	103	No Gas	8901785.76	3.5	9143531.58	97.36	60	125	
In	115	No Gas	9518038.23	2.3	9650137.39	98.63	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407879-011
File Name	073SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:36:24
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.013	ppb	37.7	53.33	
Al	27	72	No Gas	88.912	ppb	7.2	3409289.59	
V	51	72	He	3.658	ppb	1.1	34661.96	
Cr	52	72	No Gas	1.481	ppb	8.0	117345.05	
Mn	55	72	No Gas	13.114	ppb	5.7	1049339.02	
Co	59	72	He	0.241	ppb	1.3	4564.07	
Ni	60	72	No Gas	1.681	ppb	4.8	28611.49	
Ni	60	72	He	1.228	ppb	0.6	6407.00	
Cu	63	72	No Gas	3.631	ppb	4.4	146515.73	
Cu	63	72	He	0.602	ppb	3.1	8945.05	
Zn	66	72	No Gas	25.222	ppb	5.1	267477.18	
As	75	72	No Gas	1.571	ppb	12.2	17267.69	
Se	78	72	He	3.816	ppb	3.7	501.34	
Se	82	72	No Gas	4.496	ppb	4.2	3290.78	
Mo	98	89	No Gas	10.505	ppb	4.8	330647.52	
Ag	107	89	No Gas	0.013	ppb	12.3	882.25	
Cd	111	89	No Gas	0.028	ppb	79.5	4805.86	
Sb	123	89	No Gas	0.195	ppb	8.0	7510.99	
Ba	137	115	No Gas	35.689	ppb	3.6	592124.34	
Tl	203	115	No Gas	0.018	ppb	4.6	657.80	
Pb	208	115	No Gas	0.090	ppb	2.2	9186.89	
U	238	115	No Gas	7.640	ppb	4.7	621402.48	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8041356.63	4.2	8181334.67	98.29	60	125	
Ge	72	No Gas	6728716.40	3.1	7270733.04	92.55	60	125	
Ge	72	He	888631.11	1.5	958105.21	92.75	60	125	
Y	89	No Gas	9808852.39	4.1	10023893.77	97.85	60	125	
Rh	103	No Gas	8090442.74	2.8	9143531.58	88.48	60	125	
In	115	No Gas	8517007.16	2.2	9650137.39	88.26	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	074_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:38:21
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	44.797	ppb	8.0	177738.35	89.59	> +/-10%
Al	27	72	No Gas	42.809	ppb	11.2	1720562.53	85.62	> +/-10%
V	51	72	He	50.517	ppb	2.1	490009.41	101.03	
Cr	52	72	No Gas	46.540	ppb	6.5	2859564.26	93.08	
Mn	55	72	No Gas	49.770	ppb	13.8	4134901.08	99.54	
Co	59	72	He	51.557	ppb	2.0	994857.22	103.11	
Ni	60	72	No Gas	47.569	ppb	10.6	831640.02	95.14	
Ni	60	72	He	51.350	ppb	1.5	272156.09	102.7	
Cu	63	72	No Gas	47.766	ppb	11.1	1980316.80	95.53	
Cu	63	72	He	52.672	ppb	1.0	750378.79	105.34	
Zn	66	72	No Gas	47.689	ppb	12.3	524503.94	95.38	
As	75	72	No Gas	49.149	ppb	10.9	585153.09	98.3	
Se	78	72	He	52.927	ppb	2.0	6417.13	105.85	
Se	82	72	No Gas	49.806	ppb	10.3	37338.37	99.61	
Mo	98	89	No Gas	48.608	ppb	6.2	1631337.63	97.22	
Ag	107	89	No Gas	47.697	ppb	4.3	2476254.42	95.39	
Cd	111	89	No Gas	45.658	ppb	6.6	530231.53	91.32	
Sb	123	89	No Gas	49.207	ppb	7.2	1682090.60	98.41	
Ba	137	115	No Gas	48.730	ppb	7.4	879316.82	97.46	
Tl	203	115	No Gas	50.403	ppb	7.0	1616365.56	100.81	
Pb	208	115	No Gas	48.698	ppb	7.9	5013921.15	97.4	
U	238	115	No Gas	49.616	ppb	5.7	4386251.21	99.23	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8307991.89	1.8	8181334.67	101.55	60	125	
Ge	72	No Gas	7024368.61	2.2	7270733.04	96.61	60	125	
Ge	72	He	916465.73	1.3	958105.21	95.65	60	125	
Y	89	No Gas	10464094.31	1.2	10023893.77	104.39	60	125	
Rh	103	No Gas	8936166.86	2.9	9143531.58	97.73	60	125	
In	115	No Gas	9268241.30	0.8	9650137.39	96.04	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	075_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:40:07
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	13.5	15.56	
Al	27	72	No Gas	-0.078	ppb	N/A	18711.32	
V	51	72	He	0.048	ppb	4.1	734.46	
Cr	52	72	No Gas	0.111	ppb	24.8	39094.58	
Mn	55	72	No Gas	0.049	ppb	0.8	7885.53	
Co	59	72	He	0.002	ppb	40.5	86.67	
Ni	60	72	No Gas	0.004	ppb	25.4	501.12	
Ni	60	72	He	-0.003	ppb	N/A	87.78	
Cu	63	72	No Gas	-0.007	ppb	N/A	1965.70	
Cu	63	72	He	-0.002	ppb	N/A	614.46	
Zn	66	72	No Gas	-0.054	ppb	N/A	1751.22	
As	75	72	No Gas	0.070	ppb	70.0	94.07	
Se	78	72	He	0.001	ppb	4814.7	58.00	
Se	82	72	No Gas	-0.150	ppb	N/A	-50.44	
Mo	98	89	No Gas	0.029	ppb	19.6	1031.70	
Ag	107	89	No Gas	0.032	ppb	24.3	1856.80	
Cd	111	89	No Gas	0.012	ppb	218.5	4769.92	
Sb	123	89	No Gas	0.046	ppb	11.1	2812.52	
Ba	137	115	No Gas	0.002	ppb	28.7	230.00	
Tl	203	115	No Gas	0.010	ppb	11.4	440.01	
Pb	208	115	No Gas	0.005	ppb	9.7	1281.14	
U	238	115	No Gas	-0.001	ppb	N/A	426.68	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8290598.00	2.0	8181334.67	101.34	60	125	
Ge	72	No Gas	7045157.50	2.8	7270733.04	96.9	60	125	
Ge	72	He	905172.70	2.2	958105.21	94.48	60	125	
Y	89	No Gas	10090240.71	2.2	10023893.77	100.66	60	125	
Rh	103	No Gas	8750637.43	2.2	9143531.58	95.7	60	125	
In	115	No Gas	9134565.75	2.6	9650137.39	94.66	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407879-014
File Name	076SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:42:05
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.030	ppb	18.6	118.89	
Al	27	72	No Gas	3.134	ppb	9.0	143469.93	
V	51	72	He	0.719	ppb	0.6	7061.76	
Cr	52	72	No Gas	1.079	ppb	11.2	96044.04	
Mn	55	72	No Gas	11.270	ppb	6.8	923028.54	
Co	59	72	He	0.170	ppb	5.1	3247.05	
Ni	60	72	No Gas	2.524	ppb	9.6	43747.16	
Ni	60	72	He	1.794	ppb	0.5	9368.65	
Cu	63	72	No Gas	2.714	ppb	6.8	112642.69	
Cu	63	72	He	1.098	ppb	1.7	15867.78	
Zn	66	72	No Gas	25.614	ppb	8.1	277880.82	
As	75	72	No Gas	0.373	ppb	35.4	3632.64	
Se	78	72	He	-0.039	ppb	N/A	52.67	
Se	82	72	No Gas	0.833	ppb	29.7	673.93	
Mo	98	89	No Gas	0.076	ppb	7.2	2497.59	
Ag	107	89	No Gas	0.032	ppb	5.1	1831.24	
Cd	111	89	No Gas	0.059	ppb	23.4	5194.31	
Sb	123	89	No Gas	0.147	ppb	12.4	6051.38	
Ba	137	115	No Gas	28.012	ppb	4.1	470928.73	
Tl	203	115	No Gas	0.003	ppb	64.6	215.56	
Pb	208	115	No Gas	0.093	ppb	5.5	9641.46	
U	238	115	No Gas	0.253	ppb	4.2	21258.97	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8273118.83	3.8	8181334.67	101.12	60	125	
Ge	72	No Gas	6891850.97	0.6	7270733.04	94.79	60	125	
Ge	72	He	893334.13	0.9	958105.21	93.24	60	125	
Y	89	No Gas	9898267.66	4.6	10023893.77	98.75	60	125	
Rh	103	No Gas	8059628.01	1.4	9143531.58	88.15	60	125	
In	115	No Gas	8631204.38	0.7	9650137.39	89.44	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407879-023
File Name	077SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:44:03
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.000	ppb	1.2	3.33	
Al	27	72	No Gas	2.192	ppb	3.7	107726.02	
V	51	72	He	14.952	ppb	1.1	142047.80	
Cr	52	72	No Gas	1.957	ppb	7.0	149739.60	
Mn	55	72	No Gas	0.238	ppb	2.7	23342.48	
Co	59	72	He	0.062	ppb	10.6	1231.17	
Ni	60	72	No Gas	0.783	ppb	1.6	13985.87	
Ni	60	72	He	0.527	ppb	5.1	2832.51	
Cu	63	72	No Gas	3.152	ppb	5.1	131666.51	
Cu	63	72	He	0.192	ppb	3.2	3314.84	
Zn	66	72	No Gas	3.372	ppb	5.3	38931.80	
As	75	72	No Gas	3.813	ppb	5.9	44329.19	
Se	78	72	He	1.234	ppb	3.6	202.33	
Se	82	72	No Gas	1.566	ppb	13.1	1223.63	
Mo	98	89	No Gas	33.815	ppb	5.1	1108516.96	
Ag	107	89	No Gas	0.015	ppb	6.8	1028.93	
Cd	111	89	No Gas	0.012	ppb	215.1	4831.77	
Sb	123	89	No Gas	0.136	ppb	11.5	5875.74	
Ba	137	115	No Gas	27.187	ppb	7.2	483039.54	
Tl	203	115	No Gas	0.013	ppb	14.4	541.12	
Pb	208	115	No Gas	0.008	ppb	9.2	1525.60	
U	238	115	No Gas	9.637	ppb	7.9	838802.76	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8740949.37	0.4	8181334.67	106.84	60	125	
Ge	72	No Gas	6952272.08	2.2	7270733.04	95.62	60	125	
Ge	72	He	896425.00	0.9	958105.21	93.56	60	125	
Y	89	No Gas	10220321.26	2.1	10023893.77	101.96	60	125	
Rh	103	No Gas	8131879.68	2.4	9143531.58	88.94	60	125	
In	115	No Gas	9130237.14	2.3	9650137.39	94.61	60	125	

7900 ICP-MS 200.8/6020A
Reference Sample Report

Sample Name	R2407879-024
File Name	078_ARF.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:46:00
Sample Type	AllRef
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS
Be	9	45	No Gas	0.000	ppb	303.0	3.33
Al	27	72	No Gas	2.008	ppb	8.4	97988.91
Cr	52	72	No Gas	1.691	ppb	10.3	130415.47
Mn	55	72	No Gas	0.229	ppb	6.2	22051.55
Ni	60	72	No Gas	0.690	ppb	6.2	12069.65
Cu	63	72	No Gas	3.128	ppb	9.1	127336.82
Zn	66	72	No Gas	2.909	ppb	10.6	33020.05
As	75	72	No Gas	3.765	ppb	8.8	42651.36
Se	82	72	No Gas	1.607	ppb	12.8	1224.43
Mo	98	89	No Gas	34.742	ppb	2.9	1090747.63
Ag	107	89	No Gas	0.012	ppb	10.9	837.81
Cd	111	89	No Gas	0.001	ppb	2924.4	4505.55
Sb	123	89	No Gas	0.131	ppb	9.7	5454.44
Ba	137	115	No Gas	27.155	ppb	5.2	471928.68
Tl	203	115	No Gas	0.012	ppb	12.8	488.90
Pb	208	115	No Gas	0.004	ppb	13.9	1110.02
U	238	115	No Gas	9.737	ppb	5.3	829174.85
V	51	72	He	14.798	ppb	0.7	140111.76
Co	59	72	He	0.057	ppb	5.4	1127.82
Ni	60	72	He	0.418	ppb	2.1	2256.85
Cu	63	72	He	0.160	ppb	0.2	2859.18
Se	78	72	He	1.356	ppb	3.1	216.00

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High
Sc	45	No Gas	8253360.51	2.5	8181334.67	100.88	60	125
Ge	72	No Gas	6786945.43	3.0	7270733.04	93.35	60	125
Ge	72	He	893334.45	0.4	958105.21	93.24	60	125
Y	89	No Gas	9786074.89	3.8	10023893.77	97.63	60	125
Rh	103	No Gas	8214445.51	2.4	9143531.58	89.84	60	125
In	115	No Gas	8921801.59	0.7	9650137.39	92.45	60	125

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407879-024S
File Name	079_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:47:58
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	078_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	17.899	ppb	1.4	72693.53	0	89.49	
Al	27	No Gas	40.026	ppb	7.6	1563041.50	2.008	95.28	
V	51	He	35.501	ppb	1.3	333843.62	14.798	102.02	
Cr	52	No Gas	20.489	ppb	6.1	1239940.99	1.691	94.46	
Mn	55	No Gas	20.012	ppb	5.0	1618048.27	0.229	98.93	
Co	59	He	19.557	ppb	1.9	365803.10	0.057	97.51	
Ni	60	No Gas	18.852	ppb	5.2	320416.48	0.69	91.12	
Ni	60	He	19.560	ppb	1.2	100549.17	0.418	95.8	
Cu	63	No Gas	22.223	ppb	3.0	896092.83	3.128	96.08	
Cu	63	He	19.726	ppb	1.1	272767.02	0.16	97.85	
Zn	66	No Gas	21.994	ppb	4.3	236242.20	2.909	96.01	
As	75	No Gas	24.646	ppb	5.0	284672.93	3.765	103.71	
Se	78	He	22.287	ppb	1.7	2651.25	1.356	104.36	
Se	82	No Gas	21.715	ppb	4.9	15846.33	1.607	100.5	
Mo	98	No Gas	55.596	ppb	3.5	1749289.71	34.742	101.56	
Ag	107	No Gas	18.850	ppb	4.2	917776.26	0.012	94.19	
Cd	111	No Gas	18.341	ppb	3.8	202326.36	0.001	91.7	
Sb	123	No Gas	20.423	ppb	2.5	654962.56	0.131	101.45	
Ba	137	No Gas	48.477	ppb	5.8	837537.14	27.155	102.8	
Tl	203	No Gas	19.231	ppb	4.7	590590.97	0.012	96.1	
Pb	208	No Gas	18.869	ppb	6.0	1860478.82	0.004	94.33	
U	238	No Gas	29.618	ppb	5.3	2507184.27	9.737	99.6	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8503361.33	3.1	8181334.67	103.94	60	125	
Ge	72	No Gas	6811330.56	1.9	7270733.04	93.68	60	125	
Ge	72	He	888253.12	1.1	958105.21	92.71	60	125	
Y	89	No Gas	9810885.72	2.4	10023893.77	97.87	60	125	
Rh	103	No Gas	8140936.62	0.5	9143531.58	89.03	60	125	
In	115	No Gas	8878570.20	1.6	9650137.39	92	60	125	

7900 ICP-MS 200.8/6020A
Matrix Spike Duplicate (MSD) Sample Report

Sample Name	R2407879-024SD
File Name	080_SpD.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:49:53
Sample Type	SpkDup
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	079_ Spk.d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	RPD	Flag
Be	9	No Gas	18.559	ppb	7.2	73183.97	17.899	3.62	
Al	27	No Gas	38.402	ppb	4.0	1538755.50	40.026	4.14	
V	51	He	34.586	ppb	1.7	334348.09	35.501	2.61	
Cr	52	No Gas	20.256	ppb	8.7	1255149.57	20.489	1.14	
Mn	55	No Gas	19.505	ppb	9.6	1613605.42	20.012	2.57	
Co	59	He	19.183	ppb	1.1	368956.54	19.557	1.93	
Ni	60	No Gas	18.636	ppb	10.1	324099.63	18.852	1.15	
Ni	60	He	19.125	ppb	0.4	101091.72	19.56	2.25	
Cu	63	No Gas	21.796	ppb	7.0	899931.48	22.223	1.94	
Cu	63	He	19.353	ppb	1.0	275145.61	19.726	1.91	
Zn	66	No Gas	21.429	ppb	7.9	235669.98	21.994	2.6	
As	75	No Gas	24.096	ppb	7.1	284920.50	24.646	2.26	
Se	78	He	22.424	ppb	1.0	2742.27	22.287	0.61	
Se	82	No Gas	21.550	ppb	9.1	16095.03	21.715	0.76	
Mo	98	No Gas	55.393	ppb	4.0	1769456.73	55.596	0.37	
Ag	107	No Gas	18.882	ppb	7.7	933127.76	18.85	0.17	
Cd	111	No Gas	18.357	ppb	6.5	205602.72	18.341	0.09	
Sb	123	No Gas	20.395	ppb	6.9	664157.68	20.423	0.14	
Ba	137	No Gas	47.978	ppb	7.2	835264.48	48.477	1.04	
Tl	203	No Gas	19.456	ppb	8.1	601940.67	19.231	1.17	
Pb	208	No Gas	18.999	ppb	6.1	1887701.64	18.869	0.68	
U	238	No Gas	30.447	ppb	5.3	2597086.77	29.618	2.76	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8263915.51	1.6	8181334.67	101.01	60	125	
Ge	72	No Gas	6983184.73	2.9	7270733.04	96.05	60	125	
Ge	72	He	913303.12	1.7	958105.21	95.32	60	125	
Y	89	No Gas	9965267.94	1.1	10023893.77	99.42	60	125	
Rh	103	No Gas	8182424.95	1.3	9143531.58	89.49	60	125	
In	115	No Gas	8945715.20	1.2	9650137.39	92.7	60	125	

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407879-024A
File Name	081_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:51:47
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	078_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	19.628	ppb	3.3	78682.01	0	98.14	
Al	27	No Gas	40.532	ppb	8.0	1631359.76	2.008	96.49	
V	51	He	36.605	ppb	0.7	353267.93	14.798	105.19	
Cr	52	No Gas	21.848	ppb	9.6	1361188.83	1.691	100.72	
Mn	55	No Gas	20.919	ppb	5.3	1743160.38	0.229	103.41	
Co	59	He	21.093	ppb	0.5	404943.29	0.057	105.17	
Ni	60	No Gas	20.099	ppb	6.9	352215.24	0.69	97.14	
Ni	60	He	20.870	ppb	2.1	110098.49	0.418	102.22	
Cu	63	No Gas	23.264	ppb	6.5	967000.31	3.128	100.59	
Cu	63	He	21.082	ppb	2.2	299120.31	0.16	104.57	
Zn	66	No Gas	23.310	ppb	4.3	258015.30	2.909	101.75	
As	75	No Gas	25.274	ppb	4.9	301092.80	3.765	106.35	
Se	78	He	23.439	ppb	1.5	2859.29	1.356	109.75	
Se	82	No Gas	22.749	ppb	5.2	17110.32	1.607	105.29	
Mo	98	No Gas	55.938	ppb	3.8	1768915.79	34.742	102.18	
Ag	107	No Gas	18.132	ppb	4.4	887179.27	0.012	90.6	
Cd	111	No Gas	20.066	ppb	5.3	222134.33	0.001	100.33	
Sb	123	No Gas	21.635	ppb	5.3	697515.68	0.131	107.47	
Ba	137	No Gas	46.583	ppb	5.2	811389.99	27.155	98.79	
Tl	203	No Gas	20.230	ppb	3.2	626252.70	0.012	101.09	
Pb	208	No Gas	20.145	ppb	4.7	2002419.84	0.004	100.71	
U	238	No Gas	31.862	ppb	3.9	2718685.10	9.737	107.15	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8391944.94	2.8	8181334.67	102.57	60	125	
Ge	72	No Gas	7027102.78	3.6	7270733.04	96.65	60	125	
Ge	72	He	911638.16	1.4	958105.21	95.15	60	125	
Y	89	No Gas	9865444.89	2.6	10023893.77	98.42	60	125	
Rh	103	No Gas	8203258.56	3.5	9143531.58	89.72	60	125	
In	115	No Gas	8945608.53	0.3	9650137.39	92.7	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407879-024L 5X
File Name	082SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:53:41
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	76.1	10.00	
Al	27	72	No Gas	0.704	ppb	7.2	50083.35	
V	51	72	He	3.210	ppb	2.9	31196.22	
Cr	52	72	No Gas	0.709	ppb	8.6	76010.30	
Mn	55	72	No Gas	0.104	ppb	3.0	12584.45	
Co	59	72	He	0.013	ppb	16.3	305.56	
Ni	60	72	No Gas	0.158	ppb	3.3	3217.04	
Ni	60	72	He	0.105	ppb	10.4	653.35	
Cu	63	72	No Gas	0.649	ppb	6.7	29408.61	
Cu	63	72	He	0.044	ppb	4.0	1281.17	
Zn	66	72	No Gas	0.614	ppb	8.7	9144.10	
As	75	72	No Gas	0.794	ppb	5.2	8794.83	
Se	78	72	He	0.325	ppb	34.3	97.00	
Se	82	72	No Gas	0.316	ppb	16.7	302.30	
Mo	98	89	No Gas	7.048	ppb	5.9	226263.71	
Ag	107	89	No Gas	0.036	ppb	35.4	2047.95	
Cd	111	89	No Gas	0.018	ppb	83.1	4808.37	
Sb	123	89	No Gas	0.105	ppb	3.9	4715.28	
Ba	137	115	No Gas	5.500	ppb	8.0	98390.73	
Tl	203	115	No Gas	0.006	ppb	17.0	313.34	
Pb	208	115	No Gas	0.000	ppb	310.1	778.90	
U	238	115	No Gas	1.914	ppb	6.7	167916.98	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8181989.12	2.0	8181334.67	100.01	60	125	
Ge	72	No Gas	7079715.55	1.5	7270733.04	97.37	60	125	
Ge	72	He	910817.29	2.1	958105.21	95.06	60	125	
Y	89	No Gas	10009322.10	0.9	10023893.77	99.85	60	125	
Rh	103	No Gas	8549353.55	2.5	9143531.58	93.5	60	125	
In	115	No Gas	9181992.13	2.8	9650137.39	95.15	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	083_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:55:37
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	43.615	ppb	9.2	171155.48	87.23	> +/-10%
Al	27	72	No Gas	42.544	ppb	9.6	1729984.17	85.09	> +/-10%
V	51	72	He	50.666	ppb	1.3	484088.84	101.33	
Cr	52	72	No Gas	45.337	ppb	11.5	2818246.49	90.67	
Mn	55	72	No Gas	46.518	ppb	8.5	3911839.71	93.04	
Co	59	72	He	49.918	ppb	0.3	948923.05	99.84	
Ni	60	72	No Gas	45.542	ppb	10.4	805640.02	91.08	
Ni	60	72	He	49.921	ppb	1.0	260632.75	99.84	
Cu	63	72	No Gas	48.296	ppb	8.8	2026112.14	96.59	
Cu	63	72	He	51.567	ppb	0.3	723628.76	103.13	
Zn	66	72	No Gas	47.240	ppb	9.9	525883.26	94.48	
As	75	72	No Gas	48.697	ppb	10.5	586601.65	97.39	
Se	78	72	He	52.051	ppb	1.3	6216.71	104.1	
Se	82	72	No Gas	48.104	ppb	9.8	36486.02	96.21	
Mo	98	89	No Gas	48.920	ppb	5.9	1556328.92	97.84	
Ag	107	89	No Gas	49.458	ppb	5.2	2433854.90	98.92	
Cd	111	89	No Gas	47.319	ppb	5.0	520617.63	94.64	
Sb	123	89	No Gas	50.365	ppb	6.3	1631984.66	100.73	
Ba	137	115	No Gas	48.228	ppb	7.2	866001.08	96.46	
Tl	203	115	No Gas	49.096	ppb	6.3	1567249.52	98.19	
Pb	208	115	No Gas	47.912	ppb	6.9	4911303.34	95.82	
U	238	115	No Gas	48.970	ppb	9.7	4306645.94	97.94	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8217980.79	1.3	8181334.67	100.45	60	125	
Ge	72	No Gas	7102573.61	1.3	7270733.04	97.69	60	125	
Ge	72	He	902758.09	1.7	958105.21	94.22	60	125	
Y	89	No Gas	9915017.66	2.2	10023893.77	98.91	60	125	
Rh	103	No Gas	8617089.66	0.6	9143531.58	94.24	60	125	
In	115	No Gas	9227655.19	4.9	9650137.39	95.62	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	084_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:57:24
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.005	ppb	45.6	20.00	
Al	27	72	No Gas	-0.072	ppb	N/A	18481.89	
V	51	72	He	0.051	ppb	12.3	750.02	
Cr	52	72	No Gas	0.107	ppb	11.8	37983.79	
Mn	55	72	No Gas	0.045	ppb	10.6	7415.28	
Co	59	72	He	0.002	ppb	18.3	91.11	
Ni	60	72	No Gas	0.001	ppb	317.3	437.79	
Ni	60	72	He	0.000	ppb	N/A	98.89	
Cu	63	72	No Gas	-0.003	ppb	N/A	2069.04	
Cu	63	72	He	0.001	ppb	131.2	644.46	
Zn	66	72	No Gas	-0.057	ppb	N/A	1680.11	
As	75	72	No Gas	0.032	ppb	226.0	-344.93	
Se	78	72	He	0.010	ppb	299.7	58.00	
Se	82	72	No Gas	-0.003	ppb	N/A	60.35	
Mo	98	89	No Gas	0.033	ppb	10.8	1141.09	
Ag	107	89	No Gas	0.035	ppb	32.4	1930.14	
Cd	111	89	No Gas	0.017	ppb	173.8	4698.44	
Sb	123	89	No Gas	0.049	ppb	8.6	2834.75	
Ba	137	115	No Gas	0.000	ppb	N/A	191.11	
Tl	203	115	No Gas	0.010	ppb	7.8	436.68	
Pb	208	115	No Gas	0.005	ppb	45.6	1216.70	
U	238	115	No Gas	0.000	ppb	N/A	468.90	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7786458.86	4.6	8181334.67	95.17	60	125	
Ge	72	No Gas	6874855.28	1.6	7270733.04	94.56	60	125	
Ge	72	He	887506.13	1.6	958105.21	92.63	60	125	
Y	89	No Gas	9823254.89	2.9	10023893.77	98	60	125	
Rh	103	No Gas	8621322.99	5.0	9143531.58	94.29	60	125	
In	115	No Gas	9019433.25	2.0	9650137.39	93.46	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407948-001 10X
File Name	085SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 14:59:22
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	47.6	15.55	
Al	27	72	No Gas	0.620	ppb	4.0	45688.74	
V	51	72	He	0.191	ppb	1.9	2049.04	
Cr	52	72	No Gas	0.850	ppb	12.3	82685.47	
Mn	55	72	No Gas	3.246	ppb	5.8	269511.23	
Co	59	72	He	0.024	ppb	5.1	504.46	
Ni	60	72	No Gas	0.161	ppb	11.7	3200.37	
Ni	60	72	He	0.091	ppb	1.5	561.13	
Cu	63	72	No Gas	4.323	ppb	6.5	178747.02	
Cu	63	72	He	1.495	ppb	1.6	21089.00	
Zn	66	72	No Gas	49.928	ppb	5.8	541493.40	
As	75	72	No Gas	0.089	ppb	80.8	309.53	
Se	78	72	He	0.007	ppb	640.0	57.33	
Se	82	72	No Gas	0.006	ppb	1766.8	66.34	
Mo	98	89	No Gas	0.889	ppb	9.6	27330.55	
Ag	107	89	No Gas	0.022	ppb	20.1	1301.18	
Cd	111	89	No Gas	0.024	ppb	38.9	4655.02	
Sb	123	89	No Gas	0.172	ppb	15.1	6599.40	
Ba	137	115	No Gas	2.971	ppb	5.5	52001.46	
Tl	203	115	No Gas	0.031	ppb	6.8	1081.16	
Pb	208	115	No Gas	0.001	ppb	70.6	802.24	
U	238	115	No Gas	-0.003	ppb	N/A	210.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7949509.40	3.5	8181334.67	97.17	60	125	
Ge	72	No Gas	6918132.92	1.5	7270733.04	95.15	60	125	
Ge	72	He	881316.87	1.9	958105.21	91.99	60	125	
Y	89	No Gas	9581248.23	3.2	10023893.77	95.58	60	125	
Rh	103	No Gas	7929005.52	1.7	9143531.58	86.72	60	125	
In	115	No Gas	8959555.48	1.6	9650137.39	92.84	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407949-001
File Name	086SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:01:19
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.005	ppb	24.8	21.11	
Al	27	72	No Gas	165.399	ppb	4.6	6310335.86	>LDR
V	51	72	He	0.405	ppb	4.5	4052.81	
Cr	52	72	No Gas	0.571	ppb	14.5	64139.70	
Mn	55	72	No Gas	402.853	ppb	7.7	32057438.73	>LDR
Co	59	72	He	0.350	ppb	1.9	6575.98	
Ni	60	72	No Gas	0.504	ppb	8.6	8847.25	
Ni	60	72	He	0.299	ppb	3.2	1627.87	
Cu	63	72	No Gas	2.531	ppb	7.4	102584.47	
Cu	63	72	He	0.545	ppb	3.6	8105.66	
Zn	66	72	No Gas	4.643	ppb	7.4	50971.03	
As	75	72	No Gas	1.221	ppb	12.1	13236.18	
Se	78	72	He	0.162	ppb	36.7	75.33	
Se	82	72	No Gas	0.275	ppb	8.9	257.84	
Mo	98	89	No Gas	0.603	ppb	6.6	19136.75	
Ag	107	89	No Gas	0.011	ppb	9.7	816.69	
Cd	111	89	No Gas	0.025	ppb	107.4	4801.07	
Sb	123	89	No Gas	0.097	ppb	9.5	4392.94	
Ba	137	115	No Gas	128.271	ppb	5.3	2224445.33	>LDR
Tl	203	115	No Gas	0.002	ppb	25.3	200.00	
Pb	208	115	No Gas	0.409	ppb	5.2	41203.69	
U	238	115	No Gas	0.016	ppb	9.9	1879.03	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7976107.18	2.3	8181334.67	97.49	60	125	
Ge	72	No Gas	6726524.18	1.6	7270733.04	92.52	60	125	
Ge	72	He	883622.95	1.5	958105.21	92.23	60	125	
Y	89	No Gas	9851091.00	1.0	10023893.77	98.28	60	125	
Rh	103	No Gas	8279538.84	1.2	9143531.58	90.55	60	125	
In	115	No Gas	8908041.31	0.1	9650137.39	92.31	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407961-001
File Name	087SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:03:13
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.010	ppb	40.5	40.00	
Al	27	72	No Gas	39.667	ppb	10.1	1567314.94	
V	51	72	He	0.414	ppb	2.3	4242.86	
Cr	52	72	No Gas	0.691	ppb	14.8	72847.88	
Mn	55	72	No Gas	117.223	ppb	10.8	9557829.34	>LDR
Co	59	72	He	0.155	ppb	6.6	3010.32	
Ni	60	72	No Gas	0.697	ppb	8.6	12375.50	
Ni	60	72	He	0.600	ppb	4.6	3247.05	
Cu	63	72	No Gas	1.189	ppb	8.1	50535.73	
Cu	63	72	He	0.906	ppb	3.0	13394.11	
Zn	66	72	No Gas	1.826	ppb	9.2	21928.27	
As	75	72	No Gas	1.035	ppb	23.0	11353.75	
Se	78	72	He	0.064	ppb	111.7	65.67	
Se	82	72	No Gas	0.055	ppb	144.4	102.69	
Mo	98	89	No Gas	0.124	ppb	9.8	3992.67	
Ag	107	89	No Gas	0.018	ppb	4.3	1115.60	
Cd	111	89	No Gas	0.034	ppb	57.9	4894.51	
Sb	123	89	No Gas	0.107	ppb	12.3	4703.05	
Ba	137	115	No Gas	16.115	ppb	5.8	286812.55	
Tl	203	115	No Gas	0.000	ppb	57.5	140.00	
Pb	208	115	No Gas	0.145	ppb	6.9	15429.25	
U	238	115	No Gas	0.022	ppb	6.7	2372.45	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7942479.68	0.2	8181334.67	97.08	60	125	
Ge	72	No Gas	6890323.89	1.9	7270733.04	94.77	60	125	
Ge	72	He	906408.71	1.8	958105.21	94.6	60	125	
Y	89	No Gas	9826353.22	1.6	10023893.77	98.03	60	125	
Rh	103	No Gas	8563850.21	2.1	9143531.58	93.66	60	125	
In	115	No Gas	9137077.42	1.0	9650137.39	94.68	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407949-001 5X
File Name	088SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:05:08
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	68.2	7.78	
Al	27	72	No Gas	30.443	ppb	9.6	1209944.95	
V	51	72	He	0.224	ppb	6.3	2385.76	
Cr	52	72	No Gas	0.430	ppb	22.5	57441.50	
Mn	55	72	No Gas	83.561	ppb	7.3	6839241.26	
Co	59	72	He	0.066	ppb	4.4	1295.62	
Ni	60	72	No Gas	0.107	ppb	7.1	2264.63	
Ni	60	72	He	0.063	ppb	19.2	423.34	
Cu	63	72	No Gas	0.500	ppb	10.2	22591.54	
Cu	63	72	He	0.114	ppb	3.3	2224.62	
Zn	66	72	No Gas	0.929	ppb	8.4	12317.66	
As	75	72	No Gas	0.484	ppb	58.3	4891.19	
Se	78	72	He	-0.015	ppb	N/A	55.33	
Se	82	72	No Gas	-0.012	ppb	N/A	49.62	
Mo	98	89	No Gas	0.120	ppb	13.3	3918.42	
Ag	107	89	No Gas	0.011	ppb	6.2	800.03	
Cd	111	89	No Gas	0.019	ppb	63.3	4782.72	
Sb	123	89	No Gas	0.053	ppb	9.6	3018.12	
Ba	137	115	No Gas	25.423	ppb	7.0	448680.13	
Tl	203	115	No Gas	-0.001	ppb	N/A	87.78	
Pb	208	115	No Gas	0.080	ppb	6.1	8766.76	
U	238	115	No Gas	0.000	ppb	N/A	457.78	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7882971.63	2.5	8181334.67	96.35	60	125	
Ge	72	No Gas	6918477.78	3.5	7270733.04	95.16	60	125	
Ge	72	He	892701.84	0.9	958105.21	93.17	60	125	
Y	89	No Gas	9949026.27	3.0	10023893.77	99.25	60	125	
Rh	103	No Gas	8413265.78	1.3	9143531.58	92.01	60	125	
In	115	No Gas	9066031.31	1.0	9650137.39	93.95	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	089_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:07:02
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	44.031	ppb	9.7	168961.51	88.06	> +/-10%
Al	27	72	No Gas	45.200	ppb	12.6	1753636.70	90.4	
V	51	72	He	51.442	ppb	2.5	484601.89	102.88	
Cr	52	72	No Gas	47.076	ppb	9.0	2793039.68	94.15	
Mn	55	72	No Gas	50.257	ppb	10.3	4035275.67	100.51	
Co	59	72	He	52.417	ppb	1.1	982662.74	104.83	
Ni	60	72	No Gas	47.796	ppb	10.6	807366.29	95.59	
Ni	60	72	He	51.166	ppb	0.8	263550.28	102.33	
Cu	63	72	No Gas	50.195	ppb	9.6	2010662.35	100.39	
Cu	63	72	He	52.827	ppb	1.2	731129.88	105.65	
Zn	66	72	No Gas	49.500	ppb	8.6	525959.77	99	
As	75	72	No Gas	50.860	ppb	9.4	585054.19	101.72	
Se	78	72	He	54.789	ppb	2.0	6449.15	109.58	
Se	82	72	No Gas	50.651	ppb	8.8	36679.42	101.3	
Mo	98	89	No Gas	46.960	ppb	7.1	1537411.32	93.92	
Ag	107	89	No Gas	49.153	ppb	14.5	2486921.78	98.31	
Cd	111	89	No Gas	46.261	ppb	10.2	523774.02	92.52	
Sb	123	89	No Gas	48.741	ppb	8.5	1625181.88	97.48	
Ba	137	115	No Gas	49.154	ppb	7.5	868441.20	98.31	
Tl	203	115	No Gas	49.558	ppb	7.9	1555988.83	99.12	
Pb	208	115	No Gas	48.932	ppb	7.5	4932529.28	97.86	
U	238	115	No Gas	50.514	ppb	8.9	4372183.44	101.03	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8036544.12	1.7	8181334.67	98.23	60	125	
Ge	72	No Gas	6773668.90	0.9	7270733.04	93.16	60	125	
Ge	72	He	890446.65	2.6	958105.21	92.94	60	125	
Y	89	No Gas	10224411.81	2.7	10023893.77	102	60	125	
Rh	103	No Gas	8536396.33	1.6	9143531.58	93.36	60	125	
In	115	No Gas	9071909.64	0.4	9650137.39	94.01	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	090_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:08:49
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	43.4	17.78	
Al	27	72	No Gas	-0.070	ppb	N/A	18470.92	
V	51	72	He	0.043	ppb	17.0	664.46	
Cr	52	72	No Gas	0.074	ppb	18.8	35876.07	
Mn	55	72	No Gas	0.048	ppb	8.1	7580.91	
Co	59	72	He	0.002	ppb	51.6	83.33	
Ni	60	72	No Gas	0.002	ppb	227.7	444.45	
Ni	60	72	He	0.003	ppb	47.5	112.22	
Cu	63	72	No Gas	-0.006	ppb	N/A	1937.92	
Cu	63	72	He	-0.003	ppb	N/A	582.23	
Zn	66	72	No Gas	-0.052	ppb	N/A	1722.33	
As	75	72	No Gas	0.094	ppb	30.0	376.64	
Se	78	72	He	0.019	ppb	212.1	58.33	
Se	82	72	No Gas	-0.052	ppb	N/A	22.63	
Mo	98	89	No Gas	0.029	ppb	13.5	1011.49	
Ag	107	89	No Gas	0.033	ppb	26.4	1865.69	
Cd	111	89	No Gas	0.013	ppb	109.8	4646.98	
Sb	123	89	No Gas	0.050	ppb	9.0	2861.42	
Ba	137	115	No Gas	0.000	ppb	N/A	191.11	
Tl	203	115	No Gas	0.010	ppb	7.2	457.79	
Pb	208	115	No Gas	0.006	ppb	23.3	1304.48	
U	238	115	No Gas	0.000	ppb	N/A	467.79	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7774194.14	0.9	8181334.67	95.02	60	125	
Ge	72	No Gas	6848893.48	2.8	7270733.04	94.2	60	125	
Ge	72	He	876324.83	0.7	958105.21	91.46	60	125	
Y	89	No Gas	9799194.34	1.5	10023893.77	97.76	60	125	
Rh	103	No Gas	8584427.44	0.3	9143531.58	93.89	60	125	
In	115	No Gas	9084895.20	1.9	9650137.39	94.14	60	125	

7900 ICP-MS 200.8/6020A
Prep Blank (PB) Report

Sample Name	PBW-443667
File Name	091_PB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:10:47
Sample Type	PB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	27.7	8.89	
Al	27	72	No Gas	0.841	ppb	6.2	54074.14	
V	51	72	He	0.136	ppb	7.0	1524.53	
Cr	52	72	No Gas	0.384	ppb	16.0	54631.69	
Mn	55	72	No Gas	0.097	ppb	4.1	11693.70	
Co	59	72	He	0.002	ppb	38.8	97.78	
Ni	60	72	No Gas	0.016	ppb	8.2	690.02	
Ni	60	72	He	0.012	ppb	33.9	158.89	
Cu	63	72	No Gas	0.130	ppb	2.8	7498.68	
Cu	63	72	He	0.140	ppb	4.2	2528.01	
Zn	66	72	No Gas	0.010	ppb	180.7	2401.32	
As	75	72	No Gas	0.115	ppb	87.9	630.34	
Se	78	72	He	0.061	ppb	165.0	63.00	
Se	82	72	No Gas	-0.086	ppb	N/A	-1.86	
Mo	98	89	No Gas	0.013	ppb	32.6	505.01	
Ag	107	89	No Gas	0.018	ppb	24.7	1181.16	
Cd	111	89	No Gas	0.019	ppb	164.3	4843.87	
Sb	123	89	No Gas	0.057	ppb	14.8	3188.17	
Ba	137	115	No Gas	0.002	ppb	135.4	230.00	
Tl	203	115	No Gas	0.002	ppb	47.9	201.11	
Pb	208	115	No Gas	0.002	ppb	35.6	975.57	
U	238	115	No Gas	-0.004	ppb	N/A	148.89	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7901696.07	0.9	8181334.67	96.58	60	125	
Ge	72	No Gas	6889929.73	2.7	7270733.04	94.76	60	125	
Ge	72	He	875029.69	0.8	958105.21	91.33	60	125	
Y	89	No Gas	10091790.16	4.2	10023893.77	100.68	60	125	
Rh	103	No Gas	8594202.99	2.9	9143531.58	93.99	60	125	
In	115	No Gas	9169567.97	1.4	9650137.39	95.02	60	125	

7900 ICP-MS 200.8/6020A
Laboratory Control Sample (LCS) Report

Sample Name	LCSW-443667
File Name	092_LCS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:12:45
Sample Type	LCS
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	17.927	ppb	9.0	70032.05	89.64	
Al	27	72	No Gas	36.833	ppb	6.3	1447192.06	92.08	
V	51	72	He	20.287	ppb	1.0	192006.12	101.43	
Cr	52	72	No Gas	19.965	ppb	9.0	1214130.93	99.82	
Mn	55	72	No Gas	20.327	ppb	7.4	1650847.23	101.64	
Co	59	72	He	20.570	ppb	1.8	386966.04	102.85	
Ni	60	72	No Gas	19.343	ppb	8.5	330162.87	96.71	
Ni	60	72	He	20.135	ppb	1.1	104096.71	100.68	
Cu	63	72	No Gas	20.507	ppb	8.7	830685.49	102.54	
Cu	63	72	He	21.220	ppb	2.0	295026.80	106.1	
Zn	66	72	No Gas	19.529	ppb	7.1	210958.64	97.65	
As	75	72	No Gas	20.282	ppb	8.6	235168.48	101.41	
Se	78	72	He	20.571	ppb	0.9	2465.88	102.86	
Se	82	72	No Gas	20.035	ppb	7.4	14691.19	100.18	
Mo	98	89	No Gas	20.027	ppb	6.9	631392.91	100.14	
Ag	107	89	No Gas	20.725	ppb	7.3	1010657.01	103.63	
Cd	111	89	No Gas	19.617	ppb	7.5	216514.09	98.08	
Sb	123	89	No Gas	21.110	ppb	7.2	678395.70	105.55	
Ba	137	115	No Gas	20.479	ppb	5.5	367413.24	102.4	
Tl	203	115	No Gas	19.877	ppb	4.0	633580.62	99.38	
Pb	208	115	No Gas	19.616	ppb	4.2	2007594.86	98.08	
U	238	115	No Gas	20.825	ppb	3.8	1829470.42	104.12	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8194084.67	3.1	8181334.67	100.16	60	125	
Ge	72	No Gas	6849090.56	1.6	7270733.04	94.2	60	125	
Ge	72	He	893452.64	1.7	958105.21	93.25	60	125	
Y	89	No Gas	9837245.45	2.7	10023893.77	98.14	60	125	
Rh	103	No Gas	8940374.64	1.7	9143531.58	97.78	60	125	
In	115	No Gas	9208817.97	3.0	9650137.39	95.43	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407909-001
File Name	093SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:14:40
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	22.4	14.44	
Al	27	72	No Gas	2.113	ppb	8.4	99151.67	
V	51	72	He	0.226	ppb	8.0	2321.30	
Cr	52	72	No Gas	0.760	ppb	12.4	73596.24	
Mn	55	72	No Gas	1.281	ppb	4.5	103424.37	
Co	59	72	He	0.012	ppb	16.5	266.67	
Ni	60	72	No Gas	0.167	ppb	6.7	3134.80	
Ni	60	72	He	0.145	ppb	7.7	817.80	
Cu	63	72	No Gas	12.224	ppb	6.3	477422.51	
Cu	63	72	He	8.402	ppb	1.5	112811.27	
Zn	66	72	No Gas	18.931	ppb	5.1	196771.08	
As	75	72	No Gas	0.173	ppb	47.9	1257.65	
Se	78	72	He	0.068	ppb	22.8	62.67	
Se	82	72	No Gas	-0.011	ppb	N/A	51.21	
Mo	98	89	No Gas	0.032	ppb	6.9	1045.87	
Ag	107	89	No Gas	0.037	ppb	34.2	1992.38	
Cd	111	89	No Gas	0.016	ppb	158.1	4508.74	
Sb	123	89	No Gas	0.071	ppb	13.7	3413.77	
Ba	137	115	No Gas	0.479	ppb	6.7	8299.25	
Tl	203	115	No Gas	0.011	ppb	13.4	442.23	
Pb	208	115	No Gas	0.506	ppb	4.0	49591.94	
U	238	115	No Gas	0.006	ppb	1.9	961.15	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7783334.41	5.4	8181334.67	95.14	60	125	
Ge	72	No Gas	6583587.51	2.7	7270733.04	90.55	60	125	
Ge	72	He	859848.34	0.6	958105.21	89.74	60	125	
Y	89	No Gas	9445721.85	3.0	10023893.77	94.23	60	125	
Rh	103	No Gas	8103014.96	1.3	9143531.58	88.62	60	125	
In	115	No Gas	8692070.49	0.8	9650137.39	90.07	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407950-001 5X
File Name	094SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:16:38
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.020	ppb	45.7	76.67	
Al	27	72	No Gas	670.484	ppb	2.1	26171778.96	>LDR
V	51	72	He	0.835	ppb	1.3	8027.82	
Cr	52	72	No Gas	2.998	ppb	5.9	210801.90	
Mn	55	72	No Gas	32.740	ppb	6.5	2678226.28	
Co	59	72	He	0.878	ppb	4.0	16299.33	
Ni	60	72	No Gas	14.587	ppb	5.8	251161.36	
Ni	60	72	He	15.561	ppb	3.3	79109.19	
Cu	63	72	No Gas	50.986	ppb	3.3	2078569.71	
Cu	63	72	He	50.570	ppb	1.3	690467.40	
Zn	66	72	No Gas	274.117	ppb	6.6	2955456.96	>LDR
As	75	72	No Gas	0.770	ppb	19.4	8290.12	
Se	78	72	He	0.237	ppb	64.8	83.33	
Se	82	72	No Gas	0.058	ppb	232.1	103.34	
Mo	98	89	No Gas	11.796	ppb	7.5	369345.68	
Ag	107	89	No Gas	0.089	ppb	2.6	4588.56	
Cd	111	89	No Gas	0.522	ppb	7.0	10100.37	
Sb	123	89	No Gas	10.568	ppb	7.4	337951.75	
Ba	137	115	No Gas	8.937	ppb	7.9	155964.85	
Tl	203	115	No Gas	0.004	ppb	18.1	256.67	
Pb	208	115	No Gas	6.257	ppb	7.9	622922.07	
U	238	115	No Gas	0.102	ppb	9.9	9151.11	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7920778.85	3.9	8181334.67	96.82	60	125	
Ge	72	No Gas	6893994.03	2.5	7270733.04	94.82	60	125	
Ge	72	He	878502.95	1.7	958105.21	91.69	60	125	
Y	89	No Gas	9768453.50	0.7	10023893.77	97.45	60	125	
Rh	103	No Gas	8097190.51	2.6	9143531.58	88.56	60	125	
In	115	No Gas	8966288.81	2.9	9650137.39	92.91	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407958-001
File Name	095SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:18:31
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	146.3	8.89	
Al	27	72	No Gas	13.473	ppb	5.1	529265.12	
V	51	72	He	0.301	ppb	2.4	3001.43	
Cr	52	72	No Gas	1.640	ppb	8.6	125466.47	
Mn	55	72	No Gas	6.910	ppb	5.7	549533.24	
Co	59	72	He	0.152	ppb	1.6	2799.17	
Ni	60	72	No Gas	1.453	ppb	2.2	24564.76	
Ni	60	72	He	1.019	ppb	2.9	5159.83	
Cu	63	72	No Gas	15.728	ppb	6.7	621937.14	
Cu	63	72	He	15.730	ppb	1.8	210580.81	
Zn	66	72	No Gas	13.084	ppb	5.7	138576.56	
As	75	72	No Gas	0.507	ppb	28.3	5046.26	
Se	78	72	He	0.014	ppb	632.5	56.67	
Se	82	72	No Gas	0.169	ppb	48.4	180.79	
Mo	98	89	No Gas	0.210	ppb	7.0	6473.69	
Ag	107	89	No Gas	0.016	ppb	18.0	988.93	
Cd	111	89	No Gas	0.019	ppb	88.0	4557.08	
Sb	123	89	No Gas	0.104	ppb	9.9	4437.40	
Ba	137	115	No Gas	225.462	ppb	5.1	3769964.02	>LDR
Tl	203	115	No Gas	0.003	ppb	26.4	211.12	
Pb	208	115	No Gas	0.827	ppb	5.2	79574.75	
U	238	115	No Gas	0.411	ppb	7.1	34105.90	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7476633.59	2.8	8181334.67	91.39	60	125	
Ge	72	No Gas	6673147.65	0.8	7270733.04	91.78	60	125	
Ge	72	He	859714.17	2.5	958105.21	89.73	60	125	
Y	89	No Gas	9477237.68	1.2	10023893.77	94.55	60	125	
Rh	103	No Gas	7937831.35	4.6	9143531.58	86.81	60	125	
In	115	No Gas	8594412.44	2.1	9650137.39	89.06	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407958-002
File Name	096SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:20:27
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	118.4	13.33	
Al	27	72	No Gas	10.174	ppb	4.0	427117.35	
V	51	72	He	0.275	ppb	4.0	2824.73	
Cr	52	72	No Gas	0.864	ppb	5.4	85017.16	
Mn	55	72	No Gas	8.688	ppb	3.9	728391.24	
Co	59	72	He	0.118	ppb	5.1	2247.96	
Ni	60	72	No Gas	3.608	ppb	2.4	63723.75	
Ni	60	72	He	3.761	ppb	2.1	19233.01	
Cu	63	72	No Gas	50.182	ppb	2.3	2088817.97	
Cu	63	72	He	53.603	ppb	1.3	733187.50	
Zn	66	72	No Gas	309.503	ppb	5.2	3408167.85	>LDR
As	75	72	No Gas	0.495	ppb	31.7	5200.32	
Se	78	72	He	0.200	ppb	33.3	79.33	
Se	82	72	No Gas	0.089	ppb	78.5	130.19	
Mo	98	89	No Gas	0.032	ppb	16.6	1120.04	
Ag	107	89	No Gas	0.015	ppb	17.0	1001.15	
Cd	111	89	No Gas	0.070	ppb	9.4	5401.29	
Sb	123	89	No Gas	0.108	ppb	15.9	4829.76	
Ba	137	115	No Gas	13.566	ppb	3.4	230749.10	
Tl	203	115	No Gas	0.000	ppb	N/A	121.11	
Pb	208	115	No Gas	0.809	ppb	2.8	79134.52	
U	238	115	No Gas	0.000	ppb	273.5	493.34	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7932959.13	2.1	8181334.67	96.96	60	125	
Ge	72	No Gas	7040330.00	3.2	7270733.04	96.83	60	125	
Ge	72	He	879954.24	0.5	958105.21	91.84	60	125	
Y	89	No Gas	10049575.43	2.1	10023893.77	100.26	60	125	
Rh	103	No Gas	8208082.73	3.2	9143531.58	89.77	60	125	
In	115	No Gas	8725843.54	2.5	9650137.39	90.42	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2408031-001
File Name	097SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:22:22
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.005	ppb	50.6	22.22	
Al	27	72	No Gas	89.596	ppb	6.1	3494345.21	
V	51	72	He	0.865	ppb	1.7	7967.79	
Cr	52	72	No Gas	1.573	ppb	4.1	124743.16	
Mn	55	72	No Gas	116.716	ppb	4.2	9469952.68	>LDR
Co	59	72	He	0.345	ppb	1.9	6175.80	
Ni	60	72	No Gas	1.819	ppb	7.0	31469.78	
Ni	60	72	He	1.647	ppb	1.9	8120.11	
Cu	63	72	No Gas	63.707	ppb	5.3	2579560.66	
Cu	63	72	He	63.463	ppb	1.0	830932.33	
Zn	66	72	No Gas	64.772	ppb	3.1	695049.43	
As	75	72	No Gas	0.997	ppb	14.8	10908.54	
Se	78	72	He	0.396	ppb	15.3	97.67	
Se	82	72	No Gas	0.495	ppb	17.5	421.90	
Mo	98	89	No Gas	0.986	ppb	5.6	29933.72	
Ag	107	89	No Gas	0.403	ppb	7.7	19112.25	
Cd	111	89	No Gas	0.061	ppb	23.2	4981.15	
Sb	123	89	No Gas	0.381	ppb	8.6	12959.55	
Ba	137	115	No Gas	120.258	ppb	4.9	2019044.23	>LDR
Tl	203	115	No Gas	0.001	ppb	54.4	161.11	
Pb	208	115	No Gas	1.062	ppb	3.8	102460.06	
U	238	115	No Gas	0.573	ppb	3.7	47627.11	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7773961.91	4.0	8181334.67	95.02	60	125	
Ge	72	No Gas	6847415.84	2.5	7270733.04	94.18	60	125	
Ge	72	He	842560.72	1.6	958105.21	87.94	60	125	
Y	89	No Gas	9446762.96	0.8	10023893.77	94.24	60	125	
Rh	103	No Gas	7853931.08	1.1	9143531.58	85.9	60	125	
In	115	No Gas	8625459.94	1.8	9650137.39	89.38	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2408031-009
File Name	098SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:24:16
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.007	ppb	14.2	26.67	
Al	27	72	No Gas	159.060	ppb	5.5	6052919.06	>LDR
V	51	72	He	1.192	ppb	2.1	11106.56	
Cr	52	72	No Gas	1.783	ppb	5.4	134303.09	
Mn	55	72	No Gas	147.849	ppb	5.3	11738333.42	>LDR
Co	59	72	He	0.365	ppb	0.6	6660.45	
Ni	60	72	No Gas	2.152	ppb	5.3	36357.97	
Ni	60	72	He	1.849	ppb	2.1	9288.60	
Cu	63	72	No Gas	92.629	ppb	3.6	3668686.80	
Cu	63	72	He	92.052	ppb	1.5	1230133.84	
Zn	66	72	No Gas	88.960	ppb	6.3	933532.18	
As	75	72	No Gas	1.010	ppb	17.8	10796.81	
Se	78	72	He	0.559	ppb	10.5	118.00	
Se	82	72	No Gas	0.632	ppb	11.6	512.77	
Mo	98	89	No Gas	1.276	ppb	3.7	38759.69	
Ag	107	89	No Gas	0.199	ppb	5.1	9550.01	
Cd	111	89	No Gas	0.096	ppb	17.5	5346.89	
Sb	123	89	No Gas	0.383	ppb	6.0	13036.28	
Ba	137	115	No Gas	139.463	ppb	4.5	2306229.77	>LDR
Tl	203	115	No Gas	0.004	ppb	28.8	230.00	
Pb	208	115	No Gas	1.802	ppb	4.5	170683.55	
U	238	115	No Gas	0.747	ppb	5.8	60957.34	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7758763.03	0.7	8181334.67	94.83	60	125	
Ge	72	No Gas	6702902.65	1.1	7270733.04	92.19	60	125	
Ge	72	He	860024.30	0.5	958105.21	89.76	60	125	
Y	89	No Gas	9450587.12	1.5	10023893.77	94.28	60	125	
Rh	103	No Gas	7897574.68	2.3	9143531.58	86.37	60	125	
In	115	No Gas	8495284.66	0.6	9650137.39	88.03	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2408042-002
File Name	099SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:26:08
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.010	ppb	35.4	37.78	
Al	27	72	No Gas	35.471	ppb	1.7	1443345.95	
V	51	72	He	0.339	ppb	4.3	3444.87	
Cr	52	72	No Gas	2.255	ppb	1.2	170959.60	
Mn	55	72	No Gas	12.050	ppb	1.9	1014995.34	
Co	59	72	He	0.041	ppb	4.6	824.47	
Ni	60	72	No Gas	0.738	ppb	1.2	13470.92	
Ni	60	72	He	0.763	ppb	3.9	4005.02	
Cu	63	72	No Gas	0.808	ppb	2.5	36063.99	
Cu	63	72	He	0.809	ppb	2.3	11758.21	
Zn	66	72	No Gas	2.616	ppb	3.1	31319.37	
As	75	72	No Gas	0.393	ppb	4.8	3980.02	
Se	78	72	He	0.040	ppb	289.5	61.33	
Se	82	72	No Gas	0.007	ppb	1421.7	71.47	
Mo	98	89	No Gas	0.108	ppb	8.9	3472.87	
Ag	107	89	No Gas	0.014	ppb	18.9	931.14	
Cd	111	89	No Gas	0.031	ppb	21.5	4828.06	
Sb	123	89	No Gas	0.069	ppb	6.2	3472.67	
Ba	137	115	No Gas	3.553	ppb	2.9	64158.09	
Tl	203	115	No Gas	0.004	ppb	31.2	254.45	
Pb	208	115	No Gas	0.135	ppb	3.6	14646.66	
U	238	115	No Gas	-0.001	ppb	N/A	396.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7809510.52	5.1	8181334.67	95.46	60	125	
Ge	72	No Gas	7087499.16	5.1	7270733.04	97.48	60	125	
Ge	72	He	885103.25	1.5	958105.21	92.38	60	125	
Y	89	No Gas	9760901.56	1.7	10023893.77	97.38	60	125	
Rh	103	No Gas	8434407.72	3.4	9143531.58	92.24	60	125	
In	115	No Gas	9249137.41	5.3	9650137.39	95.84	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2408047-001
File Name	100SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:28:06
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.014	ppb	13.4	56.67	
Al	27	72	No Gas	54.940	ppb	8.5	2224326.79	
V	51	72	He	0.550	ppb	1.1	5407.70	
Cr	52	72	No Gas	0.895	ppb	9.1	87456.78	
Mn	55	72	No Gas	12.206	ppb	6.1	1027360.59	
Co	59	72	He	0.084	ppb	4.8	1622.32	
Ni	60	72	No Gas	0.273	ppb	4.2	5238.77	
Ni	60	72	He	0.245	ppb	6.4	1347.85	
Cu	63	72	No Gas	0.543	ppb	3.9	24981.17	
Cu	63	72	He	0.450	ppb	2.6	6809.42	
Zn	66	72	No Gas	2.215	ppb	4.0	26847.92	
As	75	72	No Gas	0.221	ppb	45.4	1890.46	
Se	78	72	He	0.128	ppb	41.8	71.33	
Se	82	72	No Gas	0.086	ppb	133.0	128.25	
Mo	98	89	No Gas	0.216	ppb	4.8	7007.91	
Ag	107	89	No Gas	0.011	ppb	16.3	817.80	
Cd	111	89	No Gas	0.020	ppb	150.3	4816.54	
Sb	123	89	No Gas	0.067	ppb	17.1	3462.67	
Ba	137	115	No Gas	7.210	ppb	4.7	127884.96	
Tl	203	115	No Gas	0.002	ppb	8.0	177.78	
Pb	208	115	No Gas	0.107	ppb	5.4	11567.66	
U	238	115	No Gas	0.023	ppb	4.8	2508.03	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7984445.52	1.5	8181334.67	97.59	60	125	
Ge	72	No Gas	7076415.13	2.9	7270733.04	97.33	60	125	
Ge	72	He	883390.88	2.5	958105.21	92.2	60	125	
Y	89	No Gas	9977903.77	1.0	10023893.77	99.54	60	125	
Rh	103	No Gas	8661143.54	0.9	9143531.58	94.72	60	125	
In	115	No Gas	9092509.92	3.1	9650137.39	94.22	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	101_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:30:02
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	46.018	ppb	15.6	172299.61	92.04	
Al	27	72	No Gas	41.486	ppb	15.3	1686405.59	82.97	> +/-10%
V	51	72	He	51.022	ppb	0.9	472971.84	102.04	
Cr	52	72	No Gas	43.363	ppb	18.6	2693959.40	86.73	> +/-10%
Mn	55	72	No Gas	45.924	ppb	16.5	3855465.68	91.85	
Co	59	72	He	51.141	ppb	0.4	943232.50	102.28	
Ni	60	72	No Gas	43.823	ppb	17.2	774093.08	87.65	> +/-10%
Ni	60	72	He	51.484	ppb	1.0	260811.49	102.97	
Cu	63	72	No Gas	46.054	ppb	13.5	1930422.11	92.11	
Cu	63	72	He	52.170	ppb	0.5	710374.97	104.34	
Zn	66	72	No Gas	45.425	ppb	19.0	504854.64	90.85	
As	75	72	No Gas	46.798	ppb	16.9	562890.56	93.6	
Se	78	72	He	52.155	ppb	0.6	6044.30	104.31	
Se	82	72	No Gas	46.095	ppb	17.4	34908.91	92.19	
Mo	98	89	No Gas	46.222	ppb	15.7	1494272.26	92.44	
Ag	107	89	No Gas	46.323	ppb	15.7	2316693.66	92.65	
Cd	111	89	No Gas	45.166	ppb	16.8	505090.02	90.33	
Sb	123	89	No Gas	47.771	ppb	16.3	1573111.64	95.54	
Ba	137	115	No Gas	45.776	ppb	16.8	819697.17	91.55	
Tl	203	115	No Gas	47.005	ppb	17.1	1495481.19	94.01	
Pb	208	115	No Gas	46.256	ppb	16.2	4725461.65	92.51	
U	238	115	No Gas	47.131	ppb	18.2	4130117.89	94.26	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7873219.13	4.3	8181334.67	96.23	60	125	
Ge	72	No Gas	7121589.16	5.1	7270733.04	97.95	60	125	
Ge	72	He	875965.87	2.0	958105.21	91.43	60	125	
Y	89	No Gas	10131244.88	4.6	10023893.77	101.07	60	125	
Rh	103	No Gas	8904941.59	7.1	9143531.58	97.39	60	125	
In	115	No Gas	9251969.36	6.0	9650137.39	95.87	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	102_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:31:51
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	2.7	16.67	
Al	27	72	No Gas	-0.037	ppb	N/A	19166.17	
V	51	72	He	0.050	ppb	14.5	722.24	
Cr	52	72	No Gas	0.125	ppb	15.2	37746.50	
Mn	55	72	No Gas	0.050	ppb	12.5	7499.78	
Co	59	72	He	0.003	ppb	20.9	101.11	
Ni	60	72	No Gas	0.003	ppb	205.7	451.12	
Ni	60	72	He	0.002	ppb	316.3	104.45	
Cu	63	72	No Gas	-0.001	ppb	N/A	2104.61	
Cu	63	72	He	0.000	ppb	N/A	616.68	
Zn	66	72	No Gas	-0.046	ppb	N/A	1734.56	
As	75	72	No Gas	0.215	ppb	52.5	1727.08	
Se	78	72	He	-0.016	ppb	N/A	53.33	
Se	82	72	No Gas	-0.096	ppb	N/A	-9.48	
Mo	98	89	No Gas	0.030	ppb	16.5	1026.01	
Ag	107	89	No Gas	0.030	ppb	27.6	1697.89	
Cd	111	89	No Gas	0.008	ppb	96.5	4519.09	
Sb	123	89	No Gas	0.045	ppb	5.1	2650.27	
Ba	137	115	No Gas	0.004	ppb	15.7	254.45	
Tl	203	115	No Gas	0.010	ppb	13.1	443.34	
Pb	208	115	No Gas	0.005	ppb	30.5	1164.47	
U	238	115	No Gas	-0.001	ppb	N/A	420.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7553556.65	2.4	8181334.67	92.33	60	125	
Ge	72	No Gas	6648885.71	2.7	7270733.04	91.45	60	125	
Ge	72	He	862546.06	2.1	958105.21	90.03	60	125	
Y	89	No Gas	9631499.06	2.0	10023893.77	96.09	60	125	
Rh	103	No Gas	8486261.89	0.5	9143531.58	92.81	60	125	
In	115	No Gas	8835525.76	0.4	9650137.39	91.56	60	125	

7900 ICP-MS 200.8/6020A
Reference Sample Report

Sample Name	R2408047-002
File Name	103_ARF.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:33:48
Sample Type	AllRef
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS
Be	9	45	No Gas	0.023	ppb	26.5	92.22
Al	27	72	No Gas	72.982	ppb	12.9	2950923.29
Cr	52	72	No Gas	0.693	ppb	13.4	75108.62
Mn	55	72	No Gas	18.012	ppb	6.9	1515459.70
Ni	60	72	No Gas	0.220	ppb	6.0	4319.56
Cu	63	72	No Gas	0.460	ppb	8.5	21548.88
Zn	66	72	No Gas	2.887	ppb	7.9	34335.60
As	75	72	No Gas	0.473	ppb	21.1	4937.68
Se	82	72	No Gas	0.044	ppb	46.5	97.32
Mo	98	89	No Gas	0.349	ppb	9.2	11359.46
Ag	107	89	No Gas	0.021	ppb	9.2	1328.96
Cd	111	89	No Gas	0.014	ppb	60.1	4795.40
Sb	123	89	No Gas	0.097	ppb	19.8	4480.75
Ba	137	115	No Gas	3.325	ppb	8.4	60291.52
Tl	203	115	No Gas	0.008	ppb	5.9	392.23
Pb	208	115	No Gas	0.224	ppb	8.5	23889.96
U	238	115	No Gas	0.048	ppb	6.5	4785.37
V	51	72	He	0.554	ppb	4.7	5426.59
Co	59	72	He	0.073	ppb	6.5	1402.29
Ni	60	72	He	0.195	ppb	3.4	1090.04
Cu	63	72	He	0.438	ppb	3.4	6619.33
Se	78	72	He	0.113	ppb	27.2	69.33

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High
Sc	45	No Gas	8026580.24	0.9	8181334.67	98.11	60	125
Ge	72	No Gas	7089543.61	1.6	7270733.04	97.51	60	125
Ge	72	He	879370.28	1.4	958105.21	91.78	60	125
Y	89	No Gas	10088643.77	3.4	10023893.77	100.65	60	125
Rh	103	No Gas	8662991.04	3.1	9143531.58	94.74	60	125
In	115	No Gas	9286731.30	0.5	9650137.39	96.23	60	125

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2408047-002S
File Name	104_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:35:44
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	103_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	19.147	ppb	9.3	73088.20	0.023	95.62	
Al	27	No Gas	106.539	ppb	15.8	4259201.22	72.982	94.3	
V	51	He	21.649	ppb	1.3	203559.74	0.554	105.33	
Cr	52	No Gas	19.451	ppb	11.6	1217185.79	0.693	94	
Mn	55	No Gas	37.289	ppb	14.6	3107595.92	18.012	98.1	
Co	59	He	20.795	ppb	0.2	388731.79	0.073	103.6	
Ni	60	No Gas	18.921	ppb	11.3	332085.51	0.22	93.58	
Ni	60	He	20.678	ppb	0.7	106231.09	0.195	102.39	
Cu	63	No Gas	21.284	ppb	11.9	886446.95	0.46	104.03	
Cu	63	He	22.944	ppb	2.0	316890.14	0.438	112.26	
Zn	66	No Gas	23.160	ppb	11.6	256766.85	2.887	101.19	
As	75	No Gas	20.542	ppb	11.8	244885.77	0.473	100.33	
Se	78	He	21.385	ppb	3.4	2544.23	0.113	106.32	
Se	82	No Gas	19.572	ppb	11.5	14755.31	0.044	97.65	
Mo	98	No Gas	19.884	ppb	8.4	639441.60	0.349	97.71	
Ag	107	No Gas	19.943	ppb	11.0	992088.26	0.021	99.61	
Cd	111	No Gas	18.991	ppb	9.1	213983.12	0.014	94.89	
Sb	123	No Gas	20.554	ppb	8.5	673899.31	0.097	102.27	
Ba	137	No Gas	24.004	ppb	11.1	426785.63	3.325	102.91	
Tl	203	No Gas	19.804	ppb	12.0	625517.63	0.008	98.98	
Pb	208	No Gas	19.735	ppb	11.7	2001639.99	0.224	97.58	
U	238	No Gas	20.387	ppb	11.1	1775759.79	0.048	101.69	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7999517.73	1.1	8181334.67	97.78	60	125	
Ge	72	No Gas	7050699.86	2.8	7270733.04	96.97	60	125	
Ge	72	He	887699.58	1.7	958105.21	92.65	60	125	
Y	89	No Gas	10035391.27	1.2	10023893.77	100.11	60	125	
Rh	103	No Gas	8841849.65	5.1	9143531.58	96.7	60	125	
In	115	No Gas	9159494.91	4.5	9650137.39	94.92	60	125	

7900 ICP-MS 200.8/6020A
Matrix Spike Duplicate (MSD) Sample Report

Sample Name	R2408047-002SD
File Name	105_SpD.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:37:39
Sample Type	SpkDup
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	104_ Spk.d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	RPD	Flag
Be	9	No Gas	18.727	ppb	10.0	71817.33	19.147	2.22	
Al	27	No Gas	113.398	ppb	1.5	4409342.88	106.539	6.24	
V	51	He	21.186	ppb	1.3	196823.48	21.649	2.16	
Cr	52	No Gas	19.943	ppb	6.3	1213285.58	19.451	2.5	
Mn	55	No Gas	38.055	ppb	7.0	3087624.95	37.289	2.03	
Co	59	He	20.817	ppb	2.2	384404.44	20.795	0.1	
Ni	60	No Gas	19.322	ppb	6.6	329953.59	18.921	2.1	
Ni	60	He	20.621	ppb	0.7	104692.18	20.678	0.28	
Cu	63	No Gas	20.932	ppb	7.4	848338.99	21.284	1.67	
Cu	63	He	21.830	ppb	0.7	298017.73	22.944	4.97	
Zn	66	No Gas	22.920	ppb	4.9	247245.13	23.16	1.04	
As	75	No Gas	21.074	ppb	5.0	244448.10	20.542	2.56	
Se	78	He	21.553	ppb	0.3	2534.23	21.385	0.78	
Se	82	No Gas	20.273	ppb	5.5	14866.57	19.572	3.52	
Mo	98	No Gas	20.021	ppb	5.3	641387.44	19.884	0.69	
Ag	107	No Gas	20.100	ppb	7.3	996411.00	19.943	0.78	
Cd	111	No Gas	19.065	ppb	5.1	213999.02	18.991	0.39	
Sb	123	No Gas	20.638	ppb	6.8	673961.00	20.554	0.41	
Ba	137	No Gas	25.007	ppb	7.6	436421.14	24.004	4.09	
Tl	203	No Gas	20.251	ppb	7.5	627944.23	19.804	2.23	
Pb	208	No Gas	20.169	ppb	6.9	2008340.35	19.735	2.17	
U	238	No Gas	20.609	ppb	9.6	1760874.62	20.387	1.08	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8044291.35	2.4	8181334.67	98.32	60	125	
Ge	72	No Gas	6841799.73	1.8	7270733.04	94.1	60	125	
Ge	72	He	877256.34	2.7	958105.21	91.56	60	125	
Y	89	No Gas	9989231.55	2.0	10023893.77	99.65	60	125	
Rh	103	No Gas	8624016.88	2.2	9143531.58	94.32	60	125	
In	115	No Gas	8970296.59	2.9	9650137.39	92.96	60	125	

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2408047-002A
File Name	106_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:39:33
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	103_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	20.838	ppb	6.5	77445.27	0.023	104.07	
Al	27	No Gas	106.183	ppb	1.6	4050897.34	72.982	93.98	
V	51	He	22.943	ppb	1.3	213726.74	0.554	111.62	
Cr	52	No Gas	21.629	ppb	2.2	1287515.92	0.693	104.52	
Mn	55	No Gas	40.941	ppb	4.5	3257276.68	18.012	107.71	
Co	59	He	22.125	ppb	0.3	409870.73	0.073	110.22	
Ni	60	No Gas	21.429	ppb	4.9	358829.72	0.22	105.98	
Ni	60	He	22.058	ppb	1.7	112254.96	0.195	109.22	
Cu	63	No Gas	22.437	ppb	5.7	891900.36	0.46	109.66	
Cu	63	He	23.245	ppb	1.7	318128.28	0.438	113.73	
Zn	66	No Gas	24.625	ppb	3.8	260285.99	2.887	107.6	
As	75	No Gas	22.681	ppb	5.0	258014.23	0.473	110.78	
Se	78	He	23.083	ppb	4.0	2715.93	0.113	114.76	
Se	82	No Gas	22.083	ppb	3.0	15871.17	0.044	110.17	
Mo	98	No Gas	21.344	ppb	3.8	689496.86	0.349	104.89	
Ag	107	No Gas	18.852	ppb	2.7	942183.26	0.021	94.16	
Cd	111	No Gas	20.313	ppb	2.5	229550.11	0.014	101.5	
Sb	123	No Gas	21.603	ppb	3.5	711700.01	0.097	107.49	
Ba	137	No Gas	22.649	ppb	5.6	407069.40	3.325	97.1	
Tl	203	No Gas	20.938	ppb	5.8	668696.26	0.008	104.65	
Pb	208	No Gas	20.872	ppb	5.0	2140192.49	0.224	103.2	
U	238	No Gas	21.818	ppb	3.8	1920711.66	0.048	108.83	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7790596.08	4.5	8181334.67	95.22	60	125	
Ge	72	No Gas	6708247.65	3.6	7270733.04	92.26	60	125	
Ge	72	He	879691.28	2.5	958105.21	91.82	60	125	
Y	89	No Gas	10072207.93	3.8	10023893.77	100.48	60	125	
Rh	103	No Gas	8434920.78	1.4	9143531.58	92.25	60	125	
In	115	No Gas	9225891.86	1.5	9650137.39	95.6	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2408047-002L 5X
File Name	107SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:41:27
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.006	ppb	23.6	24.44	
Al	27	72	No Gas	14.447	ppb	6.0	581051.17	
V	51	72	He	0.231	ppb	6.7	2391.32	
Cr	52	72	No Gas	0.459	ppb	12.6	58701.07	
Mn	55	72	No Gas	3.712	ppb	5.5	304691.83	
Co	59	72	He	0.013	ppb	12.2	292.22	
Ni	60	72	No Gas	0.048	ppb	6.8	1234.50	
Ni	60	72	He	0.045	ppb	21.4	323.34	
Cu	63	72	No Gas	0.094	ppb	1.6	6009.07	
Cu	63	72	He	0.091	ppb	3.1	1856.79	
Zn	66	72	No Gas	0.557	ppb	6.0	8236.86	
As	75	72	No Gas	0.067	ppb	233.8	55.63	
Se	78	72	He	0.026	ppb	145.1	58.67	
Se	82	72	No Gas	-0.049	ppb	N/A	26.01	
Mo	98	89	No Gas	0.091	ppb	14.7	3038.19	
Ag	107	89	No Gas	0.037	ppb	32.9	2111.29	
Cd	111	89	No Gas	0.006	ppb	374.7	4718.71	
Sb	123	89	No Gas	0.085	ppb	14.0	4117.30	
Ba	137	115	No Gas	0.681	ppb	5.1	12330.13	
Tl	203	115	No Gas	0.005	ppb	35.6	300.00	
Pb	208	115	No Gas	0.045	ppb	4.9	5359.34	
U	238	115	No Gas	0.008	ppb	7.8	1227.84	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7941551.07	1.1	8181334.67	97.07	60	125	
Ge	72	No Gas	6849460.00	1.1	7270733.04	94.21	60	125	
Ge	72	He	869598.59	1.2	958105.21	90.76	60	125	
Y	89	No Gas	10110839.87	4.8	10023893.77	100.87	60	125	
Rh	103	No Gas	8762952.71	0.8	9143531.58	95.84	60	125	
In	115	No Gas	9149662.14	1.8	9650137.39	94.81	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2408031-001 10X
File Name	108SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:43:24
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	43.7	10.00	
Al	27	72	No Gas	8.719	ppb	9.4	369264.31	
V	51	72	He	0.216	ppb	5.1	2246.85	
Cr	52	72	No Gas	0.454	ppb	17.7	60097.21	
Mn	55	72	No Gas	11.969	ppb	9.6	1002067.77	
Co	59	72	He	0.035	ppb	7.8	703.35	
Ni	60	72	No Gas	0.179	ppb	4.2	3569.35	
Ni	60	72	He	0.167	ppb	5.0	936.70	
Cu	63	72	No Gas	6.442	ppb	8.9	270244.09	
Cu	63	72	He	6.694	ppb	2.1	90979.25	
Zn	66	72	No Gas	6.558	ppb	8.5	74487.31	
As	75	72	No Gas	0.322	ppb	5.9	3109.82	
Se	78	72	He	-0.058	ppb	N/A	49.00	
Se	82	72	No Gas	-0.082	ppb	N/A	1.65	
Mo	98	89	No Gas	0.106	ppb	11.8	3449.19	
Ag	107	89	No Gas	0.052	ppb	7.3	2809.19	
Cd	111	89	No Gas	0.016	ppb	67.1	4726.47	
Sb	123	89	No Gas	0.083	ppb	15.6	3957.26	
Ba	137	115	No Gas	11.554	ppb	10.6	207420.57	
Tl	203	115	No Gas	0.001	ppb	80.6	151.11	
Pb	208	115	No Gas	0.104	ppb	9.2	11422.05	
U	238	115	No Gas	0.051	ppb	9.2	4997.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8110575.24	4.9	8181334.67	99.14	60	125	
Ge	72	No Gas	7047596.11	0.5	7270733.04	96.93	60	125	
Ge	72	He	869323.86	2.2	958105.21	90.73	60	125	
Y	89	No Gas	9878031.55	2.7	10023893.77	98.54	60	125	
Rh	103	No Gas	8663914.66	3.6	9143531.58	94.75	60	125	
In	115	No Gas	9227682.13	2.3	9650137.39	95.62	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2408031-009 10X
File Name	109SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:45:22
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	202.2	5.55	
Al	27	72	No Gas	14.925	ppb	5.6	614367.98	
V	51	72	He	0.249	ppb	3.6	2534.67	
Cr	52	72	No Gas	0.462	ppb	10.9	60372.07	
Mn	55	72	No Gas	14.297	ppb	5.0	1192008.49	
Co	59	72	He	0.038	ppb	3.3	738.91	
Ni	60	72	No Gas	0.211	ppb	4.4	4108.38	
Ni	60	72	He	0.189	ppb	1.4	1040.04	
Cu	63	72	No Gas	9.055	ppb	7.5	377506.95	
Cu	63	72	He	9.359	ppb	1.2	126078.25	
Zn	66	72	No Gas	8.780	ppb	5.3	98574.74	
As	75	72	No Gas	0.330	ppb	40.0	3201.93	
Se	78	72	He	-0.023	ppb	N/A	52.67	
Se	82	72	No Gas	0.023	ppb	338.9	79.37	
Mo	98	89	No Gas	0.131	ppb	2.7	4198.97	
Ag	107	89	No Gas	0.027	ppb	10.9	1573.43	
Cd	111	89	No Gas	0.033	ppb	29.6	4831.75	
Sb	123	89	No Gas	0.080	ppb	4.9	3797.20	
Ba	137	115	No Gas	13.604	ppb	3.0	237971.98	
Tl	203	115	No Gas	0.000	ppb	881.0	130.00	
Pb	208	115	No Gas	0.180	ppb	4.2	18658.71	
U	238	115	No Gas	0.069	ppb	4.5	6379.40	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7896650.80	2.4	8181334.67	96.52	60	125	
Ge	72	No Gas	7021954.72	2.0	7270733.04	96.58	60	125	
Ge	72	He	863241.51	1.2	958105.21	90.1	60	125	
Y	89	No Gas	9746499.06	2.4	10023893.77	97.23	60	125	
Rh	103	No Gas	8372342.17	3.2	9143531.58	91.57	60	125	
In	115	No Gas	8976067.98	1.3	9650137.39	93.01	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	110_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:47:18
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	41.517	ppb	6.8	154327.66	83.03	> +/-10%
Al	27	72	No Gas	42.022	ppb	9.7	1613908.13	84.04	> +/-10%
V	51	72	He	51.218	ppb	1.0	464425.81	102.44	
Cr	52	72	No Gas	48.522	ppb	8.9	2847104.26	97.04	
Mn	55	72	No Gas	48.281	ppb	5.6	3835478.04	96.56	
Co	59	72	He	51.676	ppb	2.8	932296.28	103.35	
Ni	60	72	No Gas	47.940	ppb	9.1	800992.92	95.88	
Ni	60	72	He	52.094	ppb	1.0	258203.90	104.19	
Cu	63	72	No Gas	49.181	ppb	10.0	1948415.44	98.36	
Cu	63	72	He	53.648	ppb	1.4	714393.74	107.3	
Zn	66	72	No Gas	49.292	ppb	9.8	518091.87	98.58	
As	75	72	No Gas	50.930	ppb	8.7	579527.44	101.86	
Se	78	72	He	52.374	ppb	1.2	5936.59	104.75	
Se	82	72	No Gas	50.777	ppb	8.9	36374.86	101.55	
Mo	98	89	No Gas	48.844	ppb	8.0	1535356.27	97.69	
Ag	107	89	No Gas	49.894	ppb	5.1	2424629.70	99.79	
Cd	111	89	No Gas	47.796	ppb	7.3	519446.51	95.59	
Sb	123	89	No Gas	50.691	ppb	7.3	1622306.01	101.38	
Ba	137	115	No Gas	48.999	ppb	7.5	865179.27	98	
Tl	203	115	No Gas	49.991	ppb	7.1	1568635.87	99.98	
Pb	208	115	No Gas	49.040	ppb	7.8	4940481.05	98.08	
U	238	115	No Gas	49.719	ppb	6.7	4300637.47	99.44	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7783672.19	3.5	8181334.67	95.14	60	125	
Ge	72	No Gas	6704873.07	1.3	7270733.04	92.22	60	125	
Ge	72	He	856875.63	2.2	958105.21	89.43	60	125	
Y	89	No Gas	9801397.11	3.3	10023893.77	97.78	60	125	
Rh	103	No Gas	8724748.54	2.2	9143531.58	95.42	60	125	
In	115	No Gas	9069852.42	0.4	9650137.39	93.99	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	111_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:49:06
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	22.8	16.67	
Al	27	72	No Gas	-0.086	ppb	N/A	17063.54	
V	51	72	He	0.040	ppb	10.8	611.12	
Cr	52	72	No Gas	0.089	ppb	23.6	35085.26	
Mn	55	72	No Gas	0.045	ppb	14.7	7015.07	
Co	59	72	He	0.002	ppb	30.1	88.89	
Ni	60	72	No Gas	0.003	ppb	232.4	445.56	
Ni	60	72	He	0.002	ppb	215.2	103.34	
Cu	63	72	No Gas	-0.008	ppb	N/A	1766.78	
Cu	63	72	He	-0.005	ppb	N/A	534.46	
Zn	66	72	No Gas	-0.042	ppb	N/A	1744.56	
As	75	72	No Gas	0.157	ppb	137.4	1041.41	
Se	78	72	He	-0.032	ppb	N/A	50.00	
Se	82	72	No Gas	-0.054	ppb	N/A	21.47	
Mo	98	89	No Gas	0.032	ppb	11.1	1088.86	
Ag	107	89	No Gas	0.031	ppb	32.7	1736.79	
Cd	111	89	No Gas	0.015	ppb	34.8	4590.99	
Sb	123	89	No Gas	0.056	ppb	5.2	3000.34	
Ba	137	115	No Gas	0.002	ppb	229.9	223.33	
Tl	203	115	No Gas	0.011	ppb	19.9	474.45	
Pb	208	115	No Gas	0.005	ppb	39.0	1237.80	
U	238	115	No Gas	0.000	ppb	N/A	481.12	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7668118.58	1.7	8181334.67	93.73	60	125	
Ge	72	No Gas	6535950.02	1.9	7270733.04	89.89	60	125	
Ge	72	He	836978.89	1.2	958105.21	87.36	60	125	
Y	89	No Gas	9634379.62	1.7	10023893.77	96.11	60	125	
Rh	103	No Gas	8521540.77	4.1	9143531.58	93.2	60	125	
In	115	No Gas	8958166.31	3.2	9650137.39	92.83	60	125	

7900 ICP-MS 200.8/6020A
Prep Blank (PB) Report

Sample Name	PBW-443643
File Name	112_PB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:51:04
Sample Type	PB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	26.6	8.89	
Al	27	72	No Gas	0.816	ppb	4.4	50958.74	
V	51	72	He	0.114	ppb	13.1	1273.40	
Cr	52	72	No Gas	0.356	ppb	17.3	50741.47	
Mn	55	72	No Gas	0.083	ppb	6.6	10073.56	
Co	59	72	He	0.003	ppb	67.1	104.44	
Ni	60	72	No Gas	0.012	ppb	4.7	597.79	
Ni	60	72	He	0.009	ppb	5.9	137.78	
Cu	63	72	No Gas	0.014	ppb	26.9	2670.26	
Cu	63	72	He	0.023	ppb	14.1	898.92	
Zn	66	72	No Gas	0.015	ppb	69.5	2351.31	
As	75	72	No Gas	0.259	ppb	53.8	2221.59	
Se	78	72	He	-0.041	ppb	N/A	49.33	
Se	82	72	No Gas	-0.053	ppb	N/A	21.29	
Mo	98	89	No Gas	0.013	ppb	15.2	501.05	
Ag	107	89	No Gas	0.018	ppb	22.6	1096.71	
Cd	111	89	No Gas	0.007	ppb	538.4	4539.09	
Sb	123	89	No Gas	0.060	ppb	12.1	3185.94	
Ba	137	115	No Gas	-0.002	ppb	N/A	173.33	
Tl	203	115	No Gas	0.002	ppb	25.0	208.89	
Pb	208	115	No Gas	0.000	ppb	137.5	792.23	
U	238	115	No Gas	-0.003	ppb	N/A	188.89	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7774975.25	4.3	8181334.67	95.03	60	125	
Ge	72	No Gas	6606371.68	2.7	7270733.04	90.86	60	125	
Ge	72	He	841295.64	0.5	958105.21	87.81	60	125	
Y	89	No Gas	9726674.61	4.2	10023893.77	97.03	60	125	
Rh	103	No Gas	8505658.83	0.6	9143531.58	93.02	60	125	
In	115	No Gas	9148299.36	0.5	9650137.39	94.8	60	125	

7900 ICP-MS 200.8/6020A
Laboratory Control Sample (LCS) Report

Sample Name	LCSW-443643
File Name	113_LCS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:53:02
Sample Type	LCS
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	16.704	ppb	7.8	62254.64	83.52	> +/-15%
Al	27	72	No Gas	33.818	ppb	7.1	1317725.96	84.54	> +/-15%
V	51	72	He	20.794	ppb	1.6	186489.32	103.97	
Cr	52	72	No Gas	19.533	ppb	6.7	1178275.96	97.66	
Mn	55	72	No Gas	19.954	ppb	6.2	1606348.10	99.77	
Co	59	72	He	20.831	ppb	0.6	371403.54	104.16	
Ni	60	72	No Gas	19.213	ppb	6.4	325123.75	96.06	
Ni	60	72	He	20.824	ppb	1.3	102033.14	104.12	
Cu	63	72	No Gas	20.799	ppb	6.1	835201.88	103.99	
Cu	63	72	He	22.552	ppb	1.2	297125.76	112.76	
Zn	66	72	No Gas	20.125	ppb	4.4	215396.89	100.63	
As	75	72	No Gas	20.631	ppb	6.3	237133.05	103.16	
Se	78	72	He	21.467	ppb	0.7	2436.21	107.34	
Se	82	72	No Gas	20.398	ppb	4.6	14824.90	101.99	
Mo	98	89	No Gas	20.977	ppb	3.2	636567.56	104.88	
Ag	107	89	No Gas	21.575	ppb	3.6	1013094.47	107.87	
Cd	111	89	No Gas	20.359	ppb	2.3	216163.63	101.8	
Sb	123	89	No Gas	22.035	ppb	2.6	681647.07	110.18	
Ba	137	115	No Gas	21.222	ppb	7.2	369858.06	106.11	
Tl	203	115	No Gas	20.446	ppb	6.3	633341.90	102.23	
Pb	208	115	No Gas	20.273	ppb	6.7	2016190.95	101.36	
U	238	115	No Gas	20.965	ppb	5.1	1791025.31	104.82	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7803663.30	1.7	8181334.67	95.38	60	125	
Ge	72	No Gas	6784408.34	1.7	7270733.04	93.31	60	125	
Ge	72	He	846651.82	1.2	958105.21	88.37	60	125	
Y	89	No Gas	9461068.52	3.5	10023893.77	94.39	60	125	
Rh	103	No Gas	8550970.21	3.6	9143531.58	93.52	60	125	
In	115	No Gas	8958673.81	2.9	9650137.39	92.83	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-002
File Name	114SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:54:59
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.007	ppb	21.7	26.66	
Al	27	72	No Gas	12.887	ppb	8.4	503608.82	
V	51	72	He	0.616	ppb	1.7	5801.19	
Cr	52	72	No Gas	0.675	ppb	8.5	69141.15	
Mn	55	72	No Gas	1.967	ppb	4.4	157796.42	
Co	59	72	He	0.120	ppb	4.3	2193.51	
Ni	60	72	No Gas	0.607	ppb	5.6	10428.33	
Ni	60	72	He	0.483	ppb	2.9	2471.33	
Cu	63	72	No Gas	1.979	ppb	5.9	79532.22	
Cu	63	72	He	1.467	ppb	1.4	19972.95	
Zn	66	72	No Gas	2.922	ppb	4.8	32429.68	
As	75	72	No Gas	1.023	ppb	5.7	10822.37	
Se	78	72	He	0.064	ppb	128.2	61.67	
Se	82	72	No Gas	0.142	ppb	125.4	160.16	
Mo	98	89	No Gas	0.429	ppb	5.2	13506.57	
Ag	107	89	No Gas	0.036	ppb	41.9	1960.15	
Cd	111	89	No Gas	-0.004	ppb	N/A	4447.61	
Sb	123	89	No Gas	0.196	ppb	3.1	7501.00	
Ba	137	115	No Gas	20.082	ppb	5.9	343558.88	
Tl	203	115	No Gas	0.014	ppb	5.9	552.24	
Pb	208	115	No Gas	0.082	ppb	4.9	8721.19	
U	238	115	No Gas	0.103	ppb	3.9	9121.07	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7672931.36	3.9	8181334.67	93.79	60	125	
Ge	72	No Gas	6623416.68	2.4	7270733.04	91.1	60	125	
Ge	72	He	850154.31	4.0	958105.21	88.73	60	125	
Y	89	No Gas	9756399.33	4.2	10023893.77	97.33	60	125	
Rh	103	No Gas	8049493.01	1.3	9143531.58	88.03	60	125	
In	115	No Gas	8784839.38	2.3	9650137.39	91.03	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-004
File Name	115SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:56:56
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	79.3	18.89	
Al	27	72	No Gas	8.129	ppb	5.8	330202.32	
V	51	72	He	0.561	ppb	2.5	5266.54	
Cr	52	72	No Gas	0.580	ppb	7.5	64735.64	
Mn	55	72	No Gas	0.974	ppb	6.4	81281.62	
Co	59	72	He	0.109	ppb	3.3	1995.70	
Ni	60	72	No Gas	0.613	ppb	2.9	10691.85	
Ni	60	72	He	0.501	ppb	8.8	2535.79	
Cu	63	72	No Gas	1.885	ppb	5.0	77072.00	
Cu	63	72	He	1.335	ppb	2.1	18106.02	
Zn	66	72	No Gas	1.869	ppb	4.2	21890.39	
As	75	72	No Gas	0.886	ppb	13.8	9426.96	
Se	78	72	He	0.100	ppb	51.4	65.00	
Se	82	72	No Gas	0.132	ppb	8.9	155.59	
Mo	98	89	No Gas	0.434	ppb	5.7	13509.09	
Ag	107	89	No Gas	0.015	ppb	2.1	971.15	
Cd	111	89	No Gas	0.014	ppb	180.0	4590.00	
Sb	123	89	No Gas	0.181	ppb	6.6	6959.58	
Ba	137	115	No Gas	20.065	ppb	4.5	338074.40	
Tl	203	115	No Gas	0.006	ppb	25.9	317.78	
Pb	208	115	No Gas	0.048	ppb	6.5	5312.67	
U	238	115	No Gas	0.101	ppb	3.7	8811.97	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7870897.19	1.7	8181334.67	96.21	60	125	
Ge	72	No Gas	6733199.32	1.8	7270733.04	92.61	60	125	
Ge	72	He	843812.38	2.1	958105.21	88.07	60	125	
Y	89	No Gas	9651517.11	1.4	10023893.77	96.29	60	125	
Rh	103	No Gas	8019448.01	1.7	9143531.58	87.71	60	125	
In	115	No Gas	8650201.88	0.3	9650137.39	89.64	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-006
File Name	116SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 15:58:53
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	15.6	14.44	
Al	27	72	No Gas	9.196	ppb	3.8	369862.79	
V	51	72	He	0.548	ppb	1.5	5152.05	
Cr	52	72	No Gas	0.860	ppb	9.6	80847.95	
Mn	55	72	No Gas	1.119	ppb	5.3	92532.01	
Co	59	72	He	0.158	ppb	4.2	2860.30	
Ni	60	72	No Gas	0.643	ppb	3.9	11161.15	
Ni	60	72	He	0.552	ppb	3.0	2789.17	
Cu	63	72	No Gas	1.898	ppb	4.0	77368.19	
Cu	63	72	He	1.399	ppb	1.5	18956.00	
Zn	66	72	No Gas	1.447	ppb	3.5	17394.15	
As	75	72	No Gas	0.816	ppb	9.9	8606.10	
Se	78	72	He	0.024	ppb	261.1	56.67	
Se	82	72	No Gas	0.112	ppb	85.8	140.56	
Mo	98	89	No Gas	0.433	ppb	1.1	13509.48	
Ag	107	89	No Gas	0.009	ppb	23.0	697.80	
Cd	111	89	No Gas	0.021	ppb	73.2	4670.93	
Sb	123	89	No Gas	0.199	ppb	4.2	7528.77	
Ba	137	115	No Gas	19.434	ppb	6.1	335721.89	
Tl	203	115	No Gas	0.005	ppb	15.1	290.01	
Pb	208	115	No Gas	0.038	ppb	9.1	4440.31	
U	238	115	No Gas	0.097	ppb	4.7	8673.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7639979.42	0.9	8181334.67	93.38	60	125	
Ge	72	No Gas	6708764.87	2.9	7270733.04	92.27	60	125	
Ge	72	He	844403.18	0.5	958105.21	88.13	60	125	
Y	89	No Gas	9667323.23	5.3	10023893.77	96.44	60	125	
Rh	103	No Gas	8219885.23	6.4	9143531.58	89.9	60	125	
In	115	No Gas	8870474.37	2.6	9650137.39	91.92	60	125	

7900 ICP-MS 200.8/6020A
Reference Sample Report

Sample Name	R2407734-008
File Name	117_ARF.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:00:50
Sample Type	AllRef
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS
Be	9	45	No Gas	0.005	ppb	93.8	23.33
Al	27	72	No Gas	53.686	ppb	2.7	2064147.14
Cr	52	72	No Gas	0.795	ppb	13.7	77248.28
Mn	55	72	No Gas	2.615	ppb	5.2	211923.43
Ni	60	72	No Gas	0.698	ppb	6.3	12107.44
Cu	63	72	No Gas	2.205	ppb	6.2	89791.29
Zn	66	72	No Gas	1.891	ppb	8.5	22110.74
As	75	72	No Gas	0.827	ppb	14.8	8739.95
Se	82	72	No Gas	0.164	ppb	42.4	178.22
Mo	98	89	No Gas	0.399	ppb	4.6	12819.25
Ag	107	89	No Gas	0.008	ppb	16.3	671.13
Cd	111	89	No Gas	-0.001	ppb	N/A	4569.45
Sb	123	89	No Gas	0.200	ppb	10.5	7780.03
Ba	137	115	No Gas	19.730	ppb	3.9	344544.04
Tl	203	115	No Gas	0.005	ppb	34.2	271.12
Pb	208	115	No Gas	0.085	ppb	2.2	9159.07
U	238	115	No Gas	0.151	ppb	2.8	13369.28
V	51	72	He	0.745	ppb	5.5	6927.24
Co	59	72	He	0.235	ppb	2.9	4232.86
Ni	60	72	He	0.619	ppb	7.4	3124.79
Cu	63	72	He	1.747	ppb	3.1	23567.35
Se	78	72	He	0.085	ppb	21.8	63.67

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High
Sc	45	No Gas	7993797.18	2.1	8181334.67	97.71	60	125
Ge	72	No Gas	6732411.12	2.6	7270733.04	92.6	60	125
Ge	72	He	846627.62	0.9	958105.21	88.36	60	125
Y	89	No Gas	9951930.99	0.6	10023893.77	99.28	60	125
Rh	103	No Gas	8170853.29	4.5	9143531.58	89.36	60	125
In	115	No Gas	8962895.48	2.3	9650137.39	92.88	60	125

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407734-008S
File Name	118_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:02:47
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	117_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	17.780	ppb	3.8	64831.23	0.005	88.87	
Al	27	No Gas	87.554	ppb	8.9	3313583.48	53.686	93.45	
V	51	He	21.753	ppb	0.7	195419.54	0.745	104.86	
Cr	52	No Gas	20.526	ppb	7.1	1212095.30	0.795	98.71	
Mn	55	No Gas	23.345	ppb	8.6	1841066.21	2.615	103.23	
Co	59	He	21.172	ppb	0.3	378140.42	0.235	104.63	
Ni	60	No Gas	19.923	ppb	4.6	330420.15	0.698	96.26	
Ni	60	He	20.805	ppb	2.0	102124.86	0.619	100.9	
Cu	63	No Gas	22.438	ppb	6.8	882942.85	2.205	101.05	
Cu	63	He	22.770	ppb	1.3	300499.87	1.747	104.7	
Zn	66	No Gas	21.783	ppb	7.0	228344.57	1.891	99.51	
As	75	No Gas	22.157	ppb	5.5	249687.85	0.827	106.39	
Se	78	He	21.496	ppb	4.3	2444.21	0.085	107.02	
Se	82	No Gas	20.808	ppb	6.1	14822.34	0.164	103.19	
Mo	98	No Gas	20.699	ppb	3.5	654537.15	0.399	101.47	
Ag	107	No Gas	20.116	ppb	3.6	984139.41	0.008	100.54	
Cd	111	No Gas	19.300	ppb	4.7	213770.80	-0.001	96.5	
Sb	123	No Gas	21.377	ppb	2.1	688948.37	0.2	105.83	
Ba	137	No Gas	42.380	ppb	5.4	723866.81	19.73	106.67	
Tl	203	No Gas	20.238	ppb	5.9	614203.69	0.005	101.17	
Pb	208	No Gas	20.188	ppb	5.9	1967571.69	0.085	100.51	
U	238	No Gas	21.932	ppb	7.6	1834949.79	0.151	108.84	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7632738.86	2.2	8181334.67	93.29	60	125	
Ge	72	No Gas	6649205.85	0.9	7270733.04	91.45	60	125	
Ge	72	He	848128.96	1.2	958105.21	88.52	60	125	
Y	89	No Gas	9856174.05	2.8	10023893.77	98.33	60	125	
Rh	103	No Gas	8338191.89	1.3	9143531.58	91.19	60	125	
In	115	No Gas	8778961.04	3.6	9650137.39	90.97	60	125	

7900 ICP-MS 200.8/6020A
Matrix Spike Duplicate (MSD) Sample Report

Sample Name	R2407734-008SD
File Name	119_SpD.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:04:41
Sample Type	SpkDup
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	118_ Spk.d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	RPD	Flag
Be	9	No Gas	17.183	ppb	11.7	64803.10	17.78	3.42	
Al	27	No Gas	88.649	ppb	18.6	3502978.26	87.554	1.24	
V	51	He	21.430	ppb	1.0	193755.02	21.753	1.49	
Cr	52	No Gas	19.261	ppb	12.9	1189871.17	20.526	6.36	
Mn	55	No Gas	22.296	ppb	15.8	1835410.83	23.345	4.6	
Co	59	He	20.563	ppb	0.7	369615.58	21.172	2.92	
Ni	60	No Gas	18.722	ppb	13.0	324283.28	19.923	6.22	
Ni	60	He	20.741	ppb	1.9	102452.12	20.805	0.31	
Cu	63	No Gas	20.904	ppb	10.8	859619.99	22.438	7.08	
Cu	63	He	22.674	ppb	0.9	301176.99	22.77	0.42	
Zn	66	No Gas	20.280	ppb	11.8	222223.32	21.783	7.15	
As	75	No Gas	20.721	ppb	10.5	243904.40	22.157	6.7	
Se	78	He	21.458	ppb	1.0	2455.21	21.496	0.18	
Se	82	No Gas	19.883	ppb	11.9	14795.82	20.808	4.54	
Mo	98	No Gas	19.969	ppb	11.6	634069.58	20.699	3.59	
Ag	107	No Gas	19.472	ppb	11.4	956649.98	20.116	3.25	
Cd	111	No Gas	18.768	ppb	10.3	208914.25	19.3	2.8	
Sb	123	No Gas	21.130	ppb	9.6	684275.21	21.377	1.16	
Ba	137	No Gas	39.088	ppb	9.6	702245.23	42.38	8.08	
Tl	203	No Gas	19.346	ppb	10.8	617530.17	20.238	4.51	
Pb	208	No Gas	19.099	ppb	9.7	1957885.60	20.188	5.54	
U	238	No Gas	20.447	ppb	10.0	1799578.30	21.932	7.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7913517.46	2.5	8181334.67	96.73	60	125	
Ge	72	No Gas	6961582.78	3.2	7270733.04	95.75	60	125	
Ge	72	He	853578.37	0.5	958105.21	89.09	60	125	
Y	89	No Gas	9923102.11	2.5	10023893.77	98.99	60	125	
Rh	103	No Gas	8432252.44	5.4	9143531.58	92.22	60	125	
In	115	No Gas	9239357.97	2.5	9650137.39	95.74	60	125	

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407734-008A
File Name	120_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:06:36
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	117_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	17.173	ppb	10.0	65694.98	0.005	85.84	
Al	27	No Gas	80.457	ppb	11.5	3195831.05	53.686	85.88	
V	51	He	22.568	ppb	1.0	204156.85	0.745	108.79	
Cr	52	No Gas	19.983	ppb	13.9	1237755.19	0.795	96.09	
Mn	55	No Gas	22.977	ppb	14.9	1899022.81	2.615	101.6	
Co	59	He	21.500	ppb	1.9	386702.27	0.235	106.26	
Ni	60	No Gas	19.059	ppb	13.5	331348.19	0.698	92.08	
Ni	60	He	21.443	ppb	2.2	105978.12	0.619	104	
Cu	63	No Gas	21.411	ppb	12.1	883489.10	2.205	96.42	
Cu	63	He	23.409	ppb	1.1	311143.35	1.747	107.64	
Zn	66	No Gas	21.099	ppb	12.2	231987.64	1.891	96.38	
As	75	No Gas	21.415	ppb	10.9	253045.40	0.827	102.82	
Se	78	He	21.995	ppb	1.8	2516.89	0.085	109.51	
Se	82	No Gas	20.220	ppb	12.3	15100.88	0.164	100.28	
Mo	98	No Gas	21.226	ppb	8.7	668534.36	0.399	104.05	
Ag	107	No Gas	17.741	ppb	9.6	864925.68	0.008	88.67	
Cd	111	No Gas	19.476	ppb	8.6	214911.15	-0.001	97.38	
Sb	123	No Gas	21.016	ppb	7.8	675183.77	0.2	104.04	
Ba	137	No Gas	37.784	ppb	7.6	663662.20	19.73	95.1	
Tl	203	No Gas	20.285	ppb	6.1	632945.86	0.005	101.4	
Pb	208	No Gas	20.137	ppb	7.0	2017692.61	0.085	100.26	
U	238	No Gas	21.737	ppb	6.8	1869973.95	0.151	107.87	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8010642.46	2.2	8181334.67	97.91	60	125	
Ge	72	No Gas	6985130.56	2.4	7270733.04	96.07	60	125	
Ge	72	He	854136.96	0.7	958105.21	89.15	60	125	
Y	89	No Gas	9825602.67	3.8	10023893.77	98.02	60	125	
Rh	103	No Gas	8235330.78	0.5	9143531.58	90.07	60	125	
In	115	No Gas	9010321.86	2.4	9650137.39	93.37	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-008L 5X
File Name	121SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:08:31
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	21.6	12.22	
Al	27	72	No Gas	10.715	ppb	6.0	447174.45	
V	51	72	He	0.257	ppb	0.2	2555.79	
Cr	52	72	No Gas	0.349	ppb	8.7	53480.36	
Mn	55	72	No Gas	0.566	ppb	3.5	50794.49	
Co	59	72	He	0.047	ppb	7.2	888.92	
Ni	60	72	No Gas	0.141	ppb	5.6	2899.19	
Ni	60	72	He	0.127	ppb	5.4	714.46	
Cu	63	72	No Gas	0.432	ppb	9.8	20159.01	
Cu	63	72	He	0.373	ppb	3.1	5498.85	
Zn	66	72	No Gas	0.319	ppb	6.3	5826.77	
As	75	72	No Gas	0.424	ppb	59.2	4360.93	
Se	78	72	He	-0.094	ppb	N/A	43.67	
Se	82	72	No Gas	0.015	ppb	589.9	74.48	
Mo	98	89	No Gas	0.102	ppb	6.7	3304.16	
Ag	107	89	No Gas	0.035	ppb	40.1	1966.82	
Cd	111	89	No Gas	0.010	ppb	103.0	4614.28	
Sb	123	89	No Gas	0.119	ppb	5.4	5076.52	
Ba	137	115	No Gas	4.053	ppb	4.8	71851.64	
Tl	203	115	No Gas	0.005	ppb	15.1	287.78	
Pb	208	115	No Gas	0.019	ppb	4.8	2692.34	
U	238	115	No Gas	0.028	ppb	0.8	2929.23	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7930932.74	2.8	8181334.67	96.94	60	125	
Ge	72	No Gas	7014787.08	2.5	7270733.04	96.48	60	125	
Ge	72	He	845416.15	1.0	958105.21	88.24	60	125	
Y	89	No Gas	9789851.28	0.9	10023893.77	97.67	60	125	
Rh	103	No Gas	8486287.44	2.6	9143531.58	92.81	60	125	
In	115	No Gas	9079711.58	0.5	9650137.39	94.09	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	122_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:10:28
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	40.154	ppb	5.5	152157.11	80.31	> +/-10%
Al	27	72	No Gas	42.705	ppb	14.1	1647190.38	85.41	> +/-10%
V	51	72	He	52.220	ppb	1.3	464217.97	104.44	
Cr	52	72	No Gas	45.991	ppb	14.1	2711683.15	91.98	
Mn	55	72	No Gas	49.426	ppb	12.2	3943364.36	98.85	
Co	59	72	He	53.775	ppb	1.5	950929.03	107.55	
Ni	60	72	No Gas	47.390	ppb	13.2	795349.15	94.78	
Ni	60	72	He	53.132	ppb	2.7	258035.88	106.26	
Cu	63	72	No Gas	49.985	ppb	13.4	1989278.12	99.97	
Cu	63	72	He	54.519	ppb	0.7	711729.33	109.04	
Zn	66	72	No Gas	49.392	ppb	11.9	521547.69	98.78	
As	75	72	No Gas	50.967	ppb	10.8	582664.12	101.93	
Se	78	72	He	52.685	ppb	0.9	5853.55	105.37	
Se	82	72	No Gas	50.747	ppb	11.2	36519.47	101.49	
Mo	98	89	No Gas	49.121	ppb	9.1	1545884.16	98.24	
Ag	107	89	No Gas	51.657	ppb	10.5	2514473.79	103.31	
Cd	111	89	No Gas	47.883	ppb	10.4	521123.98	95.77	
Sb	123	89	No Gas	52.135	ppb	11.0	1670201.46	104.27	
Ba	137	115	No Gas	47.411	ppb	10.6	857329.03	94.82	
Tl	203	115	No Gas	48.651	ppb	10.6	1563351.19	97.3	
Pb	208	115	No Gas	48.146	ppb	11.7	4966098.62	96.29	
U	238	115	No Gas	49.375	ppb	10.1	4373937.88	98.75	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7928083.02	3.6	8181334.67	96.9	60	125	
Ge	72	No Gas	6739332.65	1.0	7270733.04	92.69	60	125	
Ge	72	He	839965.54	1.9	958105.21	87.67	60	125	
Y	89	No Gas	9820616.27	1.9	10023893.77	97.97	60	125	
Rh	103	No Gas	8734164.93	1.4	9143531.58	95.52	60	125	
In	115	No Gas	9299983.80	2.3	9650137.39	96.37	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	123_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:12:15
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	43.7	15.56	
Al	27	72	No Gas	-0.069	ppb	N/A	18805.79	
V	51	72	He	0.071	ppb	10.3	872.25	
Cr	52	72	No Gas	0.139	ppb	37.8	40135.38	
Mn	55	72	No Gas	0.049	ppb	4.6	7765.46	
Co	59	72	He	0.001	ppb	193.2	61.11	
Ni	60	72	No Gas	0.002	ppb	108.8	455.56	
Ni	60	72	He	-0.002	ppb	N/A	83.33	
Cu	63	72	No Gas	-0.007	ppb	N/A	1921.25	
Cu	63	72	He	-0.002	ppb	N/A	560.01	
Zn	66	72	No Gas	-0.038	ppb	N/A	1901.25	
As	75	72	No Gas	0.136	ppb	78.0	846.84	
Se	78	72	He	-0.042	ppb	N/A	48.33	
Se	82	72	No Gas	-0.108	ppb	N/A	-18.35	
Mo	98	89	No Gas	0.036	ppb	11.6	1229.78	
Ag	107	89	No Gas	0.032	ppb	30.1	1847.91	
Cd	111	89	No Gas	0.013	ppb	126.3	4705.24	
Sb	123	89	No Gas	0.071	ppb	16.3	3559.36	
Ba	137	115	No Gas	0.000	ppb	285.8	212.22	
Tl	203	115	No Gas	0.010	ppb	16.4	454.45	
Pb	208	115	No Gas	0.010	ppb	9.2	1758.94	
U	238	115	No Gas	-0.002	ppb	N/A	365.56	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8022443.02	6.4	8181334.67	98.06	60	125	
Ge	72	No Gas	6937271.39	3.8	7270733.04	95.41	60	125	
Ge	72	He	825628.65	1.4	958105.21	86.17	60	125	
Y	89	No Gas	9903205.16	5.1	10023893.77	98.8	60	125	
Rh	103	No Gas	8814447.43	7.9	9143531.58	96.4	60	125	
In	115	No Gas	9351658.52	4.2	9650137.39	96.91	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-010
File Name	124SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:14:13
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.007	ppb	15.5	26.67	
Al	27	72	No Gas	45.326	ppb	10.9	1783369.51	
V	51	72	He	0.770	ppb	0.7	7189.59	
Cr	52	72	No Gas	0.624	ppb	12.9	68784.85	
Mn	55	72	No Gas	4.407	ppb	7.3	363061.15	
Co	59	72	He	1.126	ppb	2.0	20224.39	
Ni	60	72	No Gas	0.762	ppb	8.7	13492.07	
Ni	60	72	He	0.687	ppb	2.1	3473.77	
Cu	63	72	No Gas	2.005	ppb	6.0	83739.87	
Cu	63	72	He	1.617	ppb	0.6	21975.91	
Zn	66	72	No Gas	2.027	ppb	5.9	24086.22	
As	75	72	No Gas	0.803	ppb	18.6	8624.71	
Se	78	72	He	0.108	ppb	84.2	66.67	
Se	82	72	No Gas	0.108	ppb	21.3	141.42	
Mo	98	89	No Gas	0.418	ppb	4.1	13129.43	
Ag	107	89	No Gas	0.017	ppb	11.0	1086.71	
Cd	111	89	No Gas	0.021	ppb	110.7	4700.81	
Sb	123	89	No Gas	0.353	ppb	6.3	12476.89	
Ba	137	115	No Gas	20.126	ppb	7.5	349242.23	
Tl	203	115	No Gas	0.010	ppb	8.9	435.56	
Pb	208	115	No Gas	0.098	ppb	5.9	10386.13	
U	238	115	No Gas	0.157	ppb	6.6	13779.75	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7900914.96	2.6	8181334.67	96.57	60	125	
Ge	72	No Gas	6892737.78	5.8	7270733.04	94.8	60	125	
Ge	72	He	851072.21	2.1	958105.21	88.83	60	125	
Y	89	No Gas	9726118.23	0.8	10023893.77	97.03	60	125	
Rh	103	No Gas	8269121.89	1.6	9143531.58	90.44	60	125	
In	115	No Gas	8911808.81	0.6	9650137.39	92.35	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-012
File Name	125SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:16:10
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.006	ppb	37.2	26.67	
Al	27	72	No Gas	25.003	ppb	9.8	996215.55	
V	51	72	He	0.697	ppb	1.0	6495.94	
Cr	52	72	No Gas	0.642	ppb	15.4	69985.23	
Mn	55	72	No Gas	3.845	ppb	8.6	317536.08	
Co	59	72	He	1.291	ppb	1.7	23028.61	
Ni	60	72	No Gas	0.740	ppb	8.8	13126.16	
Ni	60	72	He	0.660	ppb	4.0	3320.40	
Cu	63	72	No Gas	1.915	ppb	8.7	80160.97	
Cu	63	72	He	1.485	ppb	1.5	20106.49	
Zn	66	72	No Gas	2.350	ppb	12.0	27584.95	
As	75	72	No Gas	1.076	ppb	15.0	11905.17	
Se	78	72	He	0.028	ppb	242.7	57.33	
Se	82	72	No Gas	0.142	ppb	74.1	165.26	
Mo	98	89	No Gas	0.418	ppb	7.7	13770.46	
Ag	107	89	No Gas	0.010	ppb	8.4	774.47	
Cd	111	89	No Gas	0.010	ppb	197.8	4811.80	
Sb	123	89	No Gas	0.311	ppb	6.1	11671.70	
Ba	137	115	No Gas	20.946	ppb	9.6	362690.25	
Tl	203	115	No Gas	0.007	ppb	38.7	326.67	
Pb	208	115	No Gas	0.068	ppb	9.6	7420.87	
U	238	115	No Gas	0.150	ppb	8.8	13164.63	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8300540.51	1.4	8181334.67	101.46	60	125	
Ge	72	No Gas	6907245.70	3.5	7270733.04	95	60	125	
Ge	72	He	845657.60	1.5	958105.21	88.26	60	125	
Y	89	No Gas	10213906.54	1.1	10023893.77	101.9	60	125	
Rh	103	No Gas	8354407.45	0.7	9143531.58	91.37	60	125	
In	115	No Gas	8915576.03	4.8	9650137.39	92.39	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-014
File Name	126SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:18:08
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.005	ppb	72.5	21.11	
Al	27	72	No Gas	23.475	ppb	3.7	923362.60	
V	51	72	He	0.647	ppb	1.0	6087.97	
Cr	52	72	No Gas	0.679	ppb	32.6	71175.70	
Mn	55	72	No Gas	5.011	ppb	3.0	406768.18	
Co	59	72	He	1.464	ppb	4.1	26307.64	
Ni	60	72	No Gas	0.815	ppb	4.9	14212.73	
Ni	60	72	He	0.695	ppb	3.6	3517.11	
Cu	63	72	No Gas	2.311	ppb	4.5	94909.24	
Cu	63	72	He	1.773	ppb	0.6	24061.55	
Zn	66	72	No Gas	1.841	ppb	4.7	21800.20	
As	75	72	No Gas	0.963	ppb	1.9	10402.00	
Se	78	72	He	0.082	ppb	125.2	63.67	
Se	82	72	No Gas	0.197	ppb	68.0	203.42	
Mo	98	89	No Gas	0.452	ppb	1.4	14181.04	
Ag	107	89	No Gas	0.009	ppb	14.9	707.80	
Cd	111	89	No Gas	0.017	ppb	84.1	4653.56	
Sb	123	89	No Gas	0.345	ppb	5.1	12206.60	
Ba	137	115	No Gas	22.421	ppb	2.0	390528.70	
Tl	203	115	No Gas	0.005	ppb	13.3	277.78	
Pb	208	115	No Gas	0.088	ppb	5.2	9483.63	
U	238	115	No Gas	0.151	ppb	3.3	13343.70	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7877652.19	2.3	8181334.67	96.29	60	125	
Ge	72	No Gas	6795541.81	1.0	7270733.04	93.46	60	125	
Ge	72	He	851592.90	0.2	958105.21	88.88	60	125	
Y	89	No Gas	9724109.06	3.1	10023893.77	97.01	60	125	
Rh	103	No Gas	8096523.29	1.8	9143531.58	88.55	60	125	
In	115	No Gas	8941146.03	2.2	9650137.39	92.65	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-016
File Name	127SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:20:06
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.005	ppb	19.6	20.00	
Al	27	72	No Gas	17.054	ppb	3.5	675406.74	
V	51	72	He	0.617	ppb	3.1	5788.95	
Cr	52	72	No Gas	0.664	ppb	5.7	70191.31	
Mn	55	72	No Gas	4.150	ppb	4.3	336991.32	
Co	59	72	He	0.107	ppb	1.5	1965.70	
Ni	60	72	No Gas	0.683	ppb	4.6	11966.20	
Ni	60	72	He	0.541	ppb	5.2	2743.61	
Cu	63	72	No Gas	1.898	ppb	3.6	78193.49	
Cu	63	72	He	1.372	ppb	1.8	18656.71	
Zn	66	72	No Gas	1.768	ppb	4.9	20989.00	
As	75	72	No Gas	1.043	ppb	14.9	11288.92	
Se	78	72	He	0.021	ppb	351.9	56.67	
Se	82	72	No Gas	0.047	ppb	30.3	95.10	
Mo	98	89	No Gas	0.430	ppb	5.4	13807.35	
Ag	107	89	No Gas	0.008	ppb	15.2	637.80	
Cd	111	89	No Gas	0.012	ppb	259.5	4696.04	
Sb	123	89	No Gas	0.178	ppb	7.2	7051.85	
Ba	137	115	No Gas	20.983	ppb	3.6	372443.42	
Tl	203	115	No Gas	0.005	ppb	26.5	287.78	
Pb	208	115	No Gas	0.085	ppb	3.5	9302.45	
U	238	115	No Gas	0.119	ppb	2.9	10870.23	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7943429.41	1.1	8181334.67	97.09	60	125	
Ge	72	No Gas	6781895.84	2.3	7270733.04	93.28	60	125	
Ge	72	He	847158.11	1.5	958105.21	88.42	60	125	
Y	89	No Gas	9954206.27	5.0	10023893.77	99.3	60	125	
Rh	103	No Gas	8415523.83	3.7	9143531.58	92.04	60	125	
In	115	No Gas	9112148.25	2.9	9650137.39	94.43	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-018
File Name	128SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:22:04
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	56.6	8.89	
Al	27	72	No Gas	7.713	ppb	8.2	311266.94	
V	51	72	He	0.554	ppb	2.9	5194.29	
Cr	52	72	No Gas	0.745	ppb	13.1	73580.93	
Mn	55	72	No Gas	1.367	ppb	7.6	111426.87	
Co	59	72	He	0.126	ppb	3.0	2285.75	
Ni	60	72	No Gas	0.658	ppb	4.8	11331.25	
Ni	60	72	He	0.574	ppb	3.8	2891.41	
Cu	63	72	No Gas	1.981	ppb	8.2	80047.70	
Cu	63	72	He	1.450	ppb	1.8	19590.19	
Zn	66	72	No Gas	2.867	ppb	7.2	32044.25	
As	75	72	No Gas	0.979	ppb	25.2	10360.55	
Se	78	72	He	0.046	ppb	149.3	59.00	
Se	82	72	No Gas	0.156	ppb	63.1	170.21	
Mo	98	89	No Gas	0.461	ppb	4.0	14595.43	
Ag	107	89	No Gas	0.008	ppb	3.1	643.35	
Cd	111	89	No Gas	0.013	ppb	144.6	4649.11	
Sb	123	89	No Gas	0.188	ppb	9.9	7297.54	
Ba	137	115	No Gas	19.717	ppb	5.4	343868.65	
Tl	203	115	No Gas	0.005	ppb	27.0	267.78	
Pb	208	115	No Gas	0.041	ppb	2.5	4802.58	
U	238	115	No Gas	0.102	ppb	8.1	9170.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7751564.69	1.7	8181334.67	94.75	60	125	
Ge	72	No Gas	6668245.98	1.7	7270733.04	91.71	60	125	
Ge	72	He	843154.41	1.8	958105.21	88	60	125	
Y	89	No Gas	9806649.89	1.1	10023893.77	97.83	60	125	
Rh	103	No Gas	8382322.72	4.6	9143531.58	91.67	60	125	
In	115	No Gas	8955387.42	2.0	9650137.39	92.8	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-020
File Name	129SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:24:01
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	140.1	6.67	
Al	27	72	No Gas	4.689	ppb	83.1	231513.58	
V	51	72	He	0.550	ppb	3.6	5193.17	
Cr	52	72	No Gas	0.191	ppb	229.0	49042.92	
Mn	55	72	No Gas	1.416	ppb	78.7	135292.23	
Co	59	72	He	0.094	ppb	5.0	1735.66	
Ni	60	72	No Gas	0.343	ppb	83.0	7121.32	
Ni	60	72	He	0.466	ppb	7.7	2381.32	
Cu	63	72	No Gas	1.119	ppb	81.9	54214.18	
Cu	63	72	He	1.374	ppb	1.5	18716.77	
Zn	66	72	No Gas	1.115	ppb	84.3	16248.79	
As	75	72	No Gas	0.682	ppb	70.0	8170.09	
Se	78	72	He	0.079	ppb	141.3	63.33	
Se	82	72	No Gas	0.076	ppb	181.2	126.48	
Mo	98	89	No Gas	0.290	ppb	80.4	10324.44	
Ag	107	89	No Gas	0.004	ppb	116.4	504.46	
Cd	111	89	No Gas	-0.015	ppb	N/A	5170.47	
Sb	123	89	No Gas	0.127	ppb	70.9	6104.94	
Ba	137	115	No Gas	11.904	ppb	79.7	239634.37	
Tl	203	115	No Gas	0.002	ppb	204.4	208.89	
Pb	208	115	No Gas	0.019	ppb	92.9	3034.63	
U	238	115	No Gas	0.064	ppb	85.4	6869.22	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	9680301.28	14.3	8181334.67	118.32	60	125	
Ge	72	No Gas	8142438.01	15.6	7270733.04	111.99	60	125	
Ge	72	He	848878.53	2.3	958105.21	88.6	60	125	
Y	89	No Gas	11701456.20	14.7	10023893.77	116.74	60	125	
Rh	103	No Gas	9749644.33	15.0	9143531.58	106.63	60	125	
In	115	No Gas	11022934.01	15.4	9650137.39	114.23	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407805-002
File Name	130SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:25:59
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	98.0	15.56	
Al	27	72	No Gas	30.709	ppb	31.3	1276679.36	
V	51	72	He	0.270	ppb	4.6	2735.82	
Cr	52	72	No Gas	0.482	ppb	44.5	63545.25	
Mn	55	72	No Gas	3.338	ppb	27.3	289487.94	
Co	59	72	He	0.107	ppb	5.8	1999.03	
Ni	60	72	No Gas	0.551	ppb	28.2	10358.54	
Ni	60	72	He	0.420	ppb	1.0	2203.51	
Cu	63	72	No Gas	0.772	ppb	28.7	35256.45	
Cu	63	72	He	0.699	ppb	2.8	10035.78	
Zn	66	72	No Gas	1.350	ppb	29.9	17649.48	
As	75	72	No Gas	0.403	ppb	39.8	4145.73	
Se	78	72	He	0.049	ppb	158.7	61.00	
Se	82	72	No Gas	0.025	ppb	487.9	81.64	
Mo	98	89	No Gas	0.155	ppb	27.6	5287.97	
Ag	107	89	No Gas	0.006	ppb	43.4	572.23	
Cd	111	89	No Gas	0.006	ppb	600.3	4963.65	
Sb	123	89	No Gas	0.090	ppb	29.3	4468.54	
Ba	137	115	No Gas	6.815	ppb	29.7	126170.19	
Tl	203	115	No Gas	0.000	ppb	N/A	132.22	
Pb	208	115	No Gas	0.042	ppb	29.4	5236.02	
U	238	115	No Gas	0.157	ppb	31.1	14761.50	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8623939.10	6.0	8181334.67	105.41	60	125	
Ge	72	No Gas	7318050.12	6.9	7270733.04	100.65	60	125	
Ge	72	He	866819.53	0.7	958105.21	90.47	60	125	
Y	89	No Gas	10646555.13	9.0	10023893.77	106.21	60	125	
Rh	103	No Gas	8828174.09	8.4	9143531.58	96.55	60	125	
In	115	No Gas	9692754.62	10.3	9650137.39	100.44	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407805-004
File Name	131SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:27:56
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	128.1	6.67	
Al	27	72	No Gas	2.816	ppb	4.4	130148.84	
V	51	72	He	0.253	ppb	7.7	2508.00	
Cr	52	72	No Gas	0.704	ppb	4.4	73244.69	
Mn	55	72	No Gas	2.614	ppb	2.6	215625.81	
Co	59	72	He	0.065	ppb	4.0	1205.61	
Ni	60	72	No Gas	0.596	ppb	2.5	10586.23	
Ni	60	72	He	0.401	ppb	6.1	2044.60	
Cu	63	72	No Gas	0.869	ppb	3.4	37318.46	
Cu	63	72	He	0.533	ppb	2.8	7568.70	
Zn	66	72	No Gas	1.255	ppb	0.9	15694.30	
As	75	72	No Gas	0.547	ppb	13.9	5634.52	
Se	78	72	He	-0.054	ppb	N/A	48.00	
Se	82	72	No Gas	0.116	ppb	113.7	146.31	
Mo	98	89	No Gas	0.317	ppb	3.8	9867.92	
Ag	107	89	No Gas	0.004	ppb	19.3	453.34	
Cd	111	89	No Gas	0.027	ppb	101.2	4715.68	
Sb	123	89	No Gas	0.101	ppb	6.1	4425.18	
Ba	137	115	No Gas	26.406	ppb	3.8	458512.99	
Tl	203	115	No Gas	0.001	ppb	31.8	158.89	
Pb	208	115	No Gas	0.029	ppb	6.7	3595.77	
U	238	115	No Gas	0.202	ppb	8.3	17675.73	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7927175.24	4.2	8181334.67	96.89	60	125	
Ge	72	No Gas	6846947.78	3.3	7270733.04	94.17	60	125	
Ge	72	He	842197.71	1.3	958105.21	87.9	60	125	
Y	89	No Gas	9626488.51	2.3	10023893.77	96.04	60	125	
Rh	103	No Gas	8181757.73	1.6	9143531.58	89.48	60	125	
In	115	No Gas	8918274.92	1.7	9650137.39	92.42	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407805-006
File Name	132SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:29:54
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.011	ppb	24.4	45.56	
Al	27	72	No Gas	102.244	ppb	10.7	3951911.37	>LDR
V	51	72	He	0.542	ppb	2.3	5058.68	
Cr	52	72	No Gas	1.003	ppb	11.5	90256.64	
Mn	55	72	No Gas	28.180	ppb	6.5	2271868.94	
Co	59	72	He	0.301	ppb	3.6	5364.36	
Ni	60	72	No Gas	1.191	ppb	9.4	20594.10	
Ni	60	72	He	0.731	ppb	5.8	3633.81	
Cu	63	72	No Gas	0.983	ppb	8.1	41643.09	
Cu	63	72	He	0.708	ppb	3.0	9814.52	
Zn	66	72	No Gas	2.249	ppb	8.2	26138.77	
As	75	72	No Gas	0.616	ppb	10.6	6402.83	
Se	78	72	He	0.051	ppb	112.9	59.33	
Se	82	72	No Gas	0.191	ppb	36.4	199.78	
Mo	98	89	No Gas	0.191	ppb	9.0	6096.49	
Ag	107	89	No Gas	0.007	ppb	18.4	574.46	
Cd	111	89	No Gas	0.042	ppb	26.0	4962.33	
Sb	123	89	No Gas	0.098	ppb	12.4	4387.39	
Ba	137	115	No Gas	51.953	ppb	6.4	906669.79	
Tl	203	115	No Gas	0.002	ppb	11.8	195.56	
Pb	208	115	No Gas	0.293	ppb	7.5	29894.98	
U	238	115	No Gas	0.243	ppb	8.4	21261.22	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8184332.17	3.1	8181334.67	100.04	60	125	
Ge	72	No Gas	6803645.56	2.0	7270733.04	93.58	60	125	
Ge	72	He	838066.83	2.8	958105.21	87.47	60	125	
Y	89	No Gas	9807956.83	3.1	10023893.77	97.85	60	125	
Rh	103	No Gas	8099807.46	1.4	9143531.58	88.59	60	125	
In	115	No Gas	8967624.92	2.4	9650137.39	92.93	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407805-008
File Name	133SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:31:49
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	50.8	12.22	
Al	27	72	No Gas	4.236	ppb	10.5	181851.43	
V	51	72	He	0.364	ppb	7.0	3484.87	
Cr	52	72	No Gas	0.566	ppb	7.4	63842.45	
Mn	55	72	No Gas	21.160	ppb	10.3	1687533.34	
Co	59	72	He	0.222	ppb	5.3	3971.68	
Ni	60	72	No Gas	1.194	ppb	9.7	20393.81	
Ni	60	72	He	0.686	ppb	1.9	3415.97	
Cu	63	72	No Gas	1.310	ppb	8.5	54135.67	
Cu	63	72	He	0.941	ppb	2.8	12844.71	
Zn	66	72	No Gas	10.852	ppb	7.4	116141.96	
As	75	72	No Gas	0.490	ppb	5.3	4890.32	
Se	78	72	He	0.016	ppb	275.7	55.33	
Se	82	72	No Gas	0.286	ppb	9.7	265.93	
Mo	98	89	No Gas	0.419	ppb	8.1	12978.05	
Ag	107	89	No Gas	0.006	ppb	19.7	536.68	
Cd	111	89	No Gas	0.051	ppb	42.9	4945.51	
Sb	123	89	No Gas	0.102	ppb	2.5	4430.73	
Ba	137	115	No Gas	114.663	ppb	5.0	1961802.56	>LDR
Tl	203	115	No Gas	0.000	ppb	N/A	121.11	
Pb	208	115	No Gas	0.024	ppb	4.9	3075.71	
U	238	115	No Gas	0.381	ppb	6.3	32439.39	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8200438.56	1.1	8181334.67	100.23	60	125	
Ge	72	No Gas	6728199.18	2.0	7270733.04	92.54	60	125	
Ge	72	He	837745.42	0.4	958105.21	87.44	60	125	
Y	89	No Gas	9583572.12	2.3	10023893.77	95.61	60	125	
Rh	103	No Gas	8045875.51	0.6	9143531.58	88	60	125	
In	115	No Gas	8790263.26	0.7	9650137.39	91.09	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	134_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:33:45
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	43.674	ppb	9.8	165816.85	87.35	> +/-10%
Al	27	72	No Gas	45.236	ppb	12.7	1769361.70	90.47	
V	51	72	He	53.799	ppb	2.1	476124.81	107.6	
Cr	52	72	No Gas	46.306	ppb	12.5	2770789.13	92.61	
Mn	55	72	No Gas	50.341	ppb	10.2	4076336.23	100.68	
Co	59	72	He	53.583	ppb	1.6	943619.58	107.17	
Ni	60	72	No Gas	47.523	ppb	9.9	809641.70	95.05	
Ni	60	72	He	53.850	ppb	1.5	260467.58	107.7	
Cu	63	72	No Gas	50.530	ppb	11.3	2040951.65	101.06	
Cu	63	72	He	55.056	ppb	1.1	715689.63	110.11 110	> +/-10%
Zn	66	72	No Gas	49.586	ppb	9.6	531450.45	99.17	
As	75	72	No Gas	51.071	ppb	9.4	592575.54	102.14	
Se	78	72	He	52.998	ppb	3.2	5861.56	106	
Se	82	72	No Gas	50.835	ppb	9.6	37130.22	101.67	
Mo	98	89	No Gas	49.740	ppb	6.8	1566945.54	99.48	
Ag	107	89	No Gas	49.948	ppb	6.3	2434249.56	99.9	
Cd	111	89	No Gas	48.878	ppb	7.6	532351.64	97.76	
Sb	123	89	No Gas	53.760	ppb	9.4	1724270.18	107.52	
Ba	137	115	No Gas	50.226	ppb	8.7	882938.63	100.45	
Tl	203	115	No Gas	50.783	ppb	7.6	1586676.32	101.57	
Pb	208	115	No Gas	50.639	ppb	6.2	5080510.60	101.28	
U	238	115	No Gas	51.054	ppb	6.6	4397954.96	102.11	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7966418.02	3.4	8181334.67	97.37	60	125	
Ge	72	No Gas	6841725.84	1.5	7270733.04	94.1	60	125	
Ge	72	He	836468.55	2.2	958105.21	87.3	60	125	
Y	89	No Gas	9828652.66	1.7	10023893.77	98.05	60	125	
Rh	103	No Gas	8696396.88	1.5	9143531.58	95.11	60	125	
In	115	No Gas	9033540.75	2.3	9650137.39	93.61	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	135_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:35:32
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	18.6	12.22	
Al	27	72	No Gas	-0.030	ppb	N/A	20228.67	
V	51	72	He	0.063	ppb	19.7	831.14	
Cr	52	72	No Gas	0.150	ppb	19.9	40754.71	
Mn	55	72	No Gas	0.054	ppb	11.8	8169.03	
Co	59	72	He	0.002	ppb	93.4	85.55	
Ni	60	72	No Gas	0.002	ppb	148.3	458.89	
Ni	60	72	He	0.004	ppb	119.7	114.44	
Cu	63	72	No Gas	0.001	ppb	297.2	2239.07	
Cu	63	72	He	-0.003	ppb	N/A	577.79	
Zn	66	72	No Gas	-0.039	ppb	N/A	1875.69	
As	75	72	No Gas	0.120	ppb	47.0	681.65	
Se	78	72	He	0.001	ppb	2494.8	54.67	
Se	82	72	No Gas	-0.070	ppb	N/A	10.93	
Mo	98	89	No Gas	0.032	ppb	19.5	1118.66	
Ag	107	89	No Gas	0.029	ppb	34.4	1712.34	
Cd	111	89	No Gas	0.025	ppb	84.2	4845.31	
Sb	123	89	No Gas	0.067	ppb	9.3	3459.34	
Ba	137	115	No Gas	0.003	ppb	30.6	263.34	
Tl	203	115	No Gas	0.011	ppb	29.1	481.12	
Pb	208	115	No Gas	0.010	ppb	17.5	1765.60	
U	238	115	No Gas	-0.001	ppb	N/A	454.45	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7940727.74	0.5	8181334.67	97.06	60	125	
Ge	72	No Gas	6920817.78	2.8	7270733.04	95.19	60	125	
Ge	72	He	852049.31	1.3	958105.21	88.93	60	125	
Y	89	No Gas	9929395.72	0.8	10023893.77	99.06	60	125	
Rh	103	No Gas	8651521.88	1.0	9143531.58	94.62	60	125	
In	115	No Gas	9474299.35	2.6	9650137.39	98.18	60	125	

7900 ICP-MS 200.8/6020A
Reference Sample Report

Sample Name	R2407805-010
File Name	136_ARF.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:37:30
Sample Type	AllRef
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS
Be	9	45	No Gas	0.004	ppb	12.1	18.89
Al	27	72	No Gas	25.337	ppb	5.2	980721.98
Cr	52	72	No Gas	1.083	ppb	10.3	93579.79
Mn	55	72	No Gas	16.436	ppb	2.9	1307095.74
Ni	60	72	No Gas	1.223	ppb	3.1	20812.07
Cu	63	72	No Gas	0.770	ppb	7.5	32591.22
Zn	66	72	No Gas	1.348	ppb	5.9	16328.40
As	75	72	No Gas	0.387	ppb	44.2	3680.68
Se	82	72	No Gas	0.213	ppb	32.2	212.68
Mo	98	89	No Gas	0.133	ppb	8.0	4254.07
Ag	107	89	No Gas	0.013	ppb	4.8	888.92
Cd	111	89	No Gas	0.040	ppb	20.1	4921.64
Sb	123	89	No Gas	0.103	ppb	12.1	4531.88
Ba	137	115	No Gas	34.339	ppb	5.7	604744.92
Tl	203	115	No Gas	0.006	ppb	15.3	317.78
Pb	208	115	No Gas	0.074	ppb	3.2	8145.48
U	238	115	No Gas	0.147	ppb	3.0	13165.74
V	51	72	He	0.255	ppb	2.1	2503.56
Co	59	72	He	0.141	ppb	3.1	2522.45
Ni	60	72	He	0.928	ppb	0.2	4574.08
Cu	63	72	He	0.537	ppb	4.7	7560.92
Se	78	72	He	-0.035	ppb	N/A	49.67

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High
Sc	45	No Gas	8083470.79	1.7	8181334.67	98.8	60	125
Ge	72	No Gas	6699626.54	1.1	7270733.04	92.15	60	125
Ge	72	He	834984.99	0.7	958105.21	87.15	60	125
Y	89	No Gas	9763418.78	1.4	10023893.77	97.4	60	125
Rh	103	No Gas	8464170.78	1.4	9143531.58	92.57	60	125
In	115	No Gas	9042171.31	0.4	9650137.39	93.7	60	125

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407805-010S
File Name	137_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:39:27
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	136_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	17.553	ppb	6.2	67693.45	0.004	87.75	
Al	27	No Gas	54.563	ppb	2.4	2133512.76	25.337	83.51	
V	51	He	21.521	ppb	1.8	192420.14	0.255	106.25	
Cr	52	No Gas	20.005	ppb	4.2	1217722.24	1.083	94.89	
Mn	55	No Gas	36.893	ppb	6.2	2996598.63	16.436	101.26	
Co	59	He	20.732	ppb	1.4	368439.80	0.141	102.94	
Ni	60	No Gas	19.233	ppb	5.1	328617.95	1.223	90.63	
Ni	60	He	21.048	ppb	0.2	102807.32	0.928	100.58	
Cu	63	No Gas	20.084	ppb	3.7	814332.78	0.77	96.7	
Cu	63	He	21.292	ppb	1.1	279673.63	0.537	103.68	
Zn	66	No Gas	20.430	ppb	4.6	220742.83	1.348	95.7	
As	75	No Gas	21.232	ppb	5.1	246483.47	0.387	104.14	
Se	78	He	20.815	ppb	1.8	2356.20	-0.035	104.26	
Se	82	No Gas	20.611	ppb	4.8	15122.96	0.213	101.97	
Mo	98	No Gas	20.351	ppb	4.7	640654.29	0.133	101.08	
Ag	107	No Gas	19.973	ppb	5.0	972907.43	0.013	99.8	
Cd	111	No Gas	19.207	ppb	4.2	211783.77	0.04	95.85	
Sb	123	No Gas	21.104	ppb	4.4	677340.58	0.103	104.98	
Ba	137	No Gas	56.262	ppb	3.3	973407.77	34.339	103.54	
Tl	203	No Gas	20.186	ppb	3.0	620695.64	0.006	100.9	
Pb	208	No Gas	19.998	ppb	4.1	1974681.19	0.074	99.62	
U	238	No Gas	21.270	ppb	3.1	1803034.79	0.147	105.58	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8078551.90	2.8	8181334.67	98.74	60	125	
Ge	72	No Gas	6846775.28	2.6	7270733.04	94.17	60	125	
Ge	72	He	844007.40	1.4	958105.21	88.09	60	125	
Y	89	No Gas	9815775.17	2.7	10023893.77	97.92	60	125	
Rh	103	No Gas	8275844.39	1.4	9143531.58	90.51	60	125	
In	115	No Gas	8883192.43	1.4	9650137.39	92.05	60	125	

7900 ICP-MS 200.8/6020A
Matrix Spike Duplicate (MSD) Sample Report

Sample Name	R2407805-010SD
File Name	138_SpD.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:41:21
Sample Type	SpkDup
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	137_ Spk.d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	RPD	Flag
Be	9	No Gas	17.891	ppb	10.0	69970.53	17.553	1.91	
Al	27	No Gas	58.424	ppb	8.8	2325595.19	54.563	6.84	
V	51	He	21.954	ppb	1.4	197590.96	21.521	1.99	
Cr	52	No Gas	19.903	ppb	9.7	1233446.58	20.005	0.51	
Mn	55	No Gas	35.112	ppb	7.2	2902075.44	36.893	4.95	
Co	59	He	20.966	ppb	1.6	375110.97	20.732	1.12	
Ni	60	No Gas	19.202	ppb	7.6	333984.15	19.233	0.16	
Ni	60	He	21.022	ppb	1.7	103383.39	21.048	0.12	
Cu	63	No Gas	19.842	ppb	8.6	819104.41	20.084	1.21	
Cu	63	He	21.494	ppb	1.4	284197.98	21.292	0.94	
Zn	66	No Gas	20.064	ppb	8.2	220757.36	20.43	1.81	
As	75	No Gas	20.587	ppb	8.9	243240.88	21.232	3.08	
Se	78	He	21.839	ppb	1.9	2486.22	20.815	4.8	
Se	82	No Gas	20.194	ppb	8.7	15085.22	20.611	2.04	
Mo	98	No Gas	20.603	ppb	10.2	650685.73	20.351	1.23	
Ag	107	No Gas	20.312	ppb	10.2	992553.54	19.973	1.68	
Cd	111	No Gas	19.351	ppb	9.8	214096.79	19.207	0.74	
Sb	123	No Gas	21.437	ppb	9.6	690343.25	21.104	1.57	
Ba	137	No Gas	54.027	ppb	8.2	975414.48	56.262	4.05	
Tl	203	No Gas	19.393	ppb	8.6	622217.86	20.186	4.01	
Pb	208	No Gas	19.155	ppb	7.0	1973962.78	19.998	4.31	
U	238	No Gas	20.428	ppb	7.5	1807155.55	21.27	4.04	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8209093.84	3.4	8181334.67	100.34	60	125	
Ge	72	No Gas	6973726.11	0.3	7270733.04	95.92	60	125	
Ge	72	He	849693.16	1.8	958105.21	88.68	60	125	
Y	89	No Gas	9878612.38	4.2	10023893.77	98.55	60	125	
Rh	103	No Gas	8295779.95	1.9	9143531.58	90.73	60	125	
In	115	No Gas	9283124.07	2.2	9650137.39	96.2	60	125	

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407805-010A
File Name	139_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:43:17
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	136_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	20.110	ppb	1.8	77352.05	0.004	100.53	
Al	27	No Gas	61.551	ppb	5.1	2430730.88	25.337	94.2	
V	51	He	22.536	ppb	1.8	202738.74	0.255	111.26	
Cr	52	No Gas	21.423	ppb	4.9	1315485.89	1.083	101.61	
Mn	55	No Gas	37.406	ppb	5.5	3067922.45	16.436	102.66	
Co	59	He	21.993	ppb	1.9	393425.22	0.141	109.2	
Ni	60	No Gas	20.356	ppb	5.6	351452.89	1.223	95.92	
Ni	60	He	21.718	ppb	1.4	106764.57	0.928	103.77	
Cu	63	No Gas	21.342	ppb	5.2	874386.93	0.77	102.75	
Cu	63	He	22.326	ppb	1.1	295155.98	0.537	108.71	
Zn	66	No Gas	21.837	ppb	5.2	238295.85	1.348	102.29	
As	75	No Gas	21.977	ppb	4.7	257814.22	0.387	107.8	
Se	78	He	22.387	ppb	2.4	2546.57	-0.035	112.13	
Se	82	No Gas	21.344	ppb	4.6	15822.09	0.213	105.59	
Mo	98	No Gas	21.064	ppb	1.6	682838.80	0.133	104.62	
Ag	107	No Gas	18.210	ppb	1.5	913659.03	0.013	90.99	
Cd	111	No Gas	19.781	ppb	1.9	224603.56	0.04	98.71	
Sb	123	No Gas	21.195	ppb	2.2	700857.80	0.103	105.43	
Ba	137	No Gas	52.862	ppb	4.1	949510.38	34.339	97.28	
Tl	203	No Gas	20.880	ppb	3.9	666614.05	0.006	104.37	
Pb	208	No Gas	20.354	ppb	4.6	2086561.71	0.074	101.4	
U	238	No Gas	21.532	ppb	5.5	1894909.99	0.147	106.88	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8054128.29	1.9	8181334.67	98.45	60	125	
Ge	72	No Gas	6917541.67	2.0	7270733.04	95.14	60	125	
Ge	72	He	849717.71	3.1	958105.21	88.69	60	125	
Y	89	No Gas	10113938.21	4.6	10023893.77	100.9	60	125	
Rh	103	No Gas	8134907.17	1.2	9143531.58	88.97	60	125	
In	115	No Gas	9223352.96	1.0	9650137.39	95.58	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407805-010L 5X
File Name	140SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:45:12
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	22.6	16.67	
Al	27	72	No Gas	5.254	ppb	0.9	228657.39	
V	51	72	He	0.136	ppb	0.3	1492.30	
Cr	52	72	No Gas	0.431	ppb	8.8	58049.09	
Mn	55	72	No Gas	3.378	ppb	5.6	282669.32	
Co	59	72	He	0.033	ppb	12.2	644.46	
Ni	60	72	No Gas	0.287	ppb	0.7	5409.93	
Ni	60	72	He	0.233	ppb	5.6	1246.73	
Cu	63	72	No Gas	0.191	ppb	3.5	10103.63	
Cu	63	72	He	0.147	ppb	4.4	2562.46	
Zn	66	72	No Gas	0.230	ppb	1.9	4827.51	
As	75	72	No Gas	0.161	ppb	120.5	1188.23	
Se	78	72	He	-0.037	ppb	N/A	50.67	
Se	82	72	No Gas	-0.035	ppb	N/A	36.59	
Mo	98	89	No Gas	0.047	ppb	9.0	1592.38	
Ag	107	89	No Gas	0.033	ppb	33.5	1866.80	
Cd	111	89	No Gas	0.043	ppb	26.3	5001.75	
Sb	123	89	No Gas	0.097	ppb	10.0	4407.39	
Ba	137	115	No Gas	7.095	ppb	6.4	124978.72	
Tl	203	115	No Gas	0.005	ppb	7.1	272.22	
Pb	208	115	No Gas	0.017	ppb	7.6	2451.21	
U	238	115	No Gas	0.030	ppb	3.1	3097.05	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8070361.35	0.5	8181334.67	98.64	60	125	
Ge	72	No Gas	6969760.56	2.3	7270733.04	95.86	60	125	
Ge	72	He	855885.55	0.5	958105.21	89.33	60	125	
Y	89	No Gas	9863871.55	1.3	10023893.77	98.4	60	125	
Rh	103	No Gas	8415036.33	2.0	9143531.58	92.03	60	125	
In	115	No Gas	9036105.75	2.5	9650137.39	93.64	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407807-002
File Name	141SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:47:09
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	42.3	11.11	
Al	27	72	No Gas	1.921	ppb	9.5	97264.61	
V	51	72	He	0.099	ppb	4.9	1146.71	
Cr	52	72	No Gas	1.009	ppb	8.7	92842.75	
Mn	55	72	No Gas	2.752	ppb	6.9	230784.63	
Co	59	72	He	0.006	ppb	30.4	163.34	
Ni	60	72	No Gas	0.179	ppb	8.0	3520.45	
Ni	60	72	He	0.203	ppb	9.2	1085.60	
Cu	63	72	No Gas	0.118	ppb	5.8	7072.91	
Cu	63	72	He	0.113	ppb	3.4	2093.49	
Zn	66	72	No Gas	4.208	ppb	5.4	48095.64	
As	75	72	No Gas	0.104	ppb	115.6	474.11	
Se	78	72	He	-0.098	ppb	N/A	43.33	
Se	82	72	No Gas	-0.151	ppb	N/A	-49.33	
Mo	98	89	No Gas	0.018	ppb	16.3	692.93	
Ag	107	89	No Gas	0.010	ppb	15.1	751.13	
Cd	111	89	No Gas	0.027	ppb	96.3	4975.06	
Sb	123	89	No Gas	0.057	ppb	9.9	3208.17	
Ba	137	115	No Gas	2.530	ppb	3.6	45567.14	
Tl	203	115	No Gas	0.001	ppb	113.4	156.67	
Pb	208	115	No Gas	0.005	ppb	28.4	1291.14	
U	238	115	No Gas	-0.004	ppb	N/A	152.22	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8326821.89	1.9	8181334.67	101.78	60	125	
Ge	72	No Gas	6966558.47	3.3	7270733.04	95.82	60	125	
Ge	72	He	846745.82	3.7	958105.21	88.38	60	125	
Y	89	No Gas	10169344.60	3.4	10023893.77	101.45	60	125	
Rh	103	No Gas	8725287.43	0.6	9143531.58	95.43	60	125	
In	115	No Gas	9203821.30	3.4	9650137.39	95.38	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407807-004
File Name	142SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:49:08
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	171.0	4.45	
Al	27	72	No Gas	1.948	ppb	3.7	97660.62	
V	51	72	He	0.086	ppb	12.4	1017.82	
Cr	52	72	No Gas	0.749	ppb	4.9	76686.01	
Mn	55	72	No Gas	0.697	ppb	2.6	60827.08	
Co	59	72	He	0.003	ppb	26.8	103.33	
Ni	60	72	No Gas	0.075	ppb	3.8	1719.00	
Ni	60	72	He	0.085	ppb	12.7	504.46	
Cu	63	72	No Gas	0.094	ppb	2.3	6054.64	
Cu	63	72	He	0.103	ppb	4.1	1946.80	
Zn	66	72	No Gas	3.695	ppb	2.3	42222.01	
As	75	72	No Gas	-0.025	ppb	N/A	-1023.85	
Se	78	72	He	-0.077	ppb	N/A	45.33	
Se	82	72	No Gas	-0.075	ppb	N/A	5.80	
Mo	98	89	No Gas	0.010	ppb	9.4	397.99	
Ag	107	89	No Gas	0.006	ppb	13.6	566.68	
Cd	111	89	No Gas	0.041	ppb	41.5	4953.19	
Sb	123	89	No Gas	0.053	ppb	24.1	2957.00	
Ba	137	115	No Gas	2.343	ppb	2.3	41666.54	
Tl	203	115	No Gas	-0.001	ppb	N/A	103.33	
Pb	208	115	No Gas	0.005	ppb	14.8	1260.03	
U	238	115	No Gas	-0.004	ppb	N/A	126.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8160182.73	1.7	8181334.67	99.74	60	125	
Ge	72	No Gas	6918724.03	1.8	7270733.04	95.16	60	125	
Ge	72	He	839999.36	1.5	958105.21	87.67	60	125	
Y	89	No Gas	9814201.83	2.1	10023893.77	97.91	60	125	
Rh	103	No Gas	8598847.16	1.8	9143531.58	94.04	60	125	
In	115	No Gas	9086979.08	3.7	9650137.39	94.16	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407807-006
File Name	143SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:51:06
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	123.4	8.89	
Al	27	72	No Gas	1.649	ppb	3.9	86267.23	
V	51	72	He	0.102	ppb	4.4	1175.61	
Cr	52	72	No Gas	0.579	ppb	5.6	66719.40	
Mn	55	72	No Gas	1020.625	ppb	4.3	83940334.44	>LDR
Co	59	72	He	0.093	ppb	8.4	1716.77	
Ni	60	72	No Gas	0.511	ppb	2.8	9271.97	
Ni	60	72	He	0.299	ppb	5.3	1562.31	
Cu	63	72	No Gas	1.223	ppb	3.3	52378.63	
Cu	63	72	He	1.098	ppb	1.4	15044.64	
Zn	66	72	No Gas	3.425	ppb	3.6	39464.33	
As	75	72	No Gas	0.459	ppb	11.8	4669.32	
Se	78	72	He	-0.011	ppb	N/A	53.00	
Se	82	72	No Gas	0.097	ppb	149.7	132.16	
Mo	98	89	No Gas	0.122	ppb	7.6	3942.86	
Ag	107	89	No Gas	0.006	ppb	22.7	530.01	
Cd	111	89	No Gas	0.037	ppb	57.0	4912.79	
Sb	123	89	No Gas	0.074	ppb	10.4	3648.27	
Ba	137	115	No Gas	25.770	ppb	3.3	456590.50	
Tl	203	115	No Gas	-0.001	ppb	N/A	95.55	
Pb	208	115	No Gas	0.003	ppb	14.1	1034.46	
U	238	115	No Gas	0.048	ppb	6.9	4689.76	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8209473.56	3.1	8181334.67	100.34	60	125	
Ge	72	No Gas	6944340.84	3.2	7270733.04	95.51	60	125	
Ge	72	He	847113.29	1.2	958105.21	88.42	60	125	
Y	89	No Gas	9810982.39	2.5	10023893.77	97.88	60	125	
Rh	103	No Gas	8203181.62	1.2	9143531.58	89.72	60	125	
In	115	No Gas	9094620.75	1.6	9650137.39	94.24	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407807-008
File Name	144SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:53:03
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	207.6	5.55	
Al	27	72	No Gas	4.266	ppb	3.6	186099.41	
V	51	72	He	0.145	ppb	2.0	1551.20	
Cr	52	72	No Gas	0.828	ppb	8.1	80409.53	
Mn	55	72	No Gas	2.019	ppb	6.3	167077.04	
Co	59	72	He	0.061	ppb	13.5	1143.38	
Ni	60	72	No Gas	0.458	ppb	3.2	8214.64	
Ni	60	72	He	0.296	ppb	1.5	1543.42	
Cu	63	72	No Gas	1.433	ppb	4.7	60036.66	
Cu	63	72	He	1.295	ppb	1.9	17605.38	
Zn	66	72	No Gas	3.197	ppb	4.0	36383.65	
As	75	72	No Gas	0.825	ppb	10.8	8848.13	
Se	78	72	He	0.002	ppb	4535.9	54.33	
Se	82	72	No Gas	-0.039	ppb	N/A	31.77	
Mo	98	89	No Gas	0.160	ppb	1.6	5063.71	
Ag	107	89	No Gas	0.005	ppb	9.4	473.34	
Cd	111	89	No Gas	0.016	ppb	217.8	4609.20	
Sb	123	89	No Gas	0.086	ppb	3.4	3965.03	
Ba	137	115	No Gas	12.978	ppb	4.2	230450.89	
Tl	203	115	No Gas	-0.002	ppb	N/A	82.22	
Pb	208	115	No Gas	0.010	ppb	9.1	1716.72	
U	238	115	No Gas	0.054	ppb	7.2	5219.97	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8245824.11	4.9	8181334.67	100.79	60	125	
Ge	72	No Gas	6836331.53	2.6	7270733.04	94.03	60	125	
Ge	72	He	845130.56	0.9	958105.21	88.21	60	125	
Y	89	No Gas	9680297.39	4.6	10023893.77	96.57	60	125	
Rh	103	No Gas	8325542.72	0.7	9143531.58	91.05	60	125	
In	115	No Gas	9116744.08	1.3	9650137.39	94.47	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407807-010
File Name	145SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:55:00
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	55.2	5.56	
Al	27	72	No Gas	2.080	ppb	2.9	96937.75	
V	51	72	He	0.355	ppb	4.4	3335.95	
Cr	52	72	No Gas	0.541	ppb	2.9	60601.90	
Mn	55	72	No Gas	1.783	ppb	5.3	141292.31	
Co	59	72	He	0.213	ppb	3.0	3734.95	
Ni	60	72	No Gas	1.553	ppb	4.8	25647.89	
Ni	60	72	He	0.707	ppb	2.2	3452.65	
Cu	63	72	No Gas	1.891	ppb	5.0	74981.95	
Cu	63	72	He	0.507	ppb	3.5	7061.76	
Zn	66	72	No Gas	4.996	ppb	2.5	53096.71	
As	75	72	No Gas	1.144	ppb	17.9	12033.15	
Se	78	72	He	0.136	ppb	135.2	67.33	
Se	82	72	No Gas	0.491	ppb	22.1	402.60	
Mo	98	89	No Gas	0.739	ppb	6.5	22818.22	
Ag	107	89	No Gas	0.006	ppb	8.0	540.01	
Cd	111	89	No Gas	0.024	ppb	42.0	4661.03	
Sb	123	89	No Gas	0.122	ppb	9.8	5056.51	
Ba	137	115	No Gas	24.074	ppb	5.9	407204.89	
Tl	203	115	No Gas	0.001	ppb	40.1	153.33	
Pb	208	115	No Gas	0.009	ppb	10.8	1561.16	
U	238	115	No Gas	0.580	ppb	7.0	48541.71	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7914530.80	3.4	8181334.67	96.74	60	125	
Ge	72	No Gas	6528782.38	4.9	7270733.04	89.8	60	125	
Ge	72	He	821933.44	0.6	958105.21	85.79	60	125	
Y	89	No Gas	9585532.95	1.4	10023893.77	95.63	60	125	
Rh	103	No Gas	8020474.40	2.8	9143531.58	87.72	60	125	
In	115	No Gas	8690280.49	1.6	9650137.39	90.05	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	146_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:56:58
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	41.323	ppb	7.3	158122.20	82.65	> +/-10%
Al	27	72	No Gas	41.606	ppb	6.7	1661962.19	83.21	> +/-10%
V	51	72	He	52.445	ppb	1.1	469144.95	104.89	
Cr	52	72	No Gas	45.270	ppb	8.3	2766737.25	90.54	
Mn	55	72	No Gas	48.232	ppb	8.6	3984383.45	96.46	
Co	59	72	He	53.422	ppb	1.0	950728.50	106.84	
Ni	60	72	No Gas	46.100	ppb	9.7	801568.96	92.2	
Ni	60	72	He	51.882	ppb	1.9	253603.46	103.76	
Cu	63	72	No Gas	49.137	ppb	9.1	2026983.74	98.27	
Cu	63	72	He	54.437	ppb	1.1	715206.66	108.87	
Zn	66	72	No Gas	47.222	ppb	7.8	516645.66	94.44	
As	75	72	No Gas	49.841	ppb	8.8	590152.50	99.68	
Se	78	72	He	51.387	ppb	1.3	5745.84	102.77	
Se	82	72	No Gas	49.264	ppb	7.1	36722.68	98.53	
Mo	98	89	No Gas	50.523	ppb	7.3	1591949.54	101.05	
Ag	107	89	No Gas	48.875	ppb	6.6	2381472.54	97.75	
Cd	111	89	No Gas	48.892	ppb	7.0	532714.35	97.78	
Sb	123	89	No Gas	51.344	ppb	6.8	1647646.91	102.69	
Ba	137	115	No Gas	50.573	ppb	8.1	863397.02	101.15	
Tl	203	115	No Gas	52.444	ppb	9.4	1591115.35	104.89	
Pb	208	115	No Gas	51.454	ppb	7.7	5011745.84	102.91	
U	238	115	No Gas	51.888	ppb	8.0	4338834.69	103.78	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8018009.96	1.9	8181334.67	98	60	125	
Ge	72	No Gas	6969317.23	2.9	7270733.04	95.85	60	125	
Ge	72	He	845209.67	1.8	958105.21	88.22	60	125	
Y	89	No Gas	9820446.83	4.1	10023893.77	97.97	60	125	
Rh	103	No Gas	8732163.54	3.5	9143531.58	95.5	60	125	
In	115	No Gas	8770010.21	2.5	9650137.39	90.88	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	147_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 16:58:45
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	127.3	6.67	
Al	27	72	No Gas	0.032	ppb	308.2	21963.22	
V	51	72	He	0.092	ppb	3.7	1065.60	
Cr	52	72	No Gas	0.199	ppb	22.1	42228.95	
Mn	55	72	No Gas	0.065	ppb	3.2	8746.03	
Co	59	72	He	0.002	ppb	34.4	84.44	
Ni	60	72	No Gas	0.004	ppb	119.4	465.56	
Ni	60	72	He	0.000	ppb	N/A	93.34	
Cu	63	72	No Gas	-0.010	ppb	N/A	1763.45	
Cu	63	72	He	-0.006	ppb	N/A	517.79	
Zn	66	72	No Gas	-0.024	ppb	N/A	1976.82	
As	75	72	No Gas	0.142	ppb	64.1	902.59	
Se	78	72	He	0.024	ppb	298.6	56.00	
Se	82	72	No Gas	-0.096	ppb	N/A	-7.71	
Mo	98	89	No Gas	0.033	ppb	11.2	1106.64	
Ag	107	89	No Gas	0.031	ppb	40.6	1699.01	
Cd	111	89	No Gas	0.021	ppb	95.2	4583.77	
Sb	123	89	No Gas	0.073	ppb	9.5	3486.01	
Ba	137	115	No Gas	0.002	ppb	35.2	233.33	
Tl	203	115	No Gas	0.011	ppb	3.8	475.56	
Pb	208	115	No Gas	0.010	ppb	14.0	1695.60	
U	238	115	No Gas	-0.001	ppb	N/A	386.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8025060.24	1.2	8181334.67	98.09	60	125	
Ge	72	No Gas	6686374.87	2.8	7270733.04	91.96	60	125	
Ge	72	He	834632.92	3.2	958105.21	87.11	60	125	
Y	89	No Gas	9478883.51	0.8	10023893.77	94.56	60	125	
Rh	103	No Gas	8548429.94	1.0	9143531.58	93.49	60	125	
In	115	No Gas	9021250.20	1.3	9650137.39	93.48	60	125	

7900 ICP-MS 200.8/6020A
Prep Blank (PB) Report

Sample Name	PBW-443641
File Name	148_PB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:00:43
Sample Type	PB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	57.7	5.56	
Al	27	72	No Gas	0.824	ppb	5.2	53399.67	
V	51	72	He	0.126	ppb	5.9	1358.96	
Cr	52	72	No Gas	0.346	ppb	23.7	52187.56	
Mn	55	72	No Gas	0.084	ppb	6.4	10601.73	
Co	59	72	He	0.003	ppb	49.0	101.11	
Ni	60	72	No Gas	0.008	ppb	39.0	547.79	
Ni	60	72	He	0.006	ppb	55.5	122.22	
Cu	63	72	No Gas	0.002	ppb	127.5	2274.63	
Cu	63	72	He	0.024	ppb	136.4	906.78	
Zn	66	72	No Gas	-0.012	ppb	N/A	2169.06	
As	75	72	No Gas	0.173	ppb	35.0	1307.58	
Se	78	72	He	-0.081	ppb	N/A	44.33	
Se	82	72	No Gas	-0.105	ppb	N/A	-14.97	
Mo	98	89	No Gas	0.012	ppb	4.3	474.52	
Ag	107	89	No Gas	0.011	ppb	5.6	828.92	
Cd	111	89	No Gas	0.024	ppb	56.6	4926.07	
Sb	123	89	No Gas	0.059	ppb	17.6	3259.29	
Ba	137	115	No Gas	0.002	ppb	161.6	241.11	
Tl	203	115	No Gas	0.003	ppb	25.2	218.89	
Pb	208	115	No Gas	0.001	ppb	31.6	842.24	
U	238	115	No Gas	-0.003	ppb	N/A	246.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8164299.12	1.1	8181334.67	99.79	60	125	
Ge	72	No Gas	6889510.84	3.9	7270733.04	94.76	60	125	
Ge	72	He	829834.01	1.9	958105.21	86.61	60	125	
Y	89	No Gas	10133762.10	0.5	10023893.77	101.1	60	125	
Rh	103	No Gas	8706249.65	1.2	9143531.58	95.22	60	125	
In	115	No Gas	9291486.85	0.9	9650137.39	96.28	60	125	

7900 ICP-MS 200.8/6020A
Laboratory Control Sample (LCS) Report

Sample Name	LCSW-443641
File Name	149_LCS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:02:41
Sample Type	LCS
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	16.981	ppb	8.8	65456.55	84.9	> +/-15%
Al	27	72	No Gas	36.402	ppb	3.6	1420285.19	91	
V	51	72	He	20.973	ppb	1.7	186887.17	104.86	
Cr	52	72	No Gas	19.854	ppb	7.4	1199089.08	99.27	
Mn	55	72	No Gas	20.370	ppb	4.8	1642257.95	101.85	
Co	59	72	He	21.031	ppb	1.2	372587.84	105.16	
Ni	60	72	No Gas	19.270	ppb	6.5	326613.10	96.35	
Ni	60	72	He	20.834	ppb	0.7	101439.80	104.17	
Cu	63	72	No Gas	20.827	ppb	6.3	837722.73	104.14	
Cu	63	72	He	21.977	ppb	1.1	287766.23	109.88	
Zn	66	72	No Gas	20.149	ppb	8.2	215998.84	100.74	
As	75	72	No Gas	20.415	ppb	7.5	235037.61	102.08	
Se	78	72	He	20.786	ppb	1.8	2346.20	103.93	
Se	82	72	No Gas	20.361	ppb	6.9	14820.48	101.8	
Mo	98	89	No Gas	19.946	ppb	7.5	634146.84	99.73	
Ag	107	89	No Gas	20.797	ppb	6.8	1023005.24	103.98	
Cd	111	89	No Gas	19.346	ppb	5.5	215433.34	96.73	
Sb	123	89	No Gas	21.091	ppb	5.5	683670.82	105.46	
Ba	137	115	No Gas	20.986	ppb	7.3	373381.53	104.93	
Tl	203	115	No Gas	20.192	ppb	5.9	638325.91	100.96	
Pb	208	115	No Gas	20.118	ppb	6.0	2042257.37	100.59	
U	238	115	No Gas	21.118	ppb	6.2	1840409.96	105.59	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8088853.29	4.6	8181334.67	98.87	60	125	
Ge	72	No Gas	6797807.93	1.0	7270733.04	93.5	60	125	
Ge	72	He	841407.88	1.9	958105.21	87.82	60	125	
Y	89	No Gas	9919180.72	1.3	10023893.77	98.96	60	125	
Rh	103	No Gas	8742016.04	2.0	9143531.58	95.61	60	125	
In	115	No Gas	9139588.80	1.7	9650137.39	94.71	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-001
File Name	150SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:04:37
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.015	ppb	14.0	57.78	
Al	27	72	No Gas	172.801	ppb	5.6	6736393.48	>LDR
V	51	72	He	0.969	ppb	2.2	8827.17	
Cr	52	72	No Gas	3.170	ppb	6.1	220132.65	
Mn	55	72	No Gas	32.291	ppb	3.4	2629000.17	
Co	59	72	He	0.271	ppb	4.6	4823.05	
Ni	60	72	No Gas	1.047	ppb	4.4	18340.89	
Ni	60	72	He	1.003	ppb	2.7	4945.31	
Cu	63	72	No Gas	2.364	ppb	6.2	98116.78	
Cu	63	72	He	1.975	ppb	2.3	26254.30	
Zn	66	72	No Gas	4.994	ppb	3.7	55853.08	
As	75	72	No Gas	0.906	ppb	17.4	9872.01	
Se	78	72	He	0.046	ppb	232.9	58.67	
Se	82	72	No Gas	0.192	ppb	7.3	202.22	
Mo	98	89	No Gas	0.415	ppb	4.2	13380.08	
Ag	107	89	No Gas	0.029	ppb	31.0	1685.67	
Cd	111	89	No Gas	0.027	ppb	65.1	4885.90	
Sb	123	89	No Gas	0.177	ppb	4.3	7042.95	
Ba	137	115	No Gas	21.996	ppb	5.7	386163.29	
Tl	203	115	No Gas	0.015	ppb	9.5	588.90	
Pb	208	115	No Gas	0.583	ppb	8.0	59110.38	
U	238	115	No Gas	0.107	ppb	8.1	9650.37	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7824033.86	2.5	8181334.67	95.63	60	125	
Ge	72	No Gas	6868130.84	1.8	7270733.04	94.46	60	125	
Ge	72	He	836294.70	0.6	958105.21	87.29	60	125	
Y	89	No Gas	9978290.71	3.0	10023893.77	99.55	60	125	
Rh	103	No Gas	8285183.28	3.0	9143531.58	90.61	60	125	
In	115	No Gas	9019192.70	1.7	9650137.39	93.46	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-003
File Name	151SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:06:33
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.007	ppb	19.3	28.89	
Al	27	72	No Gas	111.081	ppb	4.4	4259483.44	>LDR
V	51	72	He	0.787	ppb	1.0	7217.39	
Cr	52	72	No Gas	1.148	ppb	5.6	98052.98	
Mn	55	72	No Gas	25.439	ppb	5.0	2035028.39	
Co	59	72	He	0.178	ppb	4.6	3179.25	
Ni	60	72	No Gas	0.954	ppb	4.5	16438.49	
Ni	60	72	He	0.905	ppb	1.6	4467.37	
Cu	63	72	No Gas	2.171	ppb	4.3	88641.87	
Cu	63	72	He	1.686	ppb	1.2	22496.73	
Zn	66	72	No Gas	3.070	ppb	4.1	34571.40	
As	75	72	No Gas	0.897	ppb	14.2	9548.78	
Se	78	72	He	0.105	ppb	56.3	65.00	
Se	82	72	No Gas	0.064	ppb	109.3	105.74	
Mo	98	89	No Gas	0.425	ppb	4.6	13331.22	
Ag	107	89	No Gas	0.014	ppb	8.0	944.48	
Cd	111	89	No Gas	0.040	ppb	53.7	4889.83	
Sb	123	89	No Gas	0.176	ppb	3.7	6827.29	
Ba	137	115	No Gas	20.839	ppb	4.3	375332.13	
Tl	203	115	No Gas	0.007	ppb	29.4	355.56	
Pb	208	115	No Gas	0.407	ppb	5.3	42536.77	
U	238	115	No Gas	0.099	ppb	3.5	9256.73	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8177703.84	2.0	8181334.67	99.96	60	125	
Ge	72	No Gas	6742313.07	2.5	7270733.04	92.73	60	125	
Ge	72	He	836069.55	1.4	958105.21	87.26	60	125	
Y	89	No Gas	9716532.95	4.4	10023893.77	96.93	60	125	
Rh	103	No Gas	8377679.11	1.4	9143531.58	91.62	60	125	
In	115	No Gas	9245423.52	0.8	9650137.39	95.81	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-005
File Name	152SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:08:28
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.009	ppb	18.9	36.67	
Al	27	72	No Gas	84.449	ppb	6.9	3237510.98	
V	51	72	He	0.687	ppb	1.9	6329.19	
Cr	52	72	No Gas	0.754	ppb	11.3	74948.81	
Mn	55	72	No Gas	18.943	ppb	4.7	1514959.84	
Co	59	72	He	0.145	ppb	2.6	2596.91	
Ni	60	72	No Gas	0.744	ppb	5.9	12900.36	
Ni	60	72	He	0.641	ppb	3.2	3188.14	
Cu	63	72	No Gas	2.107	ppb	7.0	85975.74	
Cu	63	72	He	1.602	ppb	2.8	21390.56	
Zn	66	72	No Gas	2.700	ppb	8.6	30634.49	
As	75	72	No Gas	0.887	ppb	3.9	9447.97	
Se	78	72	He	0.023	ppb	192.1	56.00	
Se	82	72	No Gas	0.151	ppb	73.5	167.69	
Mo	98	89	No Gas	0.427	ppb	4.4	13775.53	
Ag	107	89	No Gas	0.008	ppb	14.0	667.80	
Cd	111	89	No Gas	0.029	ppb	52.4	4920.61	
Sb	123	89	No Gas	0.155	ppb	4.6	6367.06	
Ba	137	115	No Gas	20.928	ppb	4.8	365928.03	
Tl	203	115	No Gas	0.005	ppb	28.6	290.00	
Pb	208	115	No Gas	0.324	ppb	5.2	33011.31	
U	238	115	No Gas	0.103	ppb	5.0	9341.24	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8089149.12	0.5	8181334.67	98.87	60	125	
Ge	72	No Gas	6743914.04	3.2	7270733.04	92.75	60	125	
Ge	72	He	835611.08	1.8	958105.21	87.21	60	125	
Y	89	No Gas	9997800.44	3.4	10023893.77	99.74	60	125	
Rh	103	No Gas	8383144.11	1.9	9143531.58	91.68	60	125	
In	115	No Gas	8977884.92	1.0	9650137.39	93.03	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-007
File Name	153SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:10:25
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.036	ppb	6.3	138.89	
Al	27	72	No Gas	524.503	ppb	7.1	20078508.65	>LDR
V	51	72	He	1.532	ppb	1.5	13960.18	
Cr	52	72	No Gas	1.115	ppb	2.8	96237.48	
Mn	55	72	No Gas	38.879	ppb	1.9	3115395.50	
Co	59	72	He	0.504	ppb	2.7	9017.31	
Ni	60	72	No Gas	1.425	ppb	2.7	24391.14	
Ni	60	72	He	1.399	ppb	2.5	6935.03	
Cu	63	72	No Gas	3.022	ppb	4.8	122697.60	
Cu	63	72	He	2.689	ppb	2.7	35916.45	
Zn	66	72	No Gas	4.302	ppb	1.9	47624.81	
As	75	72	No Gas	0.968	ppb	6.0	10380.61	
Se	78	72	He	0.114	ppb	76.0	66.67	
Se	82	72	No Gas	0.160	ppb	49.4	177.57	
Mo	98	89	No Gas	0.344	ppb	5.7	11271.57	
Ag	107	89	No Gas	0.011	ppb	14.2	815.58	
Cd	111	89	No Gas	0.036	ppb	29.2	5055.50	
Sb	123	89	No Gas	0.153	ppb	11.3	6373.74	
Ba	137	115	No Gas	26.307	ppb	2.2	457872.01	
Tl	203	115	No Gas	0.010	ppb	8.0	426.67	
Pb	208	115	No Gas	0.765	ppb	1.1	76668.64	
U	238	115	No Gas	0.171	ppb	1.4	15032.25	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7915501.35	2.3	8181334.67	96.75	60	125	
Ge	72	No Gas	6758766.82	5.8	7270733.04	92.96	60	125	
Ge	72	He	845629.27	2.1	958105.21	88.26	60	125	
Y	89	No Gas	10127178.49	1.1	10023893.77	101.03	60	125	
Rh	103	No Gas	8335164.39	2.3	9143531.58	91.16	60	125	
In	115	No Gas	8936176.59	3.3	9650137.39	92.6	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-009
File Name	154SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:12:20
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.031	ppb	22.0	123.33	
Al	27	72	No Gas	464.340	ppb	7.6	18429989.82	>LDR
V	51	72	He	1.421	ppb	3.4	12928.09	
Cr	52	72	No Gas	1.253	ppb	8.9	108235.84	
Mn	55	72	No Gas	34.726	ppb	5.4	2884835.65	
Co	59	72	He	0.454	ppb	0.4	8107.89	
Ni	60	72	No Gas	1.395	ppb	6.1	24781.88	
Ni	60	72	He	1.369	ppb	1.3	6763.85	
Cu	63	72	No Gas	2.917	ppb	4.1	122948.52	
Cu	63	72	He	2.585	ppb	2.7	34435.07	
Zn	66	72	No Gas	5.166	ppb	5.5	58846.26	
As	75	72	No Gas	1.112	ppb	12.6	12503.31	
Se	78	72	He	0.167	ppb	52.3	72.33	
Se	82	72	No Gas	0.195	ppb	41.0	208.42	
Mo	98	89	No Gas	0.362	ppb	4.2	11491.26	
Ag	107	89	No Gas	0.009	ppb	5.2	688.91	
Cd	111	89	No Gas	0.028	ppb	116.9	4822.88	
Sb	123	89	No Gas	0.157	ppb	5.1	6297.04	
Ba	137	115	No Gas	25.144	ppb	2.8	437577.85	
Tl	203	115	No Gas	0.009	ppb	11.1	393.34	
Pb	208	115	No Gas	0.678	ppb	2.3	68038.84	
U	238	115	No Gas	0.165	ppb	1.5	14519.46	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8207911.62	1.2	8181334.67	100.32	60	125	
Ge	72	No Gas	7009072.36	2.0	7270733.04	96.4	60	125	
Ge	72	He	842819.86	0.2	958105.21	87.97	60	125	
Y	89	No Gas	9821221.56	1.8	10023893.77	97.98	60	125	
Rh	103	No Gas	8245311.62	1.9	9143531.58	90.18	60	125	
In	115	No Gas	8933183.81	1.6	9650137.39	92.57	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-011
File Name	155SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:14:16
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.026	ppb	20.2	103.33	
Al	27	72	No Gas	462.499	ppb	10.1	17785247.07	>LDR
V	51	72	He	1.428	ppb	1.6	12966.99	
Cr	52	72	No Gas	1.395	ppb	11.0	113259.21	
Mn	55	72	No Gas	49.303	ppb	5.9	3969134.43	
Co	59	72	He	0.486	ppb	4.1	8654.86	
Ni	60	72	No Gas	1.525	ppb	5.1	26240.02	
Ni	60	72	He	1.432	ppb	4.4	7062.88	
Cu	63	72	No Gas	2.760	ppb	8.6	112819.15	
Cu	63	72	He	2.284	ppb	3.5	30452.66	
Zn	66	72	No Gas	5.243	ppb	7.5	57875.50	
As	75	72	No Gas	0.949	ppb	14.6	10220.55	
Se	78	72	He	0.128	ppb	22.3	68.00	
Se	82	72	No Gas	0.211	ppb	92.6	210.55	
Mo	98	89	No Gas	0.402	ppb	4.8	12621.28	
Ag	107	89	No Gas	0.009	ppb	10.2	688.91	
Cd	111	89	No Gas	0.025	ppb	86.2	4736.72	
Sb	123	89	No Gas	0.154	ppb	12.5	6135.84	
Ba	137	115	No Gas	26.831	ppb	7.0	458593.60	
Tl	203	115	No Gas	0.010	ppb	17.4	423.34	
Pb	208	115	No Gas	0.830	ppb	7.4	81641.19	
U	238	115	No Gas	0.167	ppb	6.4	14431.57	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8140761.90	3.6	8181334.67	99.5	60	125	
Ge	72	No Gas	6803399.04	4.4	7270733.04	93.57	60	125	
Ge	72	He	841938.42	2.4	958105.21	87.88	60	125	
Y	89	No Gas	9720526.84	0.7	10023893.77	96.97	60	125	
Rh	103	No Gas	8041693.57	4.7	9143531.58	87.95	60	125	
In	115	No Gas	8789061.04	3.4	9650137.39	91.08	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-013
File Name	156SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:16:12
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.021	ppb	25.0	81.11	
Al	27	72	No Gas	276.592	ppb	10.6	10577849.85	>LDR
V	51	72	He	1.093	ppb	1.0	9945.70	
Cr	52	72	No Gas	1.124	ppb	8.0	96720.85	
Mn	55	72	No Gas	40.717	ppb	4.4	3257942.79	
Co	59	72	He	0.343	ppb	2.2	6107.99	
Ni	60	72	No Gas	1.214	ppb	3.6	20838.74	
Ni	60	72	He	1.094	ppb	1.2	5398.81	
Cu	63	72	No Gas	2.834	ppb	4.2	115178.66	
Cu	63	72	He	2.327	ppb	1.3	30903.57	
Zn	66	72	No Gas	3.951	ppb	4.1	43911.77	
As	75	72	No Gas	1.114	ppb	3.7	12081.62	
Se	78	72	He	0.134	ppb	67.4	68.33	
Se	82	72	No Gas	0.101	ppb	108.5	135.72	
Mo	98	89	No Gas	0.429	ppb	5.6	13500.68	
Ag	107	89	No Gas	0.008	ppb	16.5	650.02	
Cd	111	89	No Gas	0.026	ppb	22.1	4765.06	
Sb	123	89	No Gas	0.155	ppb	10.4	6179.20	
Ba	137	115	No Gas	25.800	ppb	4.9	440947.46	
Tl	203	115	No Gas	0.007	ppb	21.8	336.67	
Pb	208	115	No Gas	0.651	ppb	4.8	64164.90	
U	238	115	No Gas	0.166	ppb	6.4	14374.85	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7921898.02	4.8	8181334.67	96.83	60	125	
Ge	72	No Gas	6754407.23	4.2	7270733.04	92.9	60	125	
Ge	72	He	838407.41	1.4	958105.21	87.51	60	125	
Y	89	No Gas	9745531.00	2.5	10023893.77	97.22	60	125	
Rh	103	No Gas	8290802.45	3.4	9143531.58	90.67	60	125	
In	115	No Gas	8777144.37	0.8	9650137.39	90.95	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-015
File Name	157SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:18:08
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.022	ppb	22.1	85.56	
Al	27	72	No Gas	302.697	ppb	7.1	11647459.26	>LDR
V	51	72	He	1.055	ppb	1.5	9651.05	
Cr	52	72	No Gas	1.179	ppb	8.6	100468.86	
Mn	55	72	No Gas	44.532	ppb	5.4	3581483.95	
Co	59	72	He	0.379	ppb	3.4	6774.96	
Ni	60	72	No Gas	1.280	ppb	4.1	22057.25	
Ni	60	72	He	1.257	ppb	1.7	6214.70	
Cu	63	72	No Gas	2.568	ppb	7.0	105086.97	
Cu	63	72	He	2.092	ppb	2.3	27954.11	
Zn	66	72	No Gas	5.289	ppb	6.7	58306.23	
As	75	72	No Gas	1.065	ppb	5.2	11577.26	
Se	78	72	He	0.118	ppb	25.9	67.00	
Se	82	72	No Gas	0.253	ppb	8.6	243.84	
Mo	98	89	No Gas	0.429	ppb	5.3	13382.42	
Ag	107	89	No Gas	0.008	ppb	13.8	641.13	
Cd	111	89	No Gas	0.041	ppb	52.9	4881.43	
Sb	123	89	No Gas	0.158	ppb	6.9	6241.45	
Ba	137	115	No Gas	24.843	ppb	4.8	433548.78	
Tl	203	115	No Gas	0.006	ppb	3.2	321.11	
Pb	208	115	No Gas	0.812	ppb	4.8	81591.44	
U	238	115	No Gas	0.129	ppb	5.0	11504.12	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8074098.01	1.2	8181334.67	98.69	60	125	
Ge	72	No Gas	6788694.18	2.0	7270733.04	93.37	60	125	
Ge	72	He	842006.96	1.6	958105.21	87.88	60	125	
Y	89	No Gas	9655704.34	0.4	10023893.77	96.33	60	125	
Rh	103	No Gas	8045105.79	2.7	9143531.58	87.99	60	125	
In	115	No Gas	8962868.81	1.3	9650137.39	92.88	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	158_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:20:04
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	43.225	ppb	4.9	168114.56	86.45	> +/-10%
Al	27	72	No Gas	43.855	ppb	5.9	1744828.47	87.71	> +/-10%
V	51	72	He	53.298	ppb	0.5	470399.35	106.6	
Cr	52	72	No Gas	46.695	ppb	12.4	2840557.87	93.39	
Mn	55	72	No Gas	49.154	ppb	9.1	4046419.28	98.31	
Co	59	72	He	53.973	ppb	2.6	947791.07	107.95	
Ni	60	72	No Gas	47.363	ppb	10.3	819970.18	94.73	
Ni	60	72	He	53.721	ppb	2.1	259123.30	107.44	
Cu	63	72	No Gas	50.349	ppb	10.1	2067291.38	100.7	
Cu	63	72	He	55.921	ppb	0.6	724817.19	111.84	> +/-10%
Zn	66	72	No Gas	48.626	ppb	11.4	529755.34	97.25	
As	75	72	No Gas	50.117	ppb	10.2	591035.07	100.23	
Se	78	72	He	53.595	ppb	0.8	5910.91	107.19	
Se	82	72	No Gas	49.505	ppb	10.3	36758.22	99.01	
Mo	98	89	No Gas	50.544	ppb	5.2	1604133.26	101.09	
Ag	107	89	No Gas	50.885	ppb	7.4	2497735.25	101.77	
Cd	111	89	No Gas	48.379	ppb	7.7	531092.07	96.76	
Sb	123	89	No Gas	52.421	ppb	6.6	1695049.72	104.84	
Ba	137	115	No Gas	48.508	ppb	8.3	865283.45	97.02	
Tl	203	115	No Gas	50.468	ppb	9.0	1599724.87	100.94	
Pb	208	115	No Gas	49.623	ppb	7.9	5050350.28	99.25	
U	238	115	No Gas	50.660	ppb	7.9	4427067.04	101.32	

Cu No gas line reported for batch

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8137278.84	2.9	8181334.67	99.46	60	125	
Ge	72	No Gas	6949636.53	1.6	7270733.04	95.58	60	125	
Ge	72	He	833944.67	1.0	958105.21	87.04	60	125	
Y	89	No Gas	9896089.05	3.3	10023893.77	98.72	60	125	
Rh	103	No Gas	8519949.94	1.9	9143531.58	93.18	60	125	
In	115	No Gas	9163315.47	0.6	9650137.39	94.96	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	159_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:21:50
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	23.7	18.89	
Al	27	72	No Gas	-0.009	ppb	N/A	20955.33	
V	51	72	He	0.051	ppb	9.3	708.91	
Cr	52	72	No Gas	0.132	ppb	18.4	39474.42	
Mn	55	72	No Gas	0.058	ppb	8.6	8445.85	
Co	59	72	He	0.001	ppb	81.9	72.22	
Ni	60	72	No Gas	0.002	ppb	109.4	457.78	
Ni	60	72	He	0.001	ppb	602.0	97.78	
Cu	63	72	No Gas	-0.008	ppb	N/A	1887.91	
Cu	63	72	He	-0.004	ppb	N/A	545.57	
Zn	66	72	No Gas	-0.031	ppb	N/A	1956.82	
As	75	72	No Gas	0.108	ppb	83.8	500.63	
Se	78	72	He	-0.027	ppb	N/A	50.67	
Se	82	72	No Gas	-0.138	ppb	N/A	-40.05	
Mo	98	89	No Gas	0.033	ppb	15.1	1126.78	
Ag	107	89	No Gas	0.025	ppb	34.2	1504.54	
Cd	111	89	No Gas	0.026	ppb	88.7	4853.72	
Sb	123	89	No Gas	0.065	ppb	9.5	3393.76	
Ba	137	115	No Gas	0.000	ppb	90.3	210.00	
Tl	203	115	No Gas	0.008	ppb	14.4	400.01	
Pb	208	115	No Gas	0.009	ppb	10.9	1693.38	
U	238	115	No Gas	-0.001	ppb	N/A	384.45	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8024891.35	1.1	8181334.67	98.09	60	125	
Ge	72	No Gas	6882811.11	4.8	7270733.04	94.66	60	125	
Ge	72	He	837309.72	2.1	958105.21	87.39	60	125	
Y	89	No Gas	9919035.72	3.0	10023893.77	98.95	60	125	
Rh	103	No Gas	8537089.38	1.3	9143531.58	93.37	60	125	
In	115	No Gas	9195832.69	2.4	9650137.39	95.29	60	125	

7900 ICP-MS 200.8/6020A
Reference Sample Report

Sample Name	R2407734-017
File Name	160_ARF.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:23:49
Sample Type	AllRef
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS
Be	9	45	No Gas	0.007	ppb	18.4	28.89
Al	27	72	No Gas	94.486	ppb	3.8	3678775.96
Cr	52	72	No Gas	0.869	ppb	10.9	82972.20
Mn	55	72	No Gas	19.989	ppb	7.7	1622710.84
Ni	60	72	No Gas	0.763	ppb	6.7	13423.10
Cu	63	72	No Gas	2.133	ppb	8.8	88377.62
Zn	66	72	No Gas	3.010	ppb	6.9	34432.08
As	75	72	No Gas	0.931	ppb	7.2	10100.65
Se	82	72	No Gas	0.195	ppb	42.3	204.11
Mo	98	89	No Gas	0.455	ppb	8.2	14451.66
Ag	107	89	No Gas	0.014	ppb	10.6	928.92
Cd	111	89	No Gas	0.036	ppb	19.1	4926.55
Sb	123	89	No Gas	0.173	ppb	12.2	6823.95
Ba	137	115	No Gas	21.186	ppb	4.7	359448.57
Tl	203	115	No Gas	0.011	ppb	8.2	442.23
Pb	208	115	No Gas	0.325	ppb	4.3	32121.25
U	238	115	No Gas	0.109	ppb	4.8	9516.93
V	51	72	He	0.692	ppb	4.5	6389.22
Co	59	72	He	0.153	ppb	1.4	2754.72
Ni	60	72	He	0.693	ppb	3.3	3448.20
Cu	63	72	He	1.658	ppb	1.4	22157.27
Se	78	72	He	0.064	ppb	157.2	60.67

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High
Sc	45	No Gas	7912461.63	3.4	8181334.67	96.71	60	125
Ge	72	No Gas	6848622.50	2.8	7270733.04	94.19	60	125
Ge	72	He	837063.51	1.5	958105.21	87.37	60	125
Y	89	No Gas	9853850.44	0.4	10023893.77	98.3	60	125
Rh	103	No Gas	8254214.67	1.9	9143531.58	90.27	60	125
In	115	No Gas	8709384.65	0.5	9650137.39	90.25	60	125

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407734-017S
File Name	161_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:25:44
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	160_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	18.176	ppb	9.7	68541.73	0.007	90.85	
Al	27	No Gas	121.687	ppb	8.2	4784817.59	94.486	90.48	
V	51	He	22.265	ppb	2.8	198060.96	0.692	107.6	
Cr	52	No Gas	20.092	ppb	5.9	1235928.32	0.869	96.28	
Mn	55	No Gas	38.755	ppb	7.5	3179441.33	19.989	96.92	
Co	59	He	21.198	ppb	2.9	374938.07	0.153	105.18	
Ni	60	No Gas	19.460	ppb	6.4	336025.52	0.763	93.72	
Ni	60	He	21.476	ppb	1.9	104390.70	0.693	103.78	
Cu	63	No Gas	21.796	ppb	6.6	892971.89	2.133	98.47	
Cu	63	He	23.095	ppb	2.4	301824.00	1.658	106.63	
Zn	66	No Gas	22.311	ppb	7.2	243432.47	3.01	96.96	
As	75	No Gas	21.719	ppb	8.7	254720.92	0.931	103.76	
Se	78	He	21.236	ppb	2.2	2391.54	0.064	105.84	
Se	82	No Gas	20.557	ppb	6.6	15244.92	0.195	101.79	
Mo	98	No Gas	20.926	ppb	2.5	662291.68	0.455	102.3	
Ag	107	No Gas	19.532	ppb	4.9	956860.62	0.014	97.6	
Cd	111	No Gas	18.878	ppb	2.9	209380.40	0.036	94.22	
Sb	123	No Gas	21.401	ppb	2.6	690487.32	0.173	106.09	
Ba	137	No Gas	42.129	ppb	5.1	727497.54	21.186	102.29	
Tl	203	No Gas	20.306	ppb	4.5	623172.08	0.011	101.48	
Pb	208	No Gas	20.570	ppb	5.4	2027022.27	0.325	101.21	
U	238	No Gas	21.241	ppb	5.2	1796931.98	0.109	105.63	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7911976.35	3.0	8181334.67	96.71	60	125	
Ge	72	No Gas	6927886.94	1.9	7270733.04	95.28	60	125	
Ge	72	He	839924.60	1.0	958105.21	87.67	60	125	
Y	89	No Gas	9866800.44	2.7	10023893.77	98.43	60	125	
Rh	103	No Gas	8329545.50	2.2	9143531.58	91.1	60	125	
In	115	No Gas	8868470.48	0.4	9650137.39	91.9	60	125	

7900 ICP-MS 200.8/6020A
Matrix Spike Duplicate (MSD) Sample Report

Sample Name	R2407734-017SD
File Name	162_SpD.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:27:39
Sample Type	SpkDup
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	161_ Spk.d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	RPD	Flag
Be	9	No Gas	17.505	ppb	5.9	67785.12	18.176	3.76	
Al	27	No Gas	115.926	ppb	6.0	4476813.43	121.687	4.85	
V	51	He	21.325	ppb	0.5	190829.58	22.265	4.32	
Cr	52	No Gas	20.646	ppb	6.9	1246057.80	20.092	2.72	
Mn	55	No Gas	38.109	ppb	9.2	3069755.71	38.755	1.68	
Co	59	He	20.293	ppb	1.9	361113.80	21.198	4.36	
Ni	60	No Gas	19.263	ppb	7.0	326533.92	19.46	1.02	
Ni	60	He	20.586	ppb	0.4	100652.07	21.476	4.23	
Cu	63	No Gas	21.580	ppb	5.9	868075.78	21.796	0.99	
Cu	63	He	22.388	ppb	1.4	294303.62	23.095	3.11	
Zn	66	No Gas	21.225	ppb	6.2	227454.63	22.311	4.99	
As	75	No Gas	21.270	ppb	7.0	244971.64	21.719	2.09	
Se	78	He	20.666	ppb	3.4	2343.87	21.236	2.72	
Se	82	No Gas	20.104	ppb	5.5	14635.61	20.557	2.23	
Mo	98	No Gas	19.712	ppb	8.8	624341.30	20.926	5.98	
Ag	107	No Gas	19.597	ppb	9.2	960212.36	19.532	0.33	
Cd	111	No Gas	18.400	ppb	9.2	204328.83	18.878	2.56	
Sb	123	No Gas	20.457	ppb	8.2	660615.11	21.401	4.51	
Ba	137	No Gas	40.632	ppb	7.0	717388.86	42.129	3.62	
Tl	203	No Gas	19.202	ppb	5.4	602478.83	20.306	5.59	
Pb	208	No Gas	19.236	ppb	4.6	1937906.44	20.57	6.71	
U	238	No Gas	20.215	ppb	6.9	1748590.03	21.241	4.95	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8112200.79	3.1	8181334.67	99.15	60	125	
Ge	72	No Gas	6791354.45	2.2	7270733.04	93.41	60	125	
Ge	72	He	844912.08	2.4	958105.21	88.19	60	125	
Y	89	No Gas	9891877.11	2.4	10023893.77	98.68	60	125	
Rh	103	No Gas	8308891.06	1.5	9143531.58	90.87	60	125	
In	115	No Gas	9064588.25	0.7	9650137.39	93.93	60	125	

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407734-017A
File Name	163_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:29:33
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	160_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	19.022	ppb	7.7	73302.35	0.007	95.08	
Al	27	No Gas	119.976	ppb	4.4	4687201.34	94.486	89.21	
V	51	He	23.094	ppb	2.1	209633.99	0.692	111.61	
Cr	52	No Gas	21.369	ppb	3.7	1303105.71	0.869	102.39	
Mn	55	No Gas	41.187	ppb	2.3	3355319.38	19.989	103	
Co	59	He	21.760	ppb	2.7	392679.88	0.153	107.97	
Ni	60	No Gas	20.436	ppb	4.1	350482.82	0.763	98.42	
Ni	60	He	22.146	ppb	2.1	109836.39	0.693	107.02	
Cu	63	No Gas	23.217	ppb	5.5	944813.19	2.133	104.9	
Cu	63	He	23.488	ppb	1.8	313279.78	1.658	108.45	
Zn	66	No Gas	23.185	ppb	4.4	251183.65	3.01	100.76	
As	75	No Gas	23.003	ppb	3.6	268096.04	0.931	109.9	
Se	78	He	22.060	ppb	3.4	2532.23	0.064	109.95	
Se	82	No Gas	21.784	ppb	3.3	16039.78	0.195	107.87	
Mo	98	No Gas	22.467	ppb	4.9	693989.72	0.455	109.84	
Ag	107	No Gas	19.050	ppb	4.0	910504.03	0.014	95.18	
Cd	111	No Gas	20.707	ppb	2.9	223711.56	0.036	103.35	
Sb	123	No Gas	22.192	ppb	2.0	698643.55	0.173	110.01	
Ba	137	No Gas	39.492	ppb	5.1	704442.92	21.186	95.89	
Tl	203	No Gas	20.750	ppb	4.6	657764.47	0.011	103.7	
Pb	208	No Gas	20.867	ppb	4.3	2123807.54	0.325	102.67	
U	238	No Gas	21.634	ppb	5.5	1890394.51	0.109	107.58	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8081781.90	4.3	8181334.67	98.78	60	125	
Ge	72	No Gas	6872613.89	2.1	7270733.04	94.52	60	125	
Ge	72	He	857345.21	2.5	958105.21	89.48	60	125	
Y	89	No Gas	9629489.89	2.4	10023893.77	96.07	60	125	
Rh	103	No Gas	8122206.62	2.4	9143531.58	88.83	60	125	
In	115	No Gas	9160162.69	1.4	9650137.39	94.92	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-017L 5X
File Name	164SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:31:28
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	36.3	15.56	
Al	27	72	No Gas	18.601	ppb	1.7	751259.47	
V	51	72	He	0.224	ppb	2.2	2266.85	
Cr	52	72	No Gas	0.406	ppb	2.9	56266.52	
Mn	55	72	No Gas	4.030	ppb	5.5	334856.76	
Co	59	72	He	0.031	ppb	8.9	604.46	
Ni	60	72	No Gas	0.167	ppb	5.9	3312.62	
Ni	60	72	He	0.134	ppb	10.0	752.25	
Cu	63	72	No Gas	0.429	ppb	1.1	19795.00	
Cu	63	72	He	0.337	ppb	3.1	5035.34	
Zn	66	72	No Gas	0.553	ppb	3.6	8294.67	
As	75	72	No Gas	0.276	ppb	65.9	2537.39	
Se	78	72	He	-0.005	ppb	N/A	53.67	
Se	82	72	No Gas	0.058	ppb	48.3	105.81	
Mo	98	89	No Gas	0.111	ppb	8.4	3625.49	
Ag	107	89	No Gas	0.030	ppb	38.3	1747.90	
Cd	111	89	No Gas	0.033	ppb	47.1	4915.86	
Sb	123	89	No Gas	0.107	ppb	2.6	4753.06	
Ba	137	115	No Gas	4.301	ppb	2.8	76271.23	
Tl	203	115	No Gas	0.006	ppb	11.1	332.23	
Pb	208	115	No Gas	0.070	ppb	2.1	7796.51	
U	238	115	No Gas	0.020	ppb	2.7	2183.53	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8457764.67	3.8	8181334.67	103.38	60	125	
Ge	72	No Gas	6935670.42	2.3	7270733.04	95.39	60	125	
Ge	72	He	847224.46	0.8	958105.21	88.43	60	125	
Y	89	No Gas	9900106.83	2.9	10023893.77	98.77	60	125	
Rh	103	No Gas	8628404.66	3.4	9143531.58	94.37	60	125	
In	115	No Gas	9084173.53	2.6	9650137.39	94.14	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407734-019
File Name	165SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:33:25
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.011	ppb	46.3	45.56	
Al	27	72	No Gas	111.091	ppb	4.9	4349435.80	>LDR
V	51	72	He	0.768	ppb	1.7	7158.47	
Cr	52	72	No Gas	0.845	ppb	10.9	82047.17	
Mn	55	72	No Gas	25.688	ppb	6.3	2098663.11	
Co	59	72	He	0.177	ppb	0.4	3219.26	
Ni	60	72	No Gas	0.814	ppb	6.7	14388.49	
Ni	60	72	He	0.715	ppb	0.9	3607.13	
Cu	63	72	No Gas	2.230	ppb	6.0	92918.55	
Cu	63	72	He	1.757	ppb	3.7	23785.51	
Zn	66	72	No Gas	3.499	ppb	4.2	39921.06	
As	75	72	No Gas	1.108	ppb	5.9	12245.52	
Se	78	72	He	-0.025	ppb	N/A	51.67	
Se	82	72	No Gas	0.222	ppb	15.2	224.96	
Mo	98	89	No Gas	0.477	ppb	8.3	14948.59	
Ag	107	89	No Gas	0.012	ppb	5.3	836.69	
Cd	111	89	No Gas	0.039	ppb	61.4	4876.56	
Sb	123	89	No Gas	0.177	ppb	11.8	6858.42	
Ba	137	115	No Gas	20.925	ppb	6.6	366339.35	
Tl	203	115	No Gas	0.006	ppb	9.8	330.01	
Pb	208	115	No Gas	0.432	ppb	7.1	43903.73	
U	238	115	No Gas	0.115	ppb	6.5	10329.79	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8086679.12	0.6	8181334.67	98.84	60	125	
Ge	72	No Gas	6886752.23	1.1	7270733.04	94.72	60	125	
Ge	72	He	849891.98	1.7	958105.21	88.71	60	125	
Y	89	No Gas	9709949.06	2.5	10023893.77	96.87	60	125	
Rh	103	No Gas	8305119.12	3.5	9143531.58	90.83	60	125	
In	115	No Gas	8999794.64	2.9	9650137.39	93.26	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407805-001
File Name	166SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:35:21
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.026	ppb	36.7	104.44	
Al	27	72	No Gas	354.342	ppb	2.5	13908439.72	>LDR
V	51	72	He	0.795	ppb	5.4	7394.14	
Cr	52	72	No Gas	1.008	ppb	4.6	92326.48	
Mn	55	72	No Gas	47.511	ppb	8.5	3904208.39	
Co	59	72	He	0.494	ppb	2.7	8881.67	
Ni	60	72	No Gas	1.341	ppb	2.6	23564.13	
Ni	60	72	He	1.237	ppb	1.6	6166.91	
Cu	63	72	No Gas	1.236	ppb	2.6	52781.25	
Cu	63	72	He	1.116	ppb	1.5	15326.06	
Zn	66	72	No Gas	3.606	ppb	2.9	41312.75	
As	75	72	No Gas	0.709	ppb	8.8	7612.62	
Se	78	72	He	0.134	ppb	83.8	69.33	
Se	82	72	No Gas	0.148	ppb	74.8	172.68	
Mo	98	89	No Gas	0.167	ppb	5.8	5486.59	
Ag	107	89	No Gas	0.009	ppb	22.2	698.91	
Cd	111	89	No Gas	0.024	ppb	145.1	4903.52	
Sb	123	89	No Gas	0.105	ppb	8.7	4753.06	
Ba	137	115	No Gas	9.801	ppb	9.3	173093.90	
Tl	203	115	No Gas	0.005	ppb	2.5	291.11	
Pb	208	115	No Gas	0.657	ppb	8.6	66889.91	
U	238	115	No Gas	0.200	ppb	10.7	17759.15	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8142387.45	2.8	8181334.67	99.52	60	125	
Ge	72	No Gas	6926014.73	3.2	7270733.04	95.26	60	125	
Ge	72	He	848787.69	2.0	958105.21	88.59	60	125	
Y	89	No Gas	10083366.54	2.9	10023893.77	100.59	60	125	
Rh	103	No Gas	8259192.17	1.4	9143531.58	90.33	60	125	
In	115	No Gas	9084093.53	3.9	9650137.39	94.13	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407805-003
File Name	167SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:37:17
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	69.9	16.67	
Al	27	72	No Gas	18.449	ppb	5.7	751857.54	
V	51	72	He	0.292	ppb	3.9	2834.73	
Cr	52	72	No Gas	0.742	ppb	8.1	77100.05	
Mn	55	72	No Gas	5.084	ppb	4.3	424911.60	
Co	59	72	He	0.089	ppb	5.5	1616.76	
Ni	60	72	No Gas	0.673	ppb	6.2	12148.58	
Ni	60	72	He	0.492	ppb	1.2	2472.44	
Cu	63	72	No Gas	1.009	ppb	4.1	43930.47	
Cu	63	72	He	0.678	ppb	1.3	9400.90	
Zn	66	72	No Gas	1.651	ppb	3.8	20368.04	
As	75	72	No Gas	0.639	ppb	5.1	6852.27	
Se	78	72	He	0.042	ppb	212.1	58.00	
Se	82	72	No Gas	0.035	ppb	148.6	89.00	
Mo	98	89	No Gas	0.305	ppb	2.7	9909.32	
Ag	107	89	No Gas	0.006	ppb	18.3	538.90	
Cd	111	89	No Gas	0.019	ppb	24.3	4826.90	
Sb	123	89	No Gas	0.099	ppb	7.9	4554.11	
Ba	137	115	No Gas	26.959	ppb	3.3	477713.36	
Tl	203	115	No Gas	0.001	ppb	87.5	163.33	
Pb	208	115	No Gas	0.247	ppb	2.3	25734.64	
U	238	115	No Gas	0.198	ppb	4.7	17713.51	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8074456.62	1.5	8181334.67	98.69	60	125	
Ge	72	No Gas	6997766.53	2.0	7270733.04	96.25	60	125	
Ge	72	He	835773.53	1.6	958105.21	87.23	60	125	
Y	89	No Gas	10035875.71	3.7	10023893.77	100.12	60	125	
Rh	103	No Gas	8317229.67	1.4	9143531.58	90.96	60	125	
In	115	No Gas	9100579.08	1.1	9650137.39	94.31	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407805-005
File Name	168SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:39:14
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.015	ppb	22.0	61.11	
Al	27	72	No Gas	171.045	ppb	5.4	6640954.04	>LDR
V	51	72	He	0.665	ppb	2.2	6248.05	
Cr	52	72	No Gas	0.822	ppb	10.2	80145.36	
Mn	55	72	No Gas	36.282	ppb	5.1	2943798.29	
Co	59	72	He	0.375	ppb	1.7	6772.73	
Ni	60	72	No Gas	1.268	ppb	6.6	22040.61	
Ni	60	72	He	0.810	ppb	4.0	4079.48	
Cu	63	72	No Gas	1.065	ppb	5.4	45228.20	
Cu	63	72	He	0.778	ppb	1.0	10891.96	
Zn	66	72	No Gas	2.369	ppb	3.1	27599.21	
As	75	72	No Gas	0.599	ppb	55.6	6235.22	
Se	78	72	He	0.011	ppb	722.0	55.67	
Se	82	72	No Gas	0.349	ppb	28.1	316.01	
Mo	98	89	No Gas	0.190	ppb	10.3	6042.25	
Ag	107	89	No Gas	0.007	ppb	13.2	616.68	
Cd	111	89	No Gas	0.037	ppb	96.2	4899.47	
Sb	123	89	No Gas	0.089	ppb	12.6	4101.74	
Ba	137	115	No Gas	53.029	ppb	5.6	927211.25	
Tl	203	115	No Gas	0.003	ppb	16.5	216.67	
Pb	208	115	No Gas	0.432	ppb	5.7	43847.36	
U	238	115	No Gas	0.243	ppb	8.3	21276.78	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8212450.23	2.6	8181334.67	100.38	60	125	
Ge	72	No Gas	6845568.34	2.2	7270733.04	94.15	60	125	
Ge	72	He	851265.54	1.4	958105.21	88.85	60	125	
Y	89	No Gas	9777990.44	1.1	10023893.77	97.55	60	125	
Rh	103	No Gas	8115715.23	0.9	9143531.58	88.76	60	125	
In	115	No Gas	8984110.75	1.3	9650137.39	93.1	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407805-007
File Name	169SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:41:10
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.011	ppb	11.2	44.44	
Al	27	72	No Gas	129.820	ppb	12.7	5042852.02	>LDR
V	51	72	He	0.626	ppb	1.9	5812.31	
Cr	52	72	No Gas	0.653	ppb	12.1	70166.14	
Mn	55	72	No Gas	30.048	ppb	3.7	2438784.49	
Co	59	72	He	0.362	ppb	1.6	6452.58	
Ni	60	72	No Gas	1.359	ppb	6.1	23595.35	
Ni	60	72	He	0.888	ppb	1.8	4404.02	
Cu	63	72	No Gas	1.342	ppb	6.1	56403.87	
Cu	63	72	He	0.971	ppb	2.3	13263.98	
Zn	66	72	No Gas	1.996	ppb	5.7	23614.23	
As	75	72	No Gas	0.577	ppb	12.9	6003.68	
Se	78	72	He	0.102	ppb	44.7	65.00	
Se	82	72	No Gas	0.217	ppb	23.0	220.15	
Mo	98	89	No Gas	0.358	ppb	3.1	11461.73	
Ag	107	89	No Gas	0.006	ppb	11.3	576.68	
Cd	111	89	No Gas	0.045	ppb	80.5	5039.87	
Sb	123	89	No Gas	0.094	ppb	7.8	4335.14	
Ba	137	115	No Gas	59.478	ppb	5.7	1046373.26	
Tl	203	115	No Gas	0.005	ppb	13.5	280.00	
Pb	208	115	No Gas	0.244	ppb	3.5	25225.30	
U	238	115	No Gas	0.371	ppb	3.8	32460.46	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8096643.01	4.3	8181334.67	98.96	60	125	
Ge	72	No Gas	6849681.95	1.9	7270733.04	94.21	60	125	
Ge	72	He	839667.24	0.7	958105.21	87.64	60	125	
Y	89	No Gas	9907852.94	2.7	10023893.77	98.84	60	125	
Rh	103	No Gas	8089313.57	0.7	9143531.58	88.47	60	125	
In	115	No Gas	9038697.69	3.3	9650137.39	93.66	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	170_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:43:08
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	47.044	ppb	5.9	180479.99	94.09	
Al	27	72	No Gas	46.444	ppb	3.7	1838137.39	92.89	
V	51	72	He	52.417	ppb	1.9	471473.02	104.83	
Cr	52	72	No Gas	47.552	ppb	2.0	2879405.99	95.1	
Mn	55	72	No Gas	49.847	ppb	6.8	4090942.20	99.69	
Co	59	72	He	53.956	ppb	1.6	965559.44	107.91	
Ni	60	72	No Gas	48.133	ppb	5.8	830781.24	96.27	
Ni	60	72	He	53.235	ppb	1.7	261652.43	106.47	
Cu	63	72	No Gas	49.861	ppb	2.9	2039202.63	99.72	
Cu	63	72	He	54.492	ppb	0.8	719784.17	108.98	
Zn	66	72	No Gas	49.853	ppb	5.1	541125.60	99.71	
As	75	72	No Gas	50.802	ppb	4.7	596940.99	101.6	
Se	78	72	He	53.772	ppb	0.2	6043.63	107.54	
Se	82	72	No Gas	50.233	ppb	4.4	37150.77	100.47	
Mo	98	89	No Gas	51.435	ppb	5.1	1624202.87	102.87	
Ag	107	89	No Gas	51.401	ppb	8.1	2510891.15	102.8	
Cd	111	89	No Gas	49.129	ppb	8.8	536551.28	98.26	
Sb	123	89	No Gas	53.414	ppb	6.9	1718028.06	106.83	
Ba	137	115	No Gas	49.810	ppb	9.0	893608.49	99.62	
Tl	203	115	No Gas	49.938	ppb	8.2	1592108.96	99.88	
Pb	208	115	No Gas	50.101	ppb	9.7	5126404.73	100.2	
U	238	115	No Gas	49.352	ppb	10.0	4336507.33	98.7	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8031688.85	0.9	8181334.67	98.17	60	125	
Ge	72	No Gas	6913822.37	4.3	7270733.04	95.09	60	125	
Ge	72	He	849829.13	1.0	958105.21	88.7	60	125	
Y	89	No Gas	9845523.78	1.6	10023893.77	98.22	60	125	
Rh	103	No Gas	8642670.49	2.2	9143531.58	94.52	60	125	
In	115	No Gas	9221883.80	3.6	9650137.39	95.56	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	171_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:44:55
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	97.4	12.22	
Al	27	72	No Gas	-0.009	ppb	N/A	20568.13	
V	51	72	He	0.050	ppb	5.4	698.91	
Cr	52	72	No Gas	0.144	ppb	24.3	39447.76	
Mn	55	72	No Gas	0.060	ppb	8.8	8472.54	
Co	59	72	He	0.001	ppb	45.5	73.33	
Ni	60	72	No Gas	0.003	ppb	170.9	455.57	
Ni	60	72	He	0.001	ppb	159.4	97.78	
Cu	63	72	No Gas	0.006	ppb	74.0	2395.77	
Cu	63	72	He	0.001	ppb	512.7	610.02	
Zn	66	72	No Gas	-0.023	ppb	N/A	2001.26	
As	75	72	No Gas	0.132	ppb	26.5	800.05	
Se	78	72	He	-0.018	ppb	N/A	51.67	
Se	82	72	No Gas	-0.113	ppb	N/A	-20.43	
Mo	98	89	No Gas	0.035	ppb	16.5	1190.96	
Ag	107	89	No Gas	0.027	ppb	45.2	1537.87	
Cd	111	89	No Gas	0.017	ppb	143.1	4645.98	
Sb	123	89	No Gas	0.065	ppb	7.4	3315.97	
Ba	137	115	No Gas	0.002	ppb	67.1	234.45	
Tl	203	115	No Gas	0.010	ppb	11.7	440.01	
Pb	208	115	No Gas	0.010	ppb	18.9	1754.49	
U	238	115	No Gas	-0.001	ppb	N/A	410.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7980730.24	3.9	8181334.67	97.55	60	125	
Ge	72	No Gas	6756820.98	2.9	7270733.04	92.93	60	125	
Ge	72	He	837840.26	1.1	958105.21	87.45	60	125	
Y	89	No Gas	9707237.95	2.7	10023893.77	96.84	60	125	
Rh	103	No Gas	8677256.32	2.0	9143531.58	94.9	60	125	
In	115	No Gas	9007810.47	2.8	9650137.39	93.34	60	125	

7900 ICP-MS 200.8/6020A
Reference Sample Report

Sample Name	R2407805-009
File Name	172_ARF.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:46:54
Sample Type	AllRef
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS
Be	9	45	No Gas	0.004	ppb	97.9	15.56
Al	27	72	No Gas	46.978	ppb	3.4	1824051.25
Cr	52	72	No Gas	0.582	ppb	9.0	65406.36
Mn	55	72	No Gas	24.227	ppb	5.2	1950089.30
Ni	60	72	No Gas	0.771	ppb	5.5	13445.35
Cu	63	72	No Gas	0.622	ppb	6.0	27111.67
Zn	66	72	No Gas	1.159	ppb	4.1	14541.96
As	75	72	No Gas	0.515	ppb	18.3	5224.28
Se	82	72	No Gas	0.125	ppb	33.7	151.41
Mo	98	89	No Gas	0.129	ppb	5.0	4157.85
Ag	107	89	No Gas	0.012	ppb	9.9	847.80
Cd	111	89	No Gas	0.026	ppb	76.5	4791.72
Sb	123	89	No Gas	0.097	ppb	14.6	4375.16
Ba	137	115	No Gas	35.018	ppb	3.9	611980.86
Tl	203	115	No Gas	0.006	ppb	8.4	324.45
Pb	208	115	No Gas	0.104	ppb	4.4	11071.89
U	238	115	No Gas	0.143	ppb	5.0	12690.85
V	51	72	He	0.277	ppb	3.2	2740.27
Co	59	72	He	0.160	ppb	1.5	2903.64
Ni	60	72	He	0.412	ppb	2.6	2115.72
Cu	63	72	He	0.397	ppb	4.0	5833.43
Se	78	72	He	0.037	ppb	108.4	58.33

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High
Sc	45	No Gas	8083154.12	3.6	8181334.67	98.8	60	125
Ge	72	No Gas	6786428.20	0.6	7270733.04	93.34	60	125
Ge	72	He	847809.15	0.8	958105.21	88.49	60	125
Y	89	No Gas	9799387.94	1.2	10023893.77	97.76	60	125
Rh	103	No Gas	8150968.56	0.9	9143531.58	89.14	60	125
In	115	No Gas	8973716.59	1.5	9650137.39	92.99	60	125

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407805-009S
File Name	173_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:48:50
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	172_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	18.566	ppb	3.7	71609.24	0.004	92.81	
Al	27	No Gas	82.591	ppb	4.5	3144703.35	46.978	94.96	
V	51	He	21.663	ppb	0.8	194882.16	0.277	106.84	
Cr	52	No Gas	20.616	ppb	3.8	1224291.97	0.582	100.16	
Mn	55	No Gas	45.403	ppb	3.9	3597953.12	24.227	102.66	
Co	59	He	20.658	ppb	1.8	369478.33	0.16	102.47	
Ni	60	No Gas	19.952	ppb	3.6	332793.75	0.771	96.06	
Ni	60	He	20.861	ppb	1.9	102535.34	0.412	102.2	
Cu	63	No Gas	20.733	ppb	4.6	820721.25	0.622	100.54	
Cu	63	He	21.428	ppb	1.0	283250.42	0.397	105.06	
Zn	66	No Gas	21.071	ppb	4.7	222257.30	1.159	99.58	
As	75	No Gas	21.528	ppb	4.6	243949.94	0.515	104.94	
Se	78	He	20.705	ppb	1.3	2359.20	0.037	103.34	
Se	82	No Gas	21.042	ppb	4.0	15072.59	0.125	104.55	
Mo	98	No Gas	20.562	ppb	5.4	633774.05	0.129	102.15	
Ag	107	No Gas	20.421	ppb	5.1	973680.49	0.012	102.04	
Cd	111	No Gas	19.715	ppb	7.2	212696.04	0.026	98.45	
Sb	123	No Gas	21.510	ppb	5.6	675745.61	0.097	107.03	
Ba	137	No Gas	55.694	ppb	6.2	976804.79	35.018	101.23	
Tl	203	No Gas	19.899	ppb	5.4	620346.95	0.006	99.46	
Pb	208	No Gas	19.742	ppb	5.4	1976259.43	0.104	98.2	
U	238	No Gas	20.776	ppb	6.2	1785376.87	0.143	103.15	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8076884.40	1.6	8181334.67	98.72	60	125	
Ge	72	No Gas	6685783.62	1.9	7270733.04	91.95	60	125	
Ge	72	He	849332.00	0.1	958105.21	88.65	60	125	
Y	89	No Gas	9618887.95	4.0	10023893.77	95.96	60	125	
Rh	103	No Gas	8170365.51	2.2	9143531.58	89.36	60	125	
In	115	No Gas	9014409.92	1.8	9650137.39	93.41	60	125	

7900 ICP-MS 200.8/6020A
Matrix Spike Duplicate (MSD) Sample Report

Sample Name	R2407805-009SD
File Name	174_SpD.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:50:45
Sample Type	SpkDup
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	173_ Spk.d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	RPD	Flag
Be	9	No Gas	18.855	ppb	6.3	71290.34	18.566	1.55	
Al	27	No Gas	75.512	ppb	8.1	2889909.68	82.591	8.96	
V	51	He	21.181	ppb	1.5	190830.09	21.663	2.25	
Cr	52	No Gas	20.135	ppb	7.2	1201872.73	20.616	2.36	
Mn	55	No Gas	45.043	ppb	6.7	3584354.37	45.403	0.8	
Co	59	He	20.221	ppb	1.6	362194.14	20.658	2.14	
Ni	60	No Gas	19.354	ppb	5.1	324338.08	19.952	3.04	
Ni	60	He	19.951	ppb	2.7	98186.20	20.861	4.46	
Cu	63	No Gas	19.959	ppb	7.2	793855.73	20.733	3.81	
Cu	63	He	20.366	ppb	2.6	269581.24	21.428	5.08	
Zn	66	No Gas	20.479	ppb	6.8	217022.51	21.071	2.85	
As	75	No Gas	20.942	ppb	5.5	238402.78	21.528	2.76	
Se	78	He	19.943	ppb	1.9	2278.52	20.705	3.75	
Se	82	No Gas	20.188	ppb	7.5	14531.36	21.042	4.14	
Mo	98	No Gas	20.023	ppb	2.4	625374.55	20.562	2.66	
Ag	107	No Gas	19.851	ppb	4.1	959490.93	20.421	2.83	
Cd	111	No Gas	18.654	ppb	1.8	204209.00	19.715	5.53	
Sb	123	No Gas	20.566	ppb	2.8	654795.25	21.51	4.49	
Ba	137	No Gas	57.211	ppb	5.1	977959.44	55.694	2.69	
Tl	203	No Gas	19.841	ppb	5.5	602791.10	19.899	0.29	
Pb	208	No Gas	19.682	ppb	5.6	1920119.47	19.742	0.3	
U	238	No Gas	21.044	ppb	6.8	1762535.55	20.776	1.28	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7922341.35	4.2	8181334.67	96.83	60	125	
Ge	72	No Gas	6718888.35	1.8	7270733.04	92.41	60	125	
Ge	72	He	850776.29	2.6	958105.21	88.8	60	125	
Y	89	No Gas	9738511.28	3.5	10023893.77	97.15	60	125	
Rh	103	No Gas	8196485.23	4.4	9143531.58	89.64	60	125	
In	115	No Gas	8779762.99	0.7	9650137.39	90.98	60	125	

7900 ICP-MS 200.8-6020A
Matrix Spike (MS) Sample Report

Sample Name	R2407805-009A
File Name	175_Spk.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:52:41
Sample Type	Spike
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d
QC Ref File Name	172_ ARF. d

QC Analyte Table

Name	Mass	Tune	Conc.	Units	RSD	CPS	RefConc	%Rec	Flag
Be	9	No Gas	20.533	ppb	5.7	77874.09	0.004	102.65	
Al	27	No Gas	80.973	ppb	7.4	3087616.82	46.978	93.1	
V	51	He	22.943	ppb	2.1	205896.61	0.277	113.15	
Cr	52	No Gas	22.066	ppb	6.8	1309708.14	0.582	107.21	
Mn	55	No Gas	47.104	ppb	3.7	3739832.91	24.227	106.51	
Co	59	He	21.841	ppb	0.8	389711.76	0.16	108.34	
Ni	60	No Gas	20.719	ppb	5.2	346054.66	0.771	99.75	
Ni	60	He	21.467	ppb	1.6	105254.14	0.412	105.17	
Cu	63	No Gas	21.492	ppb	3.9	852225.04	0.622	104.22	
Cu	63	He	22.056	ppb	0.5	290850.67	0.397	108.13	
Zn	66	No Gas	22.059	ppb	4.7	232846.86	1.159	104.25	
As	75	No Gas	22.472	ppb	4.7	255082.32	0.515	109.54	
Se	78	He	22.176	ppb	1.6	2517.23	0.037	110.68	
Se	82	No Gas	21.789	ppb	6.6	15623.13	0.125	108.27	
Mo	98	No Gas	21.641	ppb	2.8	674700.59	0.129	107.51	
Ag	107	No Gas	18.388	ppb	4.5	887140.56	0.012	91.88	
Cd	111	No Gas	20.386	ppb	3.8	222386.56	0.026	101.79	
Sb	123	No Gas	21.709	ppb	3.3	689950.75	0.097	108.02	
Ba	137	No Gas	55.383	ppb	3.9	939548.82	35.018	100.66	
Tl	203	No Gas	21.351	ppb	4.6	643770.34	0.006	106.72	
Pb	208	No Gas	21.295	ppb	4.7	2061551.41	0.104	105.93	
U	238	No Gas	22.104	ppb	6.1	1836857.95	0.143	109.74	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7941255.24	1.7	8181334.67	97.07	60	125	
Ge	72	No Gas	6698813.76	4.0	7270733.04	92.13	60	125	
Ge	72	He	847380.21	1.3	958105.21	88.44	60	125	
Y	89	No Gas	9721131.84	1.7	10023893.77	96.98	60	125	
Rh	103	No Gas	8226915.23	4.6	9143531.58	89.98	60	125	
In	115	No Gas	8712056.60	1.0	9650137.39	90.28	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407805-009L 5X
File Name	176SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:54:35
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	124.0	11.11	
Al	27	72	No Gas	9.370	ppb	2.6	390292.53	
V	51	72	He	0.147	ppb	3.9	1543.42	
Cr	52	72	No Gas	0.299	ppb	13.1	50033.31	
Mn	55	72	No Gas	4.901	ppb	4.5	407608.12	
Co	59	72	He	0.036	ppb	2.4	674.46	
Ni	60	72	No Gas	0.167	ppb	2.5	3312.62	
Ni	60	72	He	0.095	ppb	7.6	547.79	
Cu	63	72	No Gas	0.123	ppb	4.1	7275.22	
Cu	63	72	He	0.085	ppb	4.0	1692.33	
Zn	66	72	No Gas	0.184	ppb	5.9	4310.66	
As	75	72	No Gas	0.214	ppb	58.4	1779.91	
Se	78	72	He	-0.006	ppb	N/A	52.33	
Se	82	72	No Gas	-0.030	ppb	N/A	39.70	
Mo	98	89	No Gas	0.045	ppb	6.1	1494.18	
Ag	107	89	No Gas	0.030	ppb	37.2	1695.67	
Cd	111	89	No Gas	0.027	ppb	19.7	4736.41	
Sb	123	89	No Gas	0.098	ppb	4.8	4345.15	
Ba	137	115	No Gas	6.976	ppb	5.2	124835.31	
Tl	203	115	No Gas	0.006	ppb	5.0	321.11	
Pb	208	115	No Gas	0.024	ppb	4.6	3159.05	
U	238	115	No Gas	0.027	ppb	5.0	2877.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8033145.23	4.7	8181334.67	98.19	60	125	
Ge	72	No Gas	6957912.78	1.5	7270733.04	95.7	60	125	
Ge	72	He	827889.05	2.8	958105.21	86.41	60	125	
Y	89	No Gas	9674729.89	1.4	10023893.77	96.52	60	125	
Rh	103	No Gas	8292265.23	3.3	9143531.58	90.69	60	125	
In	115	No Gas	9176675.19	1.3	9650137.39	95.09	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407807-001
File Name	177SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:56:33
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.001	ppb	90.3	7.78	
Al	27	72	No Gas	1.606	ppb	2.8	82228.23	
V	51	72	He	0.087	ppb	8.7	1021.15	
Cr	52	72	No Gas	0.692	ppb	7.9	71464.59	
Mn	55	72	No Gas	1.780	ppb	5.3	145880.75	
Co	59	72	He	0.003	ppb	44.7	110.00	
Ni	60	72	No Gas	0.121	ppb	2.2	2451.33	
Ni	60	72	He	0.132	ppb	3.1	731.13	
Cu	63	72	No Gas	0.139	ppb	5.4	7707.67	
Cu	63	72	He	0.153	ppb	6.0	2588.02	
Zn	66	72	No Gas	3.465	ppb	5.5	38773.40	
As	75	72	No Gas	-0.062	ppb	N/A	-1404.66	
Se	78	72	He	-0.032	ppb	N/A	50.00	
Se	82	72	No Gas	-0.026	ppb	N/A	41.55	
Mo	98	89	No Gas	0.014	ppb	16.3	528.83	
Ag	107	89	No Gas	0.009	ppb	5.1	670.02	
Cd	111	89	No Gas	0.041	ppb	23.1	4876.76	
Sb	123	89	No Gas	0.060	ppb	9.3	3151.48	
Ba	137	115	No Gas	0.102	ppb	6.6	1981.26	
Tl	203	115	No Gas	0.001	ppb	115.7	150.00	
Pb	208	115	No Gas	0.006	ppb	4.7	1364.47	
U	238	115	No Gas	-0.004	ppb	N/A	114.44	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8012500.23	1.6	8181334.67	97.94	60	125	
Ge	72	No Gas	6751648.34	1.9	7270733.04	92.86	60	125	
Ge	72	He	835594.69	1.9	958105.21	87.21	60	125	
Y	89	No Gas	9652630.45	1.8	10023893.77	96.3	60	125	
Rh	103	No Gas	8565184.38	2.4	9143531.58	93.67	60	125	
In	115	No Gas	8973502.98	2.9	9650137.39	92.99	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407807-003
File Name	178SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 17:58:32
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.000	ppb	1.6	3.33	
Al	27	72	No Gas	1.391	ppb	7.6	72388.05	
V	51	72	He	0.089	ppb	1.0	1032.26	
Cr	52	72	No Gas	0.985	ppb	9.1	86721.84	
Mn	55	72	No Gas	0.398	ppb	6.6	34711.39	
Co	59	72	He	0.003	ppb	60.4	105.55	
Ni	60	72	No Gas	0.087	ppb	11.7	1834.57	
Ni	60	72	He	0.087	ppb	7.6	507.79	
Cu	63	72	No Gas	0.071	ppb	4.9	4883.08	
Cu	63	72	He	0.069	ppb	3.5	1483.41	
Zn	66	72	No Gas	1.932	ppb	6.8	22148.56	
As	75	72	No Gas	0.057	ppb	175.1	-41.72	
Se	78	72	He	0.004	ppb	703.1	53.33	
Se	82	72	No Gas	-0.055	ppb	N/A	20.71	
Mo	98	89	No Gas	0.012	ppb	26.7	481.05	
Ag	107	89	No Gas	0.006	ppb	9.3	578.90	
Cd	111	89	No Gas	0.023	ppb	123.3	4829.78	
Sb	123	89	No Gas	0.059	ppb	16.0	3221.50	
Ba	137	115	No Gas	0.062	ppb	4.3	1296.73	
Tl	203	115	No Gas	-0.001	ppb	N/A	92.22	
Pb	208	115	No Gas	0.006	ppb	13.2	1354.48	
U	238	115	No Gas	-0.005	ppb	N/A	94.44	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7860173.30	0.6	8181334.67	96.07	60	125	
Ge	72	No Gas	6614770.85	5.5	7270733.04	90.98	60	125	
Ge	72	He	826319.22	1.2	958105.21	86.25	60	125	
Y	89	No Gas	9963210.99	2.3	10023893.77	99.39	60	125	
Rh	103	No Gas	8875281.59	4.6	9143531.58	97.07	60	125	
In	115	No Gas	9070413.25	0.6	9650137.39	93.99	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407807-005
File Name	179SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 18:00:30
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	57.7	8.89	
Al	27	72	No Gas	3.298	ppb	8.6	149651.91	
V	51	72	He	0.109	ppb	13.1	1196.72	
Cr	52	72	No Gas	0.566	ppb	3.6	65384.93	
Mn	55	72	No Gas	1038.546	ppb	1.3	84661816.64	>LDR
Co	59	72	He	0.127	ppb	4.4	2242.41	
Ni	60	72	No Gas	0.485	ppb	2.3	8737.18	
Ni	60	72	He	0.273	ppb	5.4	1383.40	
Cu	63	72	No Gas	1.384	ppb	3.6	58473.71	
Cu	63	72	He	1.295	ppb	0.6	17029.11	
Zn	66	72	No Gas	2.829	ppb	1.3	32719.13	
As	75	72	No Gas	0.525	ppb	15.4	5382.31	
Se	78	72	He	0.037	ppb	68.8	56.33	
Se	82	72	No Gas	0.070	ppb	66.3	113.46	
Mo	98	89	No Gas	0.124	ppb	6.9	3841.73	
Ag	107	89	No Gas	0.005	ppb	10.5	503.35	
Cd	111	89	No Gas	0.048	ppb	33.7	4841.74	
Sb	123	89	No Gas	0.082	ppb	8.9	3736.08	
Ba	137	115	No Gas	32.275	ppb	5.6	571705.98	
Tl	203	115	No Gas	-0.001	ppb	N/A	106.67	
Pb	208	115	No Gas	0.009	ppb	4.8	1601.16	
U	238	115	No Gas	0.048	ppb	5.1	4624.19	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8206011.62	0.3	8181334.67	100.3	60	125	
Ge	72	No Gas	6887614.45	5.3	7270733.04	94.73	60	125	
Ge	72	He	817630.82	1.2	958105.21	85.34	60	125	
Y	89	No Gas	9435071.57	2.5	10023893.77	94.13	60	125	
Rh	103	No Gas	8176498.01	3.7	9143531.58	89.42	60	125	
In	115	No Gas	9093872.42	1.5	9650137.39	94.24	60	125	

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	R2407807-007
File Name	180SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 18:02:26
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	129.3	10.00	
Al	27	72	No Gas	4.762	ppb	3.5	204486.31	
V	51	72	He	0.156	ppb	4.2	1618.98	
Cr	52	72	No Gas	0.607	ppb	5.8	67051.62	
Mn	55	72	No Gas	46.604	ppb	2.6	3759534.57	
Co	59	72	He	0.062	ppb	7.9	1130.05	
Ni	60	72	No Gas	0.409	ppb	4.1	7355.26	
Ni	60	72	He	0.246	ppb	3.6	1266.73	
Cu	63	72	No Gas	1.243	ppb	5.1	52128.49	
Cu	63	72	He	1.102	ppb	1.8	14733.22	
Zn	66	72	No Gas	2.145	ppb	4.1	25072.31	
As	75	72	No Gas	0.838	ppb	2.2	8971.14	
Se	78	72	He	-0.060	ppb	N/A	46.33	
Se	82	72	No Gas	0.071	ppb	75.8	113.47	
Mo	98	89	No Gas	0.156	ppb	6.4	4996.81	
Ag	107	89	No Gas	0.005	ppb	9.7	495.56	
Cd	111	89	No Gas	0.013	ppb	212.0	4648.09	
Sb	123	89	No Gas	0.091	ppb	9.6	4169.54	
Ba	137	115	No Gas	11.659	ppb	2.5	202087.92	
Tl	203	115	No Gas	-0.001	ppb	N/A	104.44	
Pb	208	115	No Gas	0.026	ppb	1.6	3239.06	
U	238	115	No Gas	0.055	ppb	1.4	5111.04	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8079544.12	3.4	8181334.67	98.76	60	125	
Ge	72	No Gas	6807561.95	1.5	7270733.04	93.63	60	125	
Ge	72	He	826255.04	0.9	958105.21	86.24	60	125	
Y	89	No Gas	9809336.83	5.2	10023893.77	97.86	60	125	
Rh	103	No Gas	8286851.06	0.6	9143531.58	90.63	60	125	
In	115	No Gas	8892677.98	3.8	9650137.39	92.15	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	181_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 18:04:21
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	45.041	ppb	9.2	171661.27	90.08	
Al	27	72	No Gas	48.413	ppb	10.9	1850271.77	96.83	
V	51	72	He	52.967	ppb	1.5	463444.56	105.93	
Cr	52	72	No Gas	49.962	ppb	7.3	2920041.97	99.92	
Mn	55	72	No Gas	50.462	ppb	8.2	3993807.34	100.92	
Co	59	72	He	54.295	ppb	1.7	945083.61	108.59	
Ni	60	72	No Gas	48.522	ppb	9.2	808021.41	97.04	
Ni	60	72	He	53.584	ppb	3.0	256136.15	107.17	
Cu	63	72	No Gas	52.058	ppb	10.2	2055802.07	104.12	
Cu	63	72	He	55.073	ppb	1.9	707567.21	110.15	> +/-10%
Zn	66	72	No Gas	50.633	ppb	8.9	530387.97	101.27	
As	75	72	No Gas	51.684	ppb	7.5	586101.02	103.37	
Se	78	72	He	54.211	ppb	1.7	5927.58	108.42	
Se	82	72	No Gas	51.065	ppb	8.0	36454.13	102.13	
Mo	98	89	No Gas	52.049	ppb	4.9	1565682.85	104.1	
Ag	107	89	No Gas	54.689	ppb	4.3	2544413.02	109.38	
Cd	111	89	No Gas	51.237	ppb	5.6	532877.76	102.47	
Sb	123	89	No Gas	55.382	ppb	3.6	1696325.87	110.76	> +/-10%
Ba	137	115	No Gas	50.662	ppb	10.1	875499.97	101.32	
Tl	203	115	No Gas	51.041	ppb	10.2	1567379.66	102.08	
Pb	208	115	No Gas	51.054	ppb	9.6	5034285.91	102.11	
U	238	115	No Gas	50.444	ppb	9.4	4270813.72	100.89	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7983178.85	1.7	8181334.67	97.58	60	125	
Ge	72	No Gas	6675610.85	1.5	7270733.04	91.81	60	125	
Ge	72	He	826822.08	2.2	958105.21	86.3	60	125	
Y	89	No Gas	9374969.63	3.3	10023893.77	93.53	60	125	
Rh	103	No Gas	8326312.72	4.2	9143531.58	91.06	60	125	
In	115	No Gas	8884929.09	1.7	9650137.39	92.07	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	182_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 18:06:08
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.003	ppb	47.8	15.55	
Al	27	72	No Gas	-0.016	ppb	N/A	20001.88	
V	51	72	He	0.038	ppb	16.6	574.46	
Cr	52	72	No Gas	0.127	ppb	6.3	37903.54	
Mn	55	72	No Gas	0.073	ppb	4.3	9360.86	
Co	59	72	He	0.002	ppb	54.9	82.22	
Ni	60	72	No Gas	0.001	ppb	502.1	418.90	
Ni	60	72	He	0.001	ppb	97.9	95.56	
Cu	63	72	No Gas	0.000	ppb	1371.9	2139.06	
Cu	63	72	He	0.002	ppb	79.7	600.02	
Zn	66	72	No Gas	-0.023	ppb	N/A	1974.60	
As	75	72	No Gas	0.094	ppb	141.0	354.68	
Se	78	72	He	-0.032	ppb	N/A	48.33	
Se	82	72	No Gas	-0.137	ppb	N/A	-36.69	
Mo	98	89	No Gas	0.033	ppb	7.5	1102.96	
Ag	107	89	No Gas	0.025	ppb	32.7	1415.64	
Cd	111	89	No Gas	0.037	ppb	95.8	4795.54	
Sb	123	89	No Gas	0.072	ppb	4.7	3488.23	
Ba	137	115	No Gas	0.000	ppb	713.9	193.34	
Tl	203	115	No Gas	0.010	ppb	2.1	424.45	
Pb	208	115	No Gas	0.010	ppb	13.2	1677.82	
U	238	115	No Gas	-0.001	ppb	N/A	353.34	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8183952.18	3.5	8181334.67	100.03	60	125	
Ge	72	No Gas	6657728.35	1.0	7270733.04	91.57	60	125	
Ge	72	He	808763.53	0.7	958105.21	84.41	60	125	
Y	89	No Gas	9581297.12	3.3	10023893.77	95.58	60	125	
Rh	103	No Gas	8388172.72	0.7	9143531.58	91.74	60	125	
In	115	No Gas	8726110.76	1.5	9650137.39	90.42	60	125	

7900 ICP-MS 200.8/6020A
Interference Check Solution A (ICSA) Report

Sample Name	ICSA/SIC Check
File Name	183ICSA.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 18:08:04
Sample Type	ICSA
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.002	ppb	28.2	8.89	
Al	27	72	No Gas	81895.868	ppb	11.2	2821813576.76	
V	51	72	He	0.257	ppb	2.1	2232.40	
Cr	52	72	No Gas	4.201	ppb	10.3	249627.30	
Mn	55	72	No Gas	0.764	ppb	10.1	58459.42	
Co	59	72	He	0.586	ppb	2.9	9150.74	
Ni	60	72	No Gas	2.490	ppb	13.1	38175.24	>2X MRL
Ni	60	72	He	0.920	ppb	2.5	4012.80	
Cu	63	72	No Gas	8.399	ppb	10.7	304133.43	>2X MRL
Cu	63	72	He	0.122	ppb	4.8	1926.80	
Zn	66	72	No Gas	9.218	ppb	9.4	89738.35	
As	75	72	No Gas	0.277	ppb	181.7	2109.87	
Se	78	72	He	-0.020	ppb	N/A	45.33	
Se	82	72	No Gas	0.528	ppb	28.9	400.45	
Mo	98	89	No Gas	1875.994	ppb	11.6	53988412.20	
Ag	107	89	No Gas	0.033	ppb	6.6	1724.56	
Cd	111	89	No Gas	0.079	ppb	40.6	4916.01	
Sb	123	89	No Gas	0.277	ppb	7.3	9283.22	
Ba	137	115	No Gas	0.409	ppb	11.9	6298.17	
Tl	203	115	No Gas	0.010	ppb	8.7	378.90	
Pb	208	115	No Gas	0.063	ppb	9.0	6007.23	
U	238	115	No Gas	0.047	ppb	9.1	3840.60	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7403889.98	0.5	8181334.67	90.5	60	125	
Ge	72	No Gas	6101745.73	3.5	7270733.04	83.92	60	125	
Ge	72	He	738632.56	1.4	958105.21	77.09	60	125	
Y	89	No Gas	8997049.64	2.8	10023893.77	89.76	60	125	
Rh	103	No Gas	6903319.03	3.2	9143531.58	75.5	60	125	
In	115	No Gas	7705601.92	2.2	9650137.39	79.85	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	184_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 18:09:58
Sample Type	CCV
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	QC Flag
Be	9	45	No Gas	39.944	ppb	6.9	152764.01	79.89	> +/-10%
Al	27	72	No Gas	44.610	ppb	7.7	1723859.79	89.22	> +/-10%
V	51	72	He	48.948	ppb	0.6	424747.32	97.9	
Cr	52	72	No Gas	44.873	ppb	8.2	2652796.98	89.75 90	> +/-10%
Mn	55	72	No Gas	47.763	ppb	6.5	3816985.96	95.53	
Co	59	72	He	50.268	ppb	1.0	867852.00	100.54	
Ni	60	72	No Gas	46.138	ppb	6.7	775941.08	92.28	
Ni	60	72	He	49.798	ppb	0.5	236146.30	99.6	
Cu	63	72	No Gas	49.127	ppb	5.7	1958962.91	98.25	
Cu	63	72	He	51.516	ppb	1.3	656455.30	103.03	
Zn	66	72	No Gas	48.100	ppb	7.1	508938.75	96.2	
As	75	72	No Gas	49.924	ppb	5.9	571816.29	99.85	
Se	78	72	He	49.501	ppb	3.0	5371.03	99	
Se	82	72	No Gas	49.469	ppb	6.8	35679.26	98.94	
Mo	98	89	No Gas	50.826	ppb	11.2	1586748.54	101.65	
Ag	107	89	No Gas	49.009	ppb	9.2	2367036.37	98.02	
Cd	111	89	No Gas	47.209	ppb	10.2	509687.09	94.42	
Sb	123	89	No Gas	50.529	ppb	8.3	1606905.42	101.06	
Ba	137	115	No Gas	49.630	ppb	7.1	839783.35	99.26	
Tl	203	115	No Gas	50.289	ppb	8.8	1511935.25	100.58	
Pb	208	115	No Gas	49.281	ppb	6.8	4757808.11	98.56	
U	238	115	No Gas	49.372	ppb	7.6	4092600.39	98.74	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	8008679.40	1.5	8181334.67	97.89	60	125	
Ge	72	No Gas	6742731.68	2.6	7270733.04	92.74	60	125	
Ge	72	He	819917.78	1.8	958105.21	85.58	60	125	
Y	89	No Gas	9751340.45	3.0	10023893.77	97.28	60	125	
Rh	103	No Gas	8567519.10	1.4	9143531.58	93.7	60	125	
In	115	No Gas	8694929.66	1.8	9650137.39	90.1	60	125	

7900 ICP-MS 200.8/6020A
Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	185_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\082724-MS7900.b
Acq Time	08/27/24 18:11:45
Sample Type	CCB
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	021CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.004	ppb	41.2	17.78	
Al	27	72	No Gas	0.619	ppb	31.7	44575.43	
V	51	72	He	0.013	ppb	70.2	350.01	
Cr	52	72	No Gas	-0.031	ppb	N/A	29279.96	
Mn	55	72	No Gas	0.059	ppb	4.6	8394.70	
Co	59	72	He	0.001	ppb	26.4	66.67	
Ni	60	72	No Gas	0.004	ppb	42.6	485.56	
Ni	60	72	He	-0.001	ppb	N/A	83.33	
Cu	63	72	No Gas	-0.004	ppb	N/A	2003.48	
Cu	63	72	He	-0.005	ppb	N/A	504.45	
Zn	66	72	No Gas	-0.030	ppb	N/A	1933.48	
As	75	72	No Gas	0.038	ppb	126.2	-280.49	
Se	78	72	He	-0.067	ppb	N/A	44.00	
Se	82	72	No Gas	-0.031	ppb	N/A	38.45	
Mo	98	89	No Gas	0.119	ppb	18.8	3771.64	
Ag	107	89	No Gas	0.024	ppb	36.6	1434.53	
Cd	111	89	No Gas	0.006	ppb	301.1	4530.66	
Sb	123	89	No Gas	0.074	ppb	15.7	3594.93	
Ba	137	115	No Gas	-0.001	ppb	N/A	184.45	
Tl	203	115	No Gas	0.011	ppb	14.1	476.68	
Pb	208	115	No Gas	0.010	ppb	13.1	1657.82	
U	238	115	No Gas	-0.003	ppb	N/A	233.34	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	7719478.03	3.9	8181334.67	94.35	60	125	
Ge	72	No Gas	6760934.45	1.5	7270733.04	92.99	60	125	
Ge	72	He	797474.12	1.6	958105.21	83.23	60	125	
Y	89	No Gas	9697241.28	1.9	10023893.77	96.74	60	125	
Rh	103	No Gas	8495267.44	0.8	9143531.58	92.91	60	125	
In	115	No Gas	8851690.48	1.4	9650137.39	91.73	60	125	

Preparation Information Benchsheet

Prep Run#: 443503
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqMS
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/21/24 15:43

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410247-01	MB		10mL	200.8/Al D, Al T, As D, Be T, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		HB:10 Well:D5 Temp:93.2C/93.7C
2	RQ2410247-02	LCS		10mL	200.8/Al D, Al T, As D, Be T, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/233423; 0.0200 mL/232728; 0.0200 mL/234787	On HB:14:15 Off HB:16:15 Pipet/Repipettor:M33,M39
3	R2407554-002	Hudson T04.02 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
4	R2407554-004	Hudson T05.05 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
5	R2407557-002	Hudson Transect T27 P03 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
6	R2407557-004	Hudson Transect T27 P03 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
7	R2407557-006	Hudson Transect T26 P09 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
8	R2407557-008	Hudson Transect T25 P02 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
9	R2407557-010	Hudson Transect T24 P05 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
10	R2407622-001	3373017001	.01	10mL	200.8/Al T, Be T	<2			10.00mL	Colorless-Clear		
11	R2407627-001	Corrective Measures	.02	10mL	200.8/Be T	<2			10.00mL	Yellow-Cloudy/Colorless-Clear		
12	R2407634-004	24L0422	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
13	R2407634-006	24L0432-24L0430	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
14	RQ2410247-03	R2407634-006 MS	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/232728; 0.0200 mL/234787; 0.0200 mL/233423	
15	RQ2410247-04	R2407634-006 DMS	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/234787; 0.0200 mL/232728; 0.0200 mL/233423	
16	R2407634-008	24L0433-24L0431	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
17	RQ2410247-05	R2407634-008 MS	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/233423; 0.0200 mL/234787; 0.0200 mL/232728	
18	RQ2410247-06	R2407634-008 DMS	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/232728; 0.0200 mL/234787; 0.0200 mL/233423	
19	R2407637-002	24L0435 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
20	R2407640-002	24S0202 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
21	R2407640-004	24S0203 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
22	R2407685-002	24S0152 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
23	R2407685-004	24S0153 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy		

Preparation Information Benchsheet

Prep Run#: 443503 **Prep WorkFlow:** MetDigAqMS **Status:** Prepped
Team: Metals/CDISTEFANO **Prep Method:** EPA 200.2 **Prep Date/Time:** 8/21/24 15:43

24	R2407685-006	24S0151 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy			
25	R2407729-002	24L0424 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear			Tier IV

Spiking Solutions

Name:	ICPMS Calibration Standard 1 (10 ug/mL	Inventory ID	232728	Logbook Ref:	232728	Expires On:	02/23/2025	Lot #: 222015048
Name:	ICPMS Calibration Standard 2 (10 ug/mL	Inventory ID	233423	Logbook Ref:	233423	Expires On:	03/10/2025	Lot #: 221015154
Name:	ICPMS Calibration Standard 3 (10 ug/mL	Inventory ID	234787	Logbook Ref:	234787	Expires On:	04/24/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	1:1 Nitric Acid Metals Grade	1:1 235979 (235980)	Hot Block Cups	10mL Lot J602711-6995 (236487)
Thermometer	402 (182588)				

Preparation Steps

Step: Digestion
Started: 8/21/24 15:43
Finished: 8/22/24 00:17
By: CDISTEFANO
Comments

7554 (N) 8/30
7557
7634
7637
7640
7685
7729

*
7622
7627
Re-digests
MS

Comments:

Reviewed By: Nicole Manson Date: 8/22/24

Chain of Custody

Relinquished By: CD Date: 8/21/24
Received By: 62 - 70, Date: 8/21/24

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443501
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqMS
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/21/24 15:43

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410240-01	MB		10mL	200.8/Al D, As D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		HB:10 Well:D5 Temp:93.2C/93.7C
2	RQ2410240-02	LCS		10mL	200.8/Al D, As D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/232728; 0.0200 mL/234787; 0.0200 mL/233423	On HB:14:15 Off HB:16:15 Pipet/Repipettor:M33,M39
3	R2407411-002	24L0399 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
4	R2407411-004	24L0402 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
5	R2407411-006	24L0410 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
6	R2407411-008	24L0415 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
7	R2407454-002	24L0418 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
8	R2407454-004	24L0419 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
9	R2407455-002	24S0141 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
10	R2407455-004	24S0140 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
11	R2407455-006	24S0142-24S0144 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
12	RQ2410240-03	R2407455-006 MS	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/233423; 0.0200 mL/234787; 0.0200 mL/232728	
13	RQ2410240-04	R2407455-006 DMS	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/233423; 0.0200 mL/234787; 0.0200 mL/232728	
14	R2407455-008	24S0143 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
15	R2407479-002	24L0416 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
16	R2407479-004	24L0417 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
17	R2407529-002	24S0126 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
18	R2407529-004	24S0115 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
19	R2407529-006	24S0113 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
20	R2407547-002	24L0031 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
21	R2407547-004	24L0032 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
22	R2407552-002	Hudson T02.02 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
23	R2407552-004	Hudson T01.01 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		

Preparation Information Benchsheet

Prep Run#: 443501
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqMS
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/21/24 15:43

24	R2407552-006	Hudson T03.07 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
25	RQ2410240-05	R2407552-006 MS	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/232728; 0.0200 mL/233423; 0.0200 mL/234787	
26	RQ2410240-06	R2407552-006 DMS	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/233423; 0.0200 mL/232728; 0.0200 mL/234787	

Spiking Solutions

Name:	ICPMS Calibration Standard 1 (10 ug/mL	Inventory ID	232728	Logbook Ref:	232728	Expires On:	02/23/2025	Lot #: 222015048
Name:	ICPMS Calibration Standard 2 (10 ug/mL	Inventory ID	233423	Logbook Ref:	233423	Expires On:	03/10/2025	Lot #: 221015154
Name:	ICPMS Calibration Standard 3 (10 ug/mL	Inventory ID	234787	Logbook Ref:	234787	Expires On:	04/24/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	1:1 Nitric Acid Metals Grade	1:1 235979 (235980)	Hot Block Cups	10mL Lot J602711-6995 (236487)
Thermometer	402 (182588)				

Preparation Steps

Step: Digestion
Started: 8/21/24 15:43
Finished: 8/22/24 00:12
By: CDISTEFANO
Comments

7411 (100) 8/30
7454
7455
7479
7529
7547
7552
MS
RIBF

Comments: _____

Reviewed By: Nicole Manson Date: 8/22/24

Chain of Custody

Relinquished By: CD Date: 8/21/24
Received By: R-A01 Date: 8/21/24

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443640
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqMS
Prep Method: EPA CLP-METALS ILM05.3

Status: Prepped
Prep Date/Time: 8/22/24 16:22

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410335-01	MB		10mL	200.8/Al T, Co T, Cr T, Mo T, Pb T, V T, Zn T, 6020B/As T, Pb T, Sb T, Tl T, Zn T	<2			10.00mL	Colorless-Clear		HB:10 Well:F7 Temp:93.0C/93.4C
2	RQ2410335-02	LCS		10mL	200.8/Al T, Co T, Cr T, Mo T, Pb T, V T, Zn T, 6020B/As T, Pb T, Sb T, Tl T, Zn T	<2			10.00mL	Colorless-Clear	0.0200 mL/232728; 0.0200 mL/234787; 0.0200 mL/233423	On HB:12:20 Off HB:14:20 Pipet/Repipettor:M33,M39
3	R2407792-003	2408140834A 300-001-GSV	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear		
4	R2407792-008	2408140940X WB-5-345	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear		
5	R2407792-011	2408150826A 300-002-GSV	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear		
6	R2407794-001	OW-20-0824	.01	10mL	6020B/Pb T, Zn T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy		
7	R2407794-003	OW-18R-0824	.01	10mL	6020B/Pb T, Zn T	<2			10.00mL	Colorless-Cloudy/Orange-Cloudy		
8	R2407794-004	OW-39-0824	.01	10mL	6020B/Pb T, Zn T	<2			10.00mL	Colorless-Cloudy/Orange-Cloudy		
9	R2407794-005	RINSE1-0824	.01	10mL	6020B/Pb T, Zn T	<2			10.00mL	Colorless-Cloudy/Colorless-Clear		
10	R2407794-006	OW-33-0824	.01	10mL	6020B/Pb T, Zn T	<2			10.00mL	Colorless-Cloudy/Yellow-Cloudy		
11	R2407808-001	24L0425	.07	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Clear		Tier IV
12	RQ2410335-03	R2407808-001 MS	.07	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Clear	0.0200 mL/234787; 0.0200 mL/232728; 0.0200 mL/233423	
13	RQ2410335-04	R2407808-001 DMS	.07	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Clear	0.0200 mL/232728; 0.0200 mL/233423; 0.0200 mL/234787	
14	R2407808-002	24L0429	.02	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Clear		
15	R2407808-003	24L0437	.02	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Clear		
16	R2407879-005	2408151008C BLM-25-455	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear		
17	R2407879-006	2408151009C BLM-25-455	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear		
18	R2407879-011	2408160834A 400-001-GW	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear		
19	R2407879-014	2408160900X WB-5-280	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear		
20	R2407879-023	2408161341A ST-4-589	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear		
21	R2407879-024	2408161342A ST-4-589	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear		
22	RQ2410335-05	R2407879-024 MS	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear	0.0200 mL/234787; 0.0200 mL/233423; 0.0200 mL/232728	
23	RQ2410335-06	R2407879-024 DMS	.02	10mL	6020B/As T, Sb T, Tl T	<2			10.00mL	Colorless-Clear	0.0200 mL/232728; 0.0200 mL/233423; 0.0200 mL/234787	
24	R2407948-001	OF002 - Internal - Effluent	.04	10mL	200.8/Cr T, Zn T	<2			10.00mL	Colorless-Clear		
25	R2407949-001	DSN007-1	.01	10mL	200.8/Al T, Cr T, Pb T	<2			10.00mL	Colorless-Cloudy/Colorless-Clear		
26	R2407961-001	24S0157	.02	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Clear		Tier IV

Spiking Solutions

Name: ICPMS Calibration Standard 1 (10 ug/mL Inventory ID 232728 Logbook Ref: 232728 Expires On: 02/23/2025 Lot #: 222015048

Preparation Information Benchsheet

Prep Run#: 443640 **Prep WorkFlow:** MetDigAqMS **Status:** Prepped
Team: Metals/CDISTEFANO **Prep Method:** EPA 200.2 **Prep Date/Time:** 8/22/24 16:22

Name:	ICPMS Calibration Standard 2 (10 ug/mL	Inventory ID	233423	Logbook Ref:	233423	Expires On:	03/10/2025	Lot #: 221015154
Name:	ICPMS Calibration Standard 3 (10 ug/ml	Inventory ID	234787	Logbook Ref:	234787	Expires On:	04/24/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	1:1 Nitric Acid Metals Grade	1:1 235979 (235980)	Hot Block Cups	10mL Lot J602711-6995 (236487)
Thermometer	402 (182588)				

Preparation Steps

Step: Digestion
Started: 8/22/24 16:22
Finished: 8/23/24 16:05
By: CDISTEFANO
Comments

7792 8127
7794 8127
7808 (W) 9/2
7879 8/30
7948 8127
7949 8127
7961 (W) 9/6 MS

Comments:

Reviewed By: Nicole Manson Date: 8/27/24

Chain of Custody

Relinquished By: [signature] Date: 8/23/24
Received By: R. Ator Date: 8/23/24

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443667
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqMS
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/23/24 09:06

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410367-01	MB		10mL	200.8/Al T, As T, Ba T, Co T, Cr T, Cu T, Mo T, Pb T, V T, Zn T	<2			10.00mL	Colorless-Clear		HB:10 Well:F7 Temp:93.0C/93.4C
2	RQ2410367-02	LCS		10mL	200.8/Al T, As T, Ba T, Co T, Cr T, Cu T, Mo T, Pb T, V T, Zn T	<2			10.00mL	Colorless-Clear	0.0200 mL/232728; 0.0200 mL/233423; 0.0200 mL/234787	On HB:12:20 Off HB:14:20 Pipet/Repipettor:M33,M39
3	R2407909-001	Kelli Betts	.01	10mL	200.8/As T, Ba T, Cr T, Cu T, Pb T	<2			10.00mL	Colorless-Clear		
4	R2407950-001	Effluent	.01	10mL	200.8/Cu T, Zn T	<2			10.00mL	Yellow-Cloudy/Yellow-Cloudy		
5	R2407958-001	Brandan Pittsley	.01	10mL	200.8/As T, Ba T, Cr T, Cu T, Pb T	<2			10.00mL	Colorless-Clear		
6	R2407958-002	Victoria Degraff	.01	10mL	200.8/As T, Ba T, Cr T, Cu T, Pb T	<2			10.00mL	Colorless-Clear		
7	R2408031-001	PS-240821-INF	.04	10mL	200.8/Al T, Cu T, Zn T	<2			10.00mL	Yellow-Cloudy/Colorless-Cloudy		
8	R2408031-009	PS-240814-INF	.02	10mL	200.8/Al T, Cu T, Zn T	<2			10.00mL	Yellow-Cloudy/Colorless-Cloudy		
9	R2408042-002	24L0458	.02	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Clear		Tier IV
10	R2408047-001	24S0161	.02	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Clear		Tier IV
11	R2408047-002	24S0158	.02	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Cloudy/Colorless-Clear		
12	RQ2410367-03	R2408047-002 MS	.02	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Cloudy/Colorless-Clear	0.0200 mL/232728; 0.0200 mL/233423; 0.0200 mL/234787	
13	RQ2410367-04	R2408047-002 DMS	.02	10mL	200.8/Co T, Cr T, Mo T, V T	<2			10.00mL	Colorless-Cloudy/Colorless-Clear	0.0200 mL/233423; 0.0200 mL/234787; 0.0200 mL/232728	

Spiking Solutions

Name:	ICPMS Calibration Standard 1 (10 ug/mL	Inventory ID	232728	Logbook Ref:	232728	Expires On:	02/23/2025	Lot #:	222015048
Name:	ICPMS Calibration Standard 2 (10 ug/mL	Inventory ID	233423	Logbook Ref:	233423	Expires On:	03/10/2025	Lot #:	221015154
Name:	ICPMS Calibration Standard 3 (10 ug/mL	Inventory ID	234787	Logbook Ref:	234787	Expires On:	04/24/2025		

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	1:1 Nitric Acid Metals Grade	1:1 235979 (235980)	Hot Block Cups	10mL Lot J602711-6995 (236487)
Thermometer	402 (182588)				

Preparation Steps

Step: Digestion
Started: 8/23/24 09:06
Finished: 8/23/24 16:13
By: CDISTEFANO
Comments

Preparation Information Benchsheet

Prep Run#: 443667
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqMS
Prep Method:

Status: Prepped
Prep Date/Time: 8/23/24 09:06

7909 8/30
7950 8/30
7958 8/30
8031 9/2
8042 (IV) 9/6
8047 (IV) 9/6
MS

Comments:

Reviewed By: Nicole Hansen Date: 8/27/24

Chain of Custody

Relinquished By:		Date:	8/23/24	Extracts Examined
Received By:		Date:	8/23/24	Yes No

Preparation Information Benchsheet

Prep Run#: 443643
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqMS
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/22/24 16:25

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410338-01	MB		10mL	200.8/Al D, As D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		HB:10 Well:F7 Temp:93.0C/93.4C
2	RQ2410338-02	LCS		10mL	200.8/Al D, As D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/234787; 0.0200 mL/233423; 0.0200 mL/232728	On HB:12:20 Off HB:14:20 Pipet/Repipettor:M33,M39
3	R2407734-002	Hudson Transect T14 P03 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
4	R2407734-004	Hudson Transect T15 P07 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
5	R2407734-006	Hudson Transect T16 P02 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
6	R2407734-008	Hudson T10.02 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
7	RQ2410338-03	R2407734-008 MS	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/232728; 0.0200 mL/233423; 0.0200 mL/234787	
8	RQ2410338-04	R2407734-008 DMS	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/233423; 0.0200 mL/234787; 0.0200 mL/232728	
9	R2407734-010	Hudson T10.02 Rep Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
10	R2407734-012	Hudson T11.04 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
11	R2407734-014	Hudson T12.03 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
12	R2407734-016	Hudson T13.09 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
13	R2407734-018	Hudson Transect T17 P03 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
14	R2407734-020	Hudson Transect T18 P02 Diss	.04	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
15	R2407805-002	24S0168 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV
16	R2407805-004	24S0170 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
17	R2407805-006	24S0165 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
18	R2407805-008	24S0166 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
19	R2407805-010	24S0167 Diss	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear		
20	RQ2410338-05	R2407805-010 MS	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/233423; 0.0200 mL/234787; 0.0200 mL/232728	
21	RQ2410338-06	R2407805-010 DMS	.02	10mL	200.8/Al D, Cd D, Cu D, Ni D, Pb D, Zn D	<2			10.00mL	Colorless-Clear	0.0200 mL/233423; 0.0200 mL/234787; 0.0200 mL/232728	
22	R2407807-002	24L0426 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		Tier IV

Preparation Information Benchsheet

Prep Run#: 443643 **Prep WorkFlow:** MetDigAqMS **Status:** Prepped
Team: Metals/CDISTEFANO **Prep Method:** EPA 200.2 **Prep Date/Time:** 8/22/24 16:25

23	R2407807-004	24L0427 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
24	R2407807-006	24L0428 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
25	R2407807-008	24L0429 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		
26	R2407807-010	24L0437 Diss	.02	10mL	200.8/Al D, As D, Cu D, Ni D, Zn D	<2			10.00mL	Colorless-Clear		

Spiking Solutions

Name:	ICPMS Calibration Standard 1 (10 ug/mL	Inventory ID	232728	Logbook Ref:	232728	Expires On:	02/23/2025	Lot #: 222015048
Name:	ICPMS Calibration Standard 2 (10 ug/mL	Inventory ID	233423	Logbook Ref:	233423	Expires On:	03/10/2025	Lot #: 221015154
Name:	ICPMS Calibration Standard 3 (10 ug/mL	Inventory ID	234787	Logbook Ref:	234787	Expires On:	04/24/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	1:1 Nitric Acid Metals Grade	1:1 235979 (235980)	Hot Block Cups	10mL Lot J602711-6995 (236487)
Thermometer	402 (182588)				

Preparation Steps

Step: Digestion
Started: 8/22/24 16:25
Finished: 8/23/24 16:08
By: CDISTEFANO
Comments

7734 B 8/30
7805 9/2
7807 9/2

R1BS
MS

Comments:

Reviewed By: Nicole Maassen Date: 8/27/24

Chain of Custody

Relinquished By: Date: 8/23/24

Received By: Date: 8/28/24

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443641
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqMS
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/22/24 16:22

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410336-01	MB		10mL	200.8/Ag T, As T, Cu T, Ni T	<2			10.00mL	Colorless-Clear		HB:10 Well:F7 Temp:93.0C/93.4C
2	RQ2410336-02	LCS		10mL	200.8/Ag T, As T, Cu T, Ni T	<2			10.00mL	Colorless-Clear	0.0200 mL/234787; 0.0200 mL/232728; 0.0200 mL/233423	On HB:12:20 Off HB:14:20 Pipet/Repipettor:M33,M39
3	R2407734-001	Hudson Transect T14 P03	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		Tier IV
4	R2407734-003	Hudson Transect T15 P07	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
5	R2407734-005	Hudson Transect T16 P02	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
6	R2407734-007	Hudson T10.02	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy		
7	R2407734-009	Hudson T10.02 Rep	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
8	R2407734-011	Hudson T11.04	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy		
9	R2407734-013	Hudson T12.03	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
10	R2407734-015	Hudson T13.09	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
11	R2407734-017	Hudson Transect T17 P03	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
12	RQ2410336-03	R2407734-017 MS	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear	0.0200 mL/233423; 0.0200 mL/232728; 0.0200 mL/234787	
13	RQ2410336-04	R2407734-017 DMS	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear	0.0200 mL/234787; 0.0200 mL/232728; 0.0200 mL/233423	
14	R2407734-019	Hudson Transect T18 P02	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
15	R2407805-001	24S0168	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Cloudy/Colorless-Clear		Tier IV
16	R2407805-003	24S0170	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
17	R2407805-005	24S0165	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
18	R2407805-007	24S0166	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
19	R2407805-009	24S0167	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear		
20	RQ2410336-05	R2407805-009 MS	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear	0.0200 mL/233423; 0.0200 mL/234787; 0.0200 mL/232728	
21	RQ2410336-06	R2407805-009 DMS	.03	10mL	200.8/Ag T, As T	<2			10.00mL	Colorless-Clear	0.0200 mL/234787; 0.0200 mL/233423; 0.0200 mL/232728	
22	R2407807-001	24L0426	.01	10mL	200.8/As T, Cu T, Ni T	<2			10.00mL	Colorless-Clear		Tier IV
23	R2407807-003	24L0427	.04	10mL	200.8/As T, Cu T, Ni T	<2			10.00mL	Colorless-Clear		
24	R2407807-005	24L0428	.01	10mL	200.8/As T, Cu T, Ni T	<2			10.00mL	Colorless-Clear		
25	R2407807-007	24L0429	.06	10mL	200.8/As T, Cu T, Ni T	<2			10.00mL	Colorless-Clear		

Spiking Solutions

Name:	ICPMS Calibration Standard 1 (10 ug/mL	Inventory ID	232728	Logbook Ref:	232728	Expires On:	02/23/2025	Lot #: 222015048
Name:	ICPMS Calibration Standard 2 (10 ug/mL	Inventory ID	233423	Logbook Ref:	233423	Expires On:	03/10/2025	Lot #: 221015154
Name:	ICPMS Calibration Standard 3 (10 ug/mL	Inventory ID	234787	Logbook Ref:	234787	Expires On:	04/24/2025	

Preparation Information Benchsheet

Prep Run#: 443641
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqMS
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/22/24 16:22

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	1:1 Nitric Acid Metals Grade	1:1 235979 (235980)	Hot Block Cups	10mL Lot J602711-6995 (236487)
Thermometer	402 (182588)				

Preparation Steps

Step: Digestion
Started: 8/22/24 16:22
Finished: 8/23/24 16:07
By: CDISTEFANO
Comments

7734 (N) 8/30
7805 9/2
~~7807~~
7807 9/2
RIBS
MS

Comments:

Reviewed By: Nicole Marsen Date: 8/27/24

Chain of Custody

Relinquished By:		Date:	8/23/24	Extracts Examined
Received By:	02-F101	Date:	8/23/24	Yes No

ICP-MS ICV/CCV Standard

Standard prepared daily

	Metal	ALS Lot #	Conc. (ppb)	Vol. (mls)	Final Vol (mls)	Final Conc. (ppb)	Matrix
Cal Std 1	Al	235160	10000	0.50	100	50.00	1% HNO3/ 0.5% HCl
	As		10000			50.00	
	Be		10000			50.00	
	Cd		10000			50.00	
	Cr		10000			50.00	
	Co		10000			50.00	
	Cu		10000			50.00	
	Pb		10000			50.00	
	Mn		10000			50.00	
	Mo		10000			50.00	
	Ni		10000			50.00	
	Sb		10000			50.00	
	Se		10000			50.00	
	Th		10000			50.00	
	Tl		10000			50.00	
	U		10000			50.00	
	V		10000			50.00	
	Zn		10000			50.00	
Cal Std 2	Ag	235161	10000	0.50		50.00	
	Ba	-	10000			50.00	
Odd Cal Std	Sr	—	10000	0.50		50.00	
	W		10000			50.00	
	Pt		10000			50.00	
	Pd		10000			50.00	
	Ta		10000			50.00	
	Li		10000			50.00	

Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
NM 7/26/24	A	235979	234782	7/27/24	M40
NM 7/29/24	B	235979	234782	7/30/24	M40
NM 7/30/24	C	235979	234782	7/31/24	M40
NM 7/31/24	D	235979	235981	8/1/24	M40
NM 8/2/24	E	235979	235981	8/3/24	M36
NM 8/5/24	F	235979	235981	8/6/24	M36
NM 8/6/24	G	235979	235981	8/7/24	M36
NM 8/7/24	H	235979	235981	8/8/24	M40
NM 8/13/24	I	235979	235981	8/14/24	M40
NM 8/21/24	J	235979	235981	8/22/24	M40
NM 8/22/24	K	235979	235981	8/23/24	M40
NM 8/23/24	L	235979	235981	8/24/24	M36
NM 8/27/24	M	235979	235981	8/28/24	M36
	N				
	O				
	P				
	Q				
	R				
	S				
	T				
	U				
	V				
	W				
	X				
	Y				
	Z				
	AA				
	BB				
	CC				
	DD				

ICP-MS ICSA/SIC Standard

Standard prepared daily

	Analyte	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix
Interference Check Std	Cl-	233254	21215	0.50	5	2121.5	1% HNO3
	Fe		2500			250	0.5% HCl
	Na		2500			250	
	C		2000			200	
	Al		1000			100	
	K		1000			100	
	Mg		1000			100	
	P		1000			100	
	S		1000			100	
	Mo		20			2	
	Ti		20			2	
	Ca		3000			300	

Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
NM 4/4/24	A	233477	233283	4/5/24	M40
NM 4/11/24	B	233477	233283	4/12/24	M40
NM 4/19/24	C	23477	233283	4/20/24	M40
NM 4/23/24	D	233477	233283	4/24/24	M40
NM 4/25/24	E	233477	233283	4/26/24	M40
NM 4/26/24	F	233477	233283	4/27/24	M40
NM 5/3/24	G	233477	233283	5/4/24	M40
NM 5/15/24	H	233477	233283	5/16/24	M40
MFM 5/21/24	I	233477	233283	5/22/24	M40
~~MFM 5/28/24~~	~~J~~	~~233477~~	~~233283~~	~~6/4/24~~	~~M40~~
NM 7/15/24	K	235979	234782	7/16/24	M40
NM 7/17/24	L	235979	234782	7/18/24	M40
NM 7/24/24	M	235979	234782	7/25/24	M36
NM 7/26/24	N	235979	234782	7/27/24	M40
NM 7/29/24	O	235979	234782	7/30/24	M40
NM 7/31/24	P	235979	235981	8/1/24	M36
NM 8/1/24	Q	235979	235981	8/2/24	M36
NM 8/5/24	R	235979	235981	8/6/24	M36
NM 8/6/24	S	235979	235981	8/7/24	M36
NM 8/9/24	T	235979	235981	8/10/24	M36
NM 8/13/24	U	235979	235981	8/14/24	M36
NM 8/16/24	V	235979	235981	8/17/24	M40
NM 8/20/24	W	235979	235981	8/21/24	M36
NM 8/21/24	X	235979	235981	8/22/24	M36
NM 8/27/24	Y	235979	235981	8/28/24	M40
	Z				
	AA				
	BB				
	CC				
	DD				

ICP-MS Calibration Standard #1

Standard is prepared monthly or as necessary

	Metal	ALS Lot #	Conc. (ppb)	Vol. (mls)	Final Vol (mls)	Final Conc. (ppb)	Matrix	Analyst/ Date
Cal Std 1	Sb	235150	20000	0.025	500	1.00	1% HNO3/	NM 8/9/24
	Mo	-	20000			1.00	0.5% HCl	
Cal Std 2	Al	235151	20000	0.025		Below		
	Zn		20000			Below		
	As		20000			1.00		
	Ba		20000			1.00		
	Be		20000			1.00		
	Cd		20000			1.00		
	Co		20000			1.00		
	Cu		20000			1.00		
	Pb		20000			1.00		
	Mn		20000			1.00		
	Ni		20000			1.00		
	Th		20000			1.00		
	Ag		20000			1.00		
	Tl		20000			1.00		
	Cr		20000			1.00		
	V		20000			1.00		
	Se		20000			1.00		
	U		20000			1.00		
Int. Stds	Al	M8740121A	10000	0.20		5.00		
	Zn	M8740121N	10000	0.20		5.00		
Odd Cal Std	Sr	M8740132A	20000	0.025		1.00		
	~~W~~		20000			1.00		
	~~Pt~~		20000			1.00		
	~~Pd~~		20000			1.00		
	~~Ta~~		20000			1.00		
	~~Li~~		20000			1.00		

Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
A	235979	235981	9/9/24	M37 M36
B				
C				
D				
E				
F				
G				
H				
I				
J				
K				
L				
M				
N				
O				
P				
Q				
R				
S				
T				
U				
V				
W				
X				
Y				
Z				

ICP-MS Calibration Standard #2

Standard is prepared monthly or as necessary

	Metal	ALS Lot #	Conc. (ppb)	Vol. (mls)	Final Vol (mls)	Final Conc. (ppb)	Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
Cal Std 1	**Sb**	235150	20000	0.25	500	10.00	1% HNO3/	NM 8/9/24	**A**	235979	235981	9/9/24	M36
	Mo	-	20000			10.00	0.5% HCl		**B**				
Cal Std 2	**Al**	235151	20000	0.25		10.00			**C**				
	Zn		20000			10.00			**D**				
	As		20000			10.00			**E**				
	Ba		20000			10.00			**F**				
	Be		20000			10.00			**G**				
	Cd		20000			10.00			**H**				
	Co		20000			10.00			**I**				
	Cu		20000			10.00			**J**				
	Pb		20000			10.00			**K**				
	Mn		20000			10.00			**L**				
	Ni		20000			10.00			**M**				
	Th		20000			10.00			**N**				
	Ag		20000			10.00			**O**				
	Tl		20000			10.00			**P**				
	Cr		20000			10.00			**Q**				
	V		20000			10.00			**R**				
	Se		20000			10.00			**S**				
	U		20000			10.00			**T**				
Odd Cal Std	**Sr**	M874Q132A	20000	0.25		10.00			**U**				
	~~**W**~~		20000			10.00			**V**				
	~~**Pt**~~		20000			10.00			**W**				
	~~**Pd**~~		20000			10.00			**X**				
	~~**Te**~~		20000			10.00			**Y**				
	~~**Li**~~		20000			10.00			**Z**				

ICP-MS Calibration Standard #3

Standard is prepared monthly or as necessary

	Metal	ALS Lot #	Conc. (ppb)	Vol. (mls)	Final Vol (mls)	Final Conc. (ppb)	Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
Cal Std 1	Sb	235150	20000	0.5	500	20.00	1% HNO3/	NM 8/9/24	A	235979	235981	9/9/24	M36
	Mo	-	20000			20.00	0.5% HCl		B				
Cal Std 2	Al	235151	20000	0.5		20.00			C				
	Zn		20000			20.00			D				
	As		20000			20.00			E				
	Ba		20000			20.00			F				
	Be		20000			20.00			G				
	Cd		20000			20.00			H				
	Co		20000			20.00			I				
	Cu		20000			20.00			J				
	Pb		20000			20.00			K				
	Mn		20000			20.00			L				
	Ni		20000			20.00			M				
	Th		20000			20.00			N				
	Ag		20000			20.00			O				
	Tl		20000			20.00			P				
	Cr		20000			20.00			Q				
	V		20000			20.00			R				
	Se		20000			20.00			S				
	U		20000			20.00			T				
Odd Cal Std	Sr	MS7401321A	20000	0.5		20.00			U				
	~~W~~		20000			20.00			V				
	~~Pt~~		20000			20.00			W				
	~~Pd~~		20000			20.00			X				
	~~Ta~~		20000			20.00			Y				
	~~Li~~		20000			20.00			Z				

ICP-MS Calibration Standard #4

Standard is prepared monthly or as necessary

	Metal	ALS Lot #	Conc. (ppb)	Vol. (mls)	Final Vol (mls)	Final Conc. (ppb)	Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
Cal Std 1	Sb	235150	20000	1.25	500	50.00	1% HNO3/	NM 8/9/24	A	235979	235980	9/9/24	M36
	Mo	-	20000			50.00	0.5% HCl		B				
Cal Std 2	Al	235151	20000	1.25		50.00			C				
	Zn		20000			50.00			D				
	As		20000			50.00			E				
	Ba		20000			50.00			F				
	Be		20000			50.00			G				
	Cd		20000			50.00			H				
	Co		20000			50.00			I				
	Cu		20000			50.00			J				
	Pb		20000			50.00			K				
	Mn		20000			50.00			L				
	Ni		20000			50.00			M				
	Th		20000			50.00			N				
	Ag		20000			50.00			O				
	Tl		20000			50.00			P				
	Cr		20000			50.00			Q				
	V		20000			50.00			R				
	Se		20000			50.00			S				
	U		20000			50.00			T				
Odd Cal Std	Sr	M8740132A	20000	1.25		50.00			U				
	~~W~~		20000			50.00			V				
	~~Pt~~		20000			50.00			W				
	~~Pd~~		20000			50.00			X				
	~~Ta~~		20000			50.00			Y				
	~~Li~~		20000			50.00			Z				

ICP-MS Calibration Standard #5

Standard is prepared monthly or as necessary

	Metal	ALS Lot #	Conc. (ppb)	Vol. (mls)	Final Vol (mls)	Final Conc. (ppb)	Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
Cal Std 1	**Sb**	235150	20000	2.5	500	100.00	1% HNO3/	NM 8/9/24	**A**	235979	235981	9/9/24	M36
	Mo	-	20000			100.00	0.5% HCl		**B**				
Cal Std 2	**Al**	235151	20000	2.5		100.00			**C**				
	Zn		20000			100.00			**D**				
	As		20000			100.00			**E**				
	Ba		20000			100.00			**F**				
	Be		20000			100.00			**G**				
	Cd		20000			100.00			**H**				
	Co		20000			100.00			**I**				
	Cu		20000			100.00			**J**				
	Pb		20000			100.00			**K**				
	Mn		20000			100.00			**L**				
	Ni		20000			100.00			**M**				
	Th		20000			100.00			**N**				
	Ag		20000			100.00			**O**				
	Tl		20000			100.00			**P**				
	Cr		20000			100.00			**Q**				
	V		20000			100.00			**R**				
	Se		20000			100.00			**S**				
	U		20000			100.00			**T**				
Odd Cal Std	**Sr**	M8740132A	20000	2.5		100.00			**U**				
	~~**W**~~		20000			100.00			**V**				
	~~**Pt**~~		20000			100.00			**W**				
	~~**Pd**~~		20000			100.00			**X**				
	~~**Ta**~~		20000			100.00			**Y**				
	~~**Li**~~		20000			100.00			**Z**				

ICP-MS HLCCV2 Standard

Standard is prepared monthly or as necessary

	Metal	ALS Lot #	Conc. (ppb)	Vol. (mls)	Final Vol (mls)	Final Conc. (ppb)	Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
Cal Std 1	Sb	~~232913~~ 231913	20000	0.50	50	200.00	1% HNO3/	MFM 4/22/24	A	233477	233283	5/22/24	M40
	Mo	"	20000			200.00	0.5% HCl	MFM 5/15/24	B	233477	233283	6/15/24	M36
Cal Std 2	Al	231912	20000	0.50		200.00		NM 5/30/24	C	233477	233283	6/30/24	M36
	Zn		20000			200.00		MFM 6/10/24	D	233477	233283	7/10/24	M40
	As		20000			200.00		MFM 6/18/24	E	235024	233283	7/18/24	M36
	Ba		20000			200.00		MFM 6/26/24	F	235024	234782	7/26/24	M36
	Be		20000			200.00		NM 7/12/24	G	235024	234782	8/12/24	M36
	Cd		20000			200.00		NM 7/24/24	H	235979	234782	8/24/24	M36
	Co		20000			200.00		NM 8/6/24	I	235979	235981	9/6/24	M36
	Cu		20000			200.00			J				
	Pb		20000			200.00			K				
	Mn		20000			200.00			L				
	Ni		20000			200.00			M				
	Th		20000			200.00			N				
	Ag		20000			200.00			O				
	Tl		20000			200.00			P				
	Cr		20000			200.00			Q				
	V		20000			200.00			R				
	Se		20000			200.00			S				
	U		20000			200.00			T				
Odd Cal Std	Sr	—	20000	0.50		200.00			U				
	W		20000			200.00			V				
	Pt		20000			200.00			W				
	Pd		20000			200.00			X				
	Ta		20000			200.00			Y				
	Li		20000			200.00			Z				

ICP-MS HLCCV3 Standard

Standard is prepared monthly or as necessar

	Metal	ALS Lot #	Conc. (ppb)	Vol. (mls)	Final Vol (mls)	Final Conc. (ppb)	Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
Cal Std 1	Sb	231913	20000	1.00	50	400.00	1% HNO3/	MFM 4/22/24	A	233477	233283	5/22/24	M40
	Mo	-	20000			400.00	0.5% HCl	MFM 5/15/24	B	233477	233283	6/15/24	M36
Cal Std 2	Al	231912	20000	1.00		400.00		NM 5/30/24	C	233477	233283	6/30/24	M36
	Zn		20000			400.00		MFM 6/10/24	D	233477	233283	7/10/24	M40
	As		20000			400.00		MFM 6/18/24	E	235024	233283	7/18/24	M36
	Ba		20000			400.00		MFM 6/26/24	F	235024	234782	7/26/24	M36
	Be		20000			400.00		NM 7/12/24	G	235024	234782	8/12/24	M36
	Cd		20000			400.00		NM 7/24/24	H	235979	234782	8/24/24	M36
	Co		20000			400.00		NM 8/6/24	I	235979	235981	9/6/24	M36
	Cu		20000			400.00			J				
	Pb		20000			400.00			K				
	Mn		20000			400.00			L				
	Ni		20000			400.00			M				
	Th		20000			400.00			N				
	Ag		20000			400.00			O				
	Tl		20000			400.00			P				
	Cr		20000			400.00			Q				
	V		20000			400.00			R				
	Se		20000			400.00			S				
	U		20000			400.00			T				
Odd Cal Std	Sr	—	20000	1.00		400.00			U				
	W		20000			400.00			V				
	Pt		20000			400.00			W				
	Pd		20000			400.00			X				
	Ta		20000			400.00			Y				
	Li		20000			400.00			Z				

ICP-MS Internal Standard Solution

Standard prepared every 6 months or as necessary

(Added in-line)

	Metal	ALS Lot #	Conc. (ppb)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppb)	Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
Internal Standard	Bi	232725	10000	50.00	500	1000	1% HNO3	NM 7/9/24	A	235024	—	11/15/24	M36/dispo
	Ho		10000			1000		NM 8/23/24	B	235979	—	11/15/24	M36/dispo
	In		10000			1000			C				
	Li +6		10000			1000			D				
	Rh		10000			1000			E				
	Sc		10000			Below			F				
	Tb		10000			1000			G				
	Y		10000			1000			H				
	Sc	235153	1000000	0.5		2000			I				
	Ge	234086	1000000	2.5		5000			J				
									K				
									L				
									M				
									N				
									O				
									P				
									Q				
									R				
									S				
									T				
									U				
									V				
									W				
									X				
									Y				
									Z				

ICP-MS Tune Solution

Standard prepared annually or as necessary

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppb)	Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
ICP-MS Tune	Ba	235154	0.01	1000	1000	10	1% HNO3	NM 5/13/24	A	~	~	7/30/25	M37
	Be		0.01			10			B				
	Ce		0.01			10			C				
	Co		0.01			10			D				
	In		0.01			10			E				
	Mg		0.01			10			F				
	Pb		0.01			10			G				
	Rh		0.01			10			H				
	U		0.01			10			I				
	Cd	234567	1000	0.01		10			J				
	Cu	230454	1000	0.01		10			K				
	Li	231917	1000	0.01		10			L				
	Tl	233695	1000	0.01		10			M				
	Y	233696	1000	0.01		10			N				
									O				
									P				
									Q				
									R				
									S				
									T				
									U				
									V				
									W				
									X				
									Y				
									Z				

Sample Dilutions 200.7/200.8

Final Volume: 5-6mL

Analyst: NM
Instrument: MS7900

Date 8/27/24
Analysis 200.8/6020B

Common Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor
1/2	2%HNO3/ 5%HCL	2.5	2.5	**1/2**												
1/3	2%HNO3/ 5%HCL	2	4	**1/3**												
1/5	2%HNO3/ 5%HCL	1	4	**1/5**												
1/10	2%HNO3/ 5%HCL	0.5	4.5	**1/10**												
1/10	2%HNO3/ 5%HCL	0.6	5.4	**1/10**												
1/20	2%HNO3/ 5%HCL	1	1	**1/2**	0.5	4.5	**1/20**									
1/50	2%HNO3/ 5%HCL	1	4	**1/5**	0.5	4.5	**1/50**									
1/100	2%HNO3/ 5%HCL	0.5	4.5	**1/10**	0.5	4.5	**1/100**									
1/200	2%HNO3/ 5%HCL	1	1	**1/2**	0.5	4.5	**1/20**	0.5	4.5	**1/200**						
1/500	2%HNO3/ 5%HCL	1	4	**1/5**	0.5	4.5	**1/50**	0.5	4.5	**1/500**						
1/1000	2%HNO3/ 5%HCL	0.5	4.5	**1/10**	0.5	4.5	**1/100**	0.5	4.5	**1/1000**						
1/2000	2%HNO3/ 5%HCL	1	1	**1/2**	0.5	4.5	**1/20**	0.5	4.5	**1/200**	0.5	4.5	**1/2000**			
1/5000	2%HNO3/ 5%HCL	1	4	**1/5**	0.5	4.5	**1/50**	0.5	4.5	**1/500**	0.5	4.5	**1/4000**			
1/10000	2%HNO3/ 5%HCL	0.5	4.5	**1/10**	0.5	4.5	**1/100**	0.5	4.5	**1/1000**	0.5	4.5	**1/10000**			
1/20000	2%HNO3/ 5%HCL	1	1	**1/2**	0.5	4.5	**1/20**	0.5	4.5	**1/200**	0.5	4.5	**1/2000**	0.5	4.5	**1/20000**

Special Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor

Metals Data Cover Sheet

Run Date: 8/22/2024

Data File: 082224-M7600

Primary Reviewer: EC

Secondary Reviewer: N. Mansen

LIMS Runs:	LIMS Preps:
851522	443512
851523	443513

Comments:
N/A

Quicktrace M7600 Run Log (R-CVAA-03)

Serial number: US23110001

Analyst: QC Data File: 082224-M7600

Date Prepped: 8/21/24 Date Analyzed: 8/22/24

Calibration/CRDL Source Standard: 231916 ICV/CCV/LCS/MS Source Standard: 235972

Cal/ CRDL 10ppm stock: M8600096A ICV/CCV/LCS/MS 10ppm stock: M8600047A

Cal/ CRDL 0.1ppm stock: M8600096E ICV/CCV/LCS/MS 0.1 ppm stock: M8600047F, M8600047G

Digested Calibration: M8600096L

Stannous Chloride (prep/exp daily): 100g SnCL2 lot 233253 + 70 mLHCl lot 235981 diluted to 1000 mL

Pipet ID: - DOD Pipet Verification: -

1:1	PBW-443512
1:2	LCSW-443512
1:3	R2407760-001
1:4	R2407760-001S
1:5	R2407760-001SD
1:6	R2407782-001
1:7	R2407792-003
1:8	R2407792-003S
1:9	R2407792-003SD
S:8	CCV
S:9	CCB
1:10	R2407792-008
1:11	R2407792-011
1:12	R2407826-001
1:13	R2407826-002
1:14	R2407828-001
1:15	R2407867-001
1:16	R2407868-001
1:17	R2407869-001
1:18	R2407914-001
S:2	CRDL
S:8	CCV
S:9	CCB

1:19	PBW-443513
1:20	LCSW-443513
1:21	R2407825-001
1:22	R2407825-005
1:23	R2407825-006
1:24	R2407825-007
1:25	R2407825-008
1:26	R2407825-008S
1:27	R2407825-008SD
1:28	R2407825-009
S:8	CCV
S:9	CCB
1:29	R2407825-012
1:30	R2407825-016
1:31	R2407825-039
1:32	R2407879-005
1:33	R2407879-006
1:34	R2407879-011
1:35	R2407879-014
1:36	R2407879-023
1:37	R2407879-024
S:2	CRDL
S:8	CCV
S:9	CCB

QC 8/22/24

ALS Environmental - Mercury 245.1/7470A/7471B

Report Generated By Teledyne Leeman QuickTrace

Analyst: alrce.nouser

Worksheet file: C:\Users\Public\Documents\Teledyne CETAC\QuickTrace\Worksheets\082224-M7600.wszf

Creation Date: 8/22/2024 08:36:53

Comment:

EC 8/22/24

Results

Sample Name	Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	DF	% Recovery
Calibration Blank	STD	08/22/24 09:00:09 am	0.000	19	87.48		1.0000	N/A
Replicates	14.9	42.5	3.6	14.6				
Standard #1 (0.2 ug/L)	STD	08/22/24 09:02:41 am	0.200	2341	0.55	6.14%	1.0000	N/A
Replicates	2322.5	2342.2	2347.5	2351.7				
Standard #2 (0.5 ug/L)	STD	08/22/24 09:07:29 am	0.500	7149	0.21	10.03%	1.0000	N/A
Replicates	7138.0	7136.7	7151.3	7169.0				
Standard #3 (1 ug/L)	STD	08/22/24 09:10:02 am	1.000	11685	0.62	-13.11%	1.0000	N/A
Replicates	11618.2	11638.6	11705.5	11778.8				
Standard #4 (2 ug/L)	STD	08/22/24 09:12:35 am	2.000	28311	0.21	1.86%	1.0000	N/A
Replicates	28269.1	28287.6	28288.9	28397.7				
Standard #5 (5 ug/L)	STD	08/22/24 09:15:08 am	5.000	69888	0.91	-0.82%	1.0000	N/A
Replicates	69162.1	69639.6	70096.1	70655.5				
Standard #6 (10 ug/L)	STD	08/22/24 09:17:41 am	10.000	141961	0.30	0.23%	1.0000	N/A
Replicates	141494.8	141780.0	142079.5	142487.8				

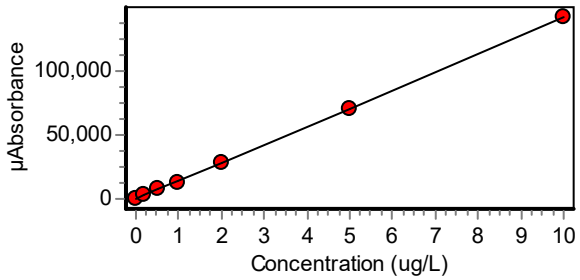
Calibration

Equation: Abs = 14230.644x + -679.917

R2: 0.99968 RSE: 8.86%

SEE: 1023.8870

Flags: C



ICV	ICV	08/22/24 09:25:09 am	3.140	44009	0.25		1.0000	104.68
Replicates	43860.1	44008.9	44039.2	44129.6				
ICB	ICB	08/22/24 09:27:43 am	0.046	-26	1.17		1.0000	N/A
Replicates	-36.6	-24.8	-26.3	-18.0				
CRDL	CRDL	08/22/24 09:32:09 am	0.246	2826	0.42		1.0000	123.20
Replicates	2816.1	2812.2	2835.5	2842.2				
CCV	CCV	08/22/24 09:34:43 am	3.109	43563	0.37		1.0000	103.63
Replicates	43382.4	43488.4	43617.6	43763.3				
CCB	CCB	08/22/24 09:37:17 am	0.047	-16	1.91		1.0000	N/A
Replicates	-22.3	-31.2	-7.2	-4.4				

Sample Name				Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	DF	% Recovery
PBW-443512				UNK	08/22/24 09:39:48 am	0.052	66	1.04		1.0000	N/A
Replicates	59.7	74.9	69.7	59.0							
LCSW-443512				UNK	08/22/24 09:42:20 am	1.077	14645	0.33		1.0000	N/A
Replicates	14586.8	14623.9	14667.4	14702.9							
R2407760-001				UNK	08/22/24 09:44:51 am	0.086	537	0.64		1.0000	N/A
Replicates	532.5	548.2	531.0	538.2							
R2407760-001S				UNK	08/22/24 09:47:23 am	1.128	15374	0.24		1.0000	N/A
Replicates	15329.4	15370.0	15375.4	15422.9							
R2407760-001SD				UNK	08/22/24 09:49:55 am	1.124	15316	0.34		1.0000	N/A
Replicates	15260.5	15286.4	15331.2	15385.4							
R2407782-001				UNK	08/22/24 09:52:27 am	0.061	192	0.79		1.0000	N/A
Replicates	196.6	193.7	197.1	182.4							
R2407792-003				UNK	08/22/24 09:54:59 am	0.056	119	1.05		1.0000	N/A
Replicates	131.5	112.3	115.8	118.3							
R2407792-003S				UNK	08/22/24 09:57:32 am	1.086	14773	0.22		1.0000	N/A
Replicates	14728.7	14765.2	14806.7	14792.3							
R2407792-003SD				UNK	08/22/24 10:00:04 am	1.088	14803	0.25		1.0000	N/A
Replicates	14763.9	14788.5	14805.0	14855.2							
CCV				CCV	08/22/24 10:02:38 am	3.066	42952	0.13		1.0000	102.20
Replicates	42917.9	42907.3	42949.0	43033.6							
CCB				CCB	08/22/24 10:05:12 am	0.047	-8	1.31		1.0000	N/A
Replicates	-12.5	4.9	-13.4	-12.1							
R2407792-008				UNK	08/22/24 10:07:44 am	0.051	41	1.64		1.0000	N/A
Replicates	30.7	31.3	46.9	54.4							
R2407792-011				UNK	08/22/24 10:10:17 am	0.053	68	0.85		1.0000	N/A
Replicates	59.5	68.3	75.0	68.1							
R2407826-001				UNK	08/22/24 10:12:50 am	0.051	43	1.13		1.0000	N/A
Replicates	44.2	42.2	33.7	53.6							
R2407826-002				UNK	08/22/24 10:15:21 am	0.052	57	2.87		1.0000	N/A
Replicates	63.7	83.2	46.5	34.5							
R2407828-001				UNK	08/22/24 10:17:53 am	0.051	48	2.56		1.0000	N/A
Replicates	24.7	42.1	63.4	63.1							
R2407867-001				UNK	08/22/24 10:20:25 am	0.253	2917	0.33		1.0000	N/A
Replicates	2906.9	2912.0	2914.4	2933.7							
R2407868-001				UNK	08/22/24 10:22:56 am	0.183	1922	0.39		1.0000	N/A
Replicates	1931.0	1930.4	1915.5	1911.5							
R2407869-001				UNK	08/22/24 10:25:28 am	0.056	114	1.15		1.0000	N/A
Replicates	104.1	126.0	115.2	111.4							

Sample Name					Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	DF	% Recovery	
R2407914-001					UNK	08/22/24 10:28:00 am	0.061	186	1.43		1.0000	N/A	
	Replicates	171.1	181.3	199.6	191.6								
CRDL					CRDL	08/22/24 10:30:32 am	0.231	2610	0.54		1.0000	115.60	
	Replicates	2599.6	2595.1	2612.1	2634.4								
CCV					CCV	08/22/24 10:33:06 am	2.648	36999	0.18		1.0000	88.26	
	Replicates	36912.2	36974.9	37055.6	37054.3								CCV running empty
CCV RPT					CCV	08/22/24 10:36:49 am	3.029	42429	0.20		1.0000	100.98	
	Replicates	42326.5	42394.6	42465.2	42529.4								Re-filled - OK
CCB					CCB	08/22/24 10:39:23 am	0.046	-22	0.80		1.0000	N/A	
	Replicates	-14.8	-23.9	-27.0	-24.2								
PBW-443513					UNK	08/22/24 10:44:04 am	0.051	45	3.11		1.0000	N/A	
	Replicates	46.9	52.9	12.9	65.6								
LCSW-443513					UNK	08/22/24 10:46:36 am	1.069	14529	0.32		1.0000	N/A	
	Replicates	14480.4	14507.6	14535.4	14592.7								
R2407825-001					UNK	08/22/24 10:49:08 am	0.051	53	0.81		1.0000	N/A	
	Replicates	59.0	56.0	46.9	48.2								
R2407825-005					UNK	08/22/24 10:51:41 am	0.051	52	0.67		1.0000	N/A	
	Replicates	49.9	50.0	59.4	49.0								
R2407825-006					UNK	08/22/24 10:54:14 am	0.051	48	1.08		1.0000	N/A	
	Replicates	47.7	40.1	59.0	46.5								
R2407825-007					UNK	08/22/24 10:56:47 am	0.051	43	1.28		1.0000	N/A	
	Replicates	57.3	38.1	39.5	39.0								
R2407825-008					UNK	08/22/24 10:59:18 am	0.051	44	1.26		1.0000	N/A	
	Replicates	38.3	39.5	40.5	57.6								
R2407825-008S					UNK	08/22/24 11:01:50 am	0.956	12922	0.38		1.0000	N/A	
	Replicates	12860.0	12914.2	12929.7	12984.0								
R2407825-008SD					UNK	08/22/24 11:04:21 am	0.962	13014	0.48		1.0000	N/A	
	Replicates	12935.4	12991.9	13040.9	13088.1								
R2407825-009					UNK	08/22/24 11:06:53 am	0.050	30	0.70		1.0000	N/A	
	Replicates	30.2	31.0	36.5	24.3								
CCV					CCV	08/22/24 11:09:27 am	3.006	42104	0.17		1.0000	100.21	
	Replicates	42026.3	42075.7	42118.1	42194.7								
CCB					CCB	08/22/24 11:12:01 am	0.047	-12	1.22		1.0000	N/A	
	Replicates	-1.3	-10.9	-19.0	-17.7								
R2407825-012					UNK	08/22/24 11:14:33 am	0.051	43	0.31		1.0000	N/A	
	Replicates	44.2	39.7	41.9	44.4								
R2407825-016					UNK	08/22/24 11:17:05 am	0.050	38	1.31		1.0000	N/A	
	Replicates	36.4	41.0	49.6	27.0								

Sample Name		Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	DF	% Recovery
R2407825-039		UNK	08/22/24 11:19:37 am	0.050	26	2.22		1.0000	N/A
Replicates	17.0	45.6	32.0	10.6					
R2407879-005		UNK	08/22/24 11:22:09 am	0.055	109	1.04		1.0000	N/A
Replicates	115.3	116.3	99.0	106.1					
R2407879-006		UNK	08/22/24 11:24:42 am	0.055	100	1.21		1.0000	N/A
Replicates	90.1	95.1	111.8	103.0					
R2407879-011		UNK	08/22/24 11:27:14 am	0.051	50	1.00		1.0000	N/A
Replicates	40.1	52.4	51.2	57.4					
R2407879-014		UNK	08/22/24 11:29:47 am	0.053	81	0.35		1.0000	N/A
Replicates	79.1	82.0	84.8	79.3					
R2407879-023		UNK	08/22/24 11:32:20 am	0.060	168	1.18		1.0000	N/A
Replicates	166.5	157.2	168.0	181.5					
R2407879-024		UNK	08/22/24 11:34:52 am	0.053	72	1.01		1.0000	N/A
Replicates	74.0	65.7	81.2	65.4					
CRDL		CRDL	08/22/24 11:37:24 am	0.228	2568	0.19		1.0000	114.10
Replicates	2567.8	2569.3	2574.1	2558.9					
CCV		CCV	08/22/24 11:39:57 am	3.028	42410	0.31		1.0000	100.93
Replicates	42247.3	42362.6	42467.9	42562.1					
CCB		CCB	08/22/24 11:42:31 am	0.048	0	0.93		1.0000	N/A
Replicates	-2.9	8.3	-6.4	1.3					

M-7600 245.1/7470A/7471B Calibration

Date	8/22/2024	Analyst	EC
Data File	082224-m7600		

Abs= 14230.644X + -679.917

Standard	Conc ug/L	uAbs	CF_x	Meas. conc	%Rec
System Blk	0	19			
STD-1	0.2	2341	2166	0.22	108.07
STD-2	0.5	7149	6435	0.56	111.09
STD-3	1	11685	13551	0.86	86.23
STD-4	2	28311	27781	2.04	101.91
STD-5	5	69888	70473	4.96	99.17
STD-6	10	141961	141627	10.02	100.24

14230.644
-679.917

Preparation Information Benchsheet

Prep Run#: 443512
Team: Metals/ECASTROVINCI

Prep WorkFlow: HgDigAq
Prep Method: Method

Status: Prepped
Prep Date/Time: 8/21/24 17:05

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410248-01	MB		25mL	245.1/Hg T, 7470A/Hg T	<2			25.00mL			HB: 7 WELL: I5 TEMP: 95C
2	RQ2410248-02	LCS		25mL	245.1/Hg T, 7470A/Hg T	<2			25.00mL		0.2500 mL/236941	ON HB: 11:40 OFF HB: 13:40 Pipets/Repipettors used: M39,M40,M208,M106,M270,M370,M320
3	R2407760-001	Point of Entry	.03	25mL	245.1/Hg T	<2			25.00mL			
4	RQ2410248-03	R2407760-001 MS	.03	25mL	245.1/Hg T	<2			25.00mL		0.2500 mL/236941	
5	RQ2410248-04	R2407760-001 DMS	.03	25mL	245.1/Hg T	<2			25.00mL		0.2500 mL/236941	
6	R2407782-001	Savannah	.02	25mL	245.1/Hg T	<2			25.00mL			
7	R2407792-003	2408140834A 300-001-GSV	.01	25mL	7470A/Hg T	<2			25.00mL			
8	RQ2410248-05	R2407792-003 MS	.01	25mL	7470A/Hg T	<2			25.00mL		0.2500 mL/236941	
9	RQ2410248-06	R2407792-003 DMS	.01	25mL	7470A/Hg T	<2			25.00mL		0.2500 mL/236941	
10	R2407792-008	2408140940X WB-5-345	.01	25mL	7470A/Hg T	<2			25.00mL			
11	R2407792-011	2408150826A 300-002-GSV	.01	25mL	7470A/Hg T	<2			25.00mL			
12	R2407826-001	Outfall # 14D (PW-A2)	.01	25mL	245.1/Hg T	<2			25.00mL			
13	R2407826-002	Section 3A1 Porewater	.01	25mL	245.1/Hg T	<2			25.00mL			
14	R2407828-001	Outfall # 14E (BW-4)	.01	25mL	245.1/Hg T	<2			25.00mL			
15	R2407867-001	S-2	.01	25mL	245.1/Hg T	<2			25.00mL			
16	R2407868-001	W-2	.12	25mL	245.1/Hg T	<2			25.00mL			
17	R2407869-001	W-3	.12	25mL	245.1/Hg T	<2			25.00mL			
18	R2407914-001	PVSC Monthly Leachate	.01	5mL	245.1/Hg T	<2			25.00mL			Diluted 5X due to matrix interference with KMnO4.

Spiking Solutions

Name: Mercury LCSW Metals Hg Inventory ID 236941 Logbook Ref: 236941 Expires On: 08/22/2024

Preparation Materials

Hot Block Cups	50mL Lot L223102601 (235558)	Sulfuric Acid, Instra-Analyzed	230116 (230116)	Nitric Acid Metals Grade HNO3	235979 (235979)
Hydroxylamine HCL Solution	233083 (233083)	Thermometer	458 (230828)	Potassium Permanganate RG KMnO4	233691 (233691)
Potassium Persulfate RG K2S2O8	231914 (231914)				

Preparation Information Benchsheet

Prep Run#: 443512
Team: Metals/ECASTROVINCI

Prep WorkFlow: HgDigAq
Prep Method: Method

Status: Prepped
Prep Date/Time: 8/21/24 17:05

Preparation Steps

Step: Digestion
Started: 8/21/24 17:05
Finished: 8/22/24 07:18
By: ECASTROVINCI
Comments

Comments: _____

Reviewed By: Nicole Manseau Date: 8/22/24

Chain of Custody

Relinquished By:	[signature]	Date:	8/22/24	Extracts Examined
Received By:	RAVI	Date:	8/22/24	Yes No

Preparation Information Benchsheet

Prep Run#: 443513
Team: Metals/ECASTROVINCI

Prep WorkFlow: HgDigAq
Prep Method: Method

Status: Prepped
Prep Date/Time: 8/21/24 17:05

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410249-01	MB		25mL	7470A/Hg T	<2			25.00mL			HB: 7 WELL: I5 TEMP: 95C
2	RQ2410249-02	LCS		25mL	7470A/Hg T	<2			25.00mL		0.2500 mL/236941	ON HB: 11:40 OFF HB: 13:40 Pipets/Repipettors used: M39,M40,M208,M106,M270,M370,M320
3	R2407825-001	W-2R	.12	25mL	7470A/Hg T	<2			25.00mL			
4	R2407825-005	W-5	.12	25mL	7470A/Hg T	<2			25.00mL			
5	R2407825-006	W-6R	.12	25mL	7470A/Hg T	<2			25.00mL			
6	R2407825-007	W-7	.12	25mL	7470A/Hg T	<2			25.00mL			
7	R2407825-008	W-9	.12	25mL	7470A/Hg T	<2			25.00mL			
8	RQ2410249-03	R2407825-008 MS	.12	25mL	7470A/Hg T	<2			25.00mL		0.2500 mL/236941	
9	RQ2410249-04	R2407825-008 DMS	.12	25mL	7470A/Hg T	<2			25.00mL		0.2500 mL/236941	
10	R2407825-009	W-10	.12	25mL	7470A/Hg T	<2			25.00mL			
11	R2407825-012	W-15	.12	25mL	7470A/Hg T	<2			25.00mL			
12	R2407825-016	W-21	.12	25mL	7470A/Hg T	<2			25.00mL			
13	R2407825-039	W-2R DUP	.12	25mL	7470A/Hg T	<2			25.00mL			
14	R2407879-005	2408151008C BLM-25-455	.01	25mL	7470A/Hg T	<2			25.00mL			
15	R2407879-006	2408151009C BLM-25-455	.01	25mL	7470A/Hg T	<2			25.00mL			
16	R2407879-011	2408160834A 400-001-GW	.01	25mL	7470A/Hg T	<2			25.00mL			
17	R2407879-014	2408160900X WB-5-280	.01	25mL	7470A/Hg T	<2			25.00mL			
18	R2407879-023	2408161341A ST-4-589	.01	25mL	7470A/Hg T	<2			25.00mL			
19	R2407879-024	2408161342A ST-4-589	.01	25mL	7470A/Hg T	<2			25.00mL			

Spiking Solutions

Name: Mercury LCSW Metals Hg Inventory ID 236941 Logbook Ref: 236941 Expires On: 08/22/2024

Preparation Materials

Hot Block Cups	50mL Lot L223102601 (235558)	Sulfuric Acid, Instra-Analyzed	230116 (230116)	Nitric Acid Metals Grade HNO3	235979 (235979)
Hydroxylamine HCL Solution	233083 (233083)	Potassium Permanganate RG KMnO4	233691 (233691)	Potassium Persulfate RG K2S2O8	231914 (231914)
Thermometer	458 (230828)				

Preparation Information Benchsheet

Prep Run#: 443513
Team: Metals/ECASTROVINCI

Prep WorkFlow: HgDigAq
Prep Method: Method

Status: Prepped
Prep Date/Time: 8/21/24 17:05

Preparation Steps

Step: Digestion
Started: 8/21/24 17:05
Finished: 8/22/24 07:18
By: ECASTROVINCI
Comments

Comments: _____

Reviewed By: Nicole Monsen Date: 8/22/24

Chain of Custody

Relinquished By:	[signature]	Date:	8/22/24	Extracts Examined
Received By:	RAO1	Date:	8/22/24	Yes No

MERCURY CCV / LCSW / MS STANDARDS

Standard	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot #	Expiration Date	Pipet ID
Hg CCV Stk A	235972	1000	1.00	100	10	0.5%HNO3	EC 8/15/24	A	235979	8/22/24	M40

(PREPARED DAILY)

Standard	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot #	Pipet ID
Hg CCV StkB	Hg CCV Stk A	10.0	1.00	100	0.100	0.5%HNO3	EC 8/15/24	B	235979	M40
							EC 8/16/24	C	235979	M40
							EC 8/19/24	D	235979	M40
							EC 8/20/24	E	235979	M40
							EC 8/21/24	F	235979	M40
							EC 8/22/24	G	235979	M40
								H		

(PREPARED AND DIGESTED DAILY WITH SAMPLE PREP RUNS)

CCV Standard (ppb)	ALS Lot #	Conc. (ppm)	Vol. (mL) Soil	Vol. (mL) Water	Final Vol. (mls)	Final Conc. (ppb)	Water/ Soil	Analyst/ Date	Letter ID	Pipet ID
CCV	Hg CCV Stk B	0.100	3.00	0.75	Soils- Final vol. 100mL after digest. Water – Final Vol of 25 mL before digest.	3.00	W S	EC 8/15/24	I	M40
LCS / MS			1.00	0.25		1.00	S - CCV	EC 8/16/24	J	M40
							W - LCS	EC 8/16/24	K	M40
							W - CCV	EC 8/19/24	L	M40
							S - LCS	EC 8/20/24	M	M40
							S - CCV	EC 8/21/24	N	M40
							W - LCS	EC 8/21/24	O	M40
							W - CCV	EC 8/22/24	P	M40

MERCURY CALIBRATION / CRDL STANDARDS

Standard	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot #	Expiration Date	Pipet ID
Hg Cal Stk A	231916	1000	1.00	100	10	0.5%HNO3	EC 8/15/24	A	235979	8/22/24	M40

(PREPARED DAILY)

Standard	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot #	Pipet ID
Hg Cal StkB	Hg Cal Stk A	10.0	1.00	100	0.100	0.5%HNO3	EC 8/16/24	B	235979	M40
							EC 8/19/24	C	235979	M40
							EC 8/21/24	D	235978	M40
							EC 8/22/24	E	235979	M40
								F		
								G		
								H		

(PREPARED AND DIGESTED DAILY WITH SAMPLE PREP RUNS)

CAL Standard (ppb)	ALS Lot #	Conc. (ppm)	Vol. (mL) Soil	Vol. (mL) Water	Final Vol. (mls)	Final Conc. (ppb)	Water/ Soil	Analyst/ Date	Letter ID	Pipet ID
0.200	Hg Cal Stk B	0.100	0.200	0.05	Soils- Dilute to 10mL w/ DI. Final vol. 100mL after digest. Water – dilute to Final Vol of 25 mL with DI before digest.	0.200	S	EC 8/16/24	I	M40
0.500			0.500	0.125		0.500	W	EC 8/19/24	J	M40, M39
1.00			1.00	0.25		1.00	S	EC 8/21/24	K	M40
2.00			2.00	0.5		2.00	W	EC 8/22/24	L	M40, M38
5.00			5.00	1.25		5.00			M	
10.0			10.0	2.5		10.0			N	
CRA			0.200	0.05		0.200			O	

Metals Data Cover Sheet

Run Date: 8/22/2024

Data File: 082224-ICP7

Primary Reviewer: N. Mansen

Secondary Reviewer: C.Kutzer

LIMS Runs:	LIMS Preps:	
851748	443447,443446,443488	CCV6
851749	443498	CCV4
851750	443495	CCV6
851751	443497	CCV4
851752	443496	CCV3

Comments:
N/A

ICP-7 Run Log

Serial number: MY2309CQ22

Analyst: NM Date: 8/22/24 Data File: 082224-ICP7

	Prep Date	Lot #
MRL	~	-
ICSA/ICSAB	7/26/24	M875004GB
ICSAB	-	-
Int. Std	8/16/24	M875005TG
ICV/CCV	8/22/24	M875007ZR

	Prep Date	Lot #
Cal Std 1	6/28/24	M875003A
Cal Std 2 1/100 calb, 3 1/50 calb, 4 1/10 calb, 5 1/5 calb		
Cal Std ~~5/ HLCCV1~~ 6	6/11/24	M875001BC
HLCCV2 A	7/26/24	M875003GB
HLCCV2 B	7/26/24	M875001QIA

~~(Cal Std 4 is a 1/5 and Cal Std 3 is a 1/100 dilution of Cal Std 5)~~ NM 8/22/24

Blank Prep - Daily	NHO3	HCl	Pipet Used	DOD Pipet Verification	IEC Date
Lot	235979	235981	M36, M37	-	-

1:1	PBW-443447	1:23	PBW-443498	2:1	PBW-443495
1:2	LCSW-443447	1:24	LCSW-443498	2:2	LCSW-443495
1:3	R2407825-011 3X	1:25	R2407634-004	2:3	R2407411-001
1:4	R2407825-002 10X	1:26	R2407364-006	2:4	R2407411-003
1:5	R2407825-004 10X	1:27	R2407634-006S	2:5	R2407411-005
1:6	R2407825-006 10X	1:28	R2407634-006SD	2:6	R2407454-001
1:7	R2407825-009 10X	1:29	R2407634-006A	2:7	R2407454-003
1:8	R2407825-010 10X	1:30	R2407634-006L 5X	2:8	R2407455-001
1:9	R2407825-018 10X	1:31	R2407634-008	2:9	R2407455-003
1:10	R2407825-019 10X	1:32	R2407634-008S	2:10	R2407455-005
S1:3	Continuing Calibration Verification	S1:3	Continuing Calibration Verification	S1:5	Continuing Calibration Verification1
S1:4	Continuing Calibration Blank	S1:4	Continuing Calibration Blank	S1:6	Continuing Calibration Blank1
1:11	R2407825-020 10X	1:33	R2407634-008SD	2:11	R2407455-005S
1:12	R2407825-020L 50X	1:34	R2407634-008A	2:12	R2407455-005SD
1:13	PBW-443446	1:35	R2407634-008L 5X	2:13	R2407455-005A
1:14	LCSW-443446	1:36	R2407637-002	2:14	R2407455-005L 5X
1:15	R2407573-010 10X	1:37	R2407729-002	2:15	R2407455-007
1:16	R2407573-010L 50X	1:38	R2407778-001	2:16	R2407479-001
S1:3	Continuing Calibration Verification	1:39	R2407778-002	2:17	R2407479-003
S1:4	Continuing Calibration Blank	1:40	R2407778-003	2:18	R2407529-001
1:17	PBW-443448	1:41	R2407778-004	2:19	R2407529-003
1:18	LCSW-443448	1:42	R2407801-001	2:20	R2407529-005
1:19	R2407724-003 10X	S1:3	Continuing Calibration Verification	S1:5	Continuing Calibration Verification1
1:20	R2407825-021 10X	S1:4	Continuing Calibration Blank	S1:6	Continuing Calibration Blank1
1:21	R2407825-023 10X	1:43	R2407826-001	2:21	R2407547-001
1:22	R2407825-023L 50X	1:44	R2407826-002	2:22	R2407547-003
S1:3	Continuing Calibration Verification	1:45	R2407828-001	2:23	R2407552-001
S1:4	Continuing Calibration Blank	1:46	R2407921-001	2:24	R2407552-003
		1:47	R2407922-001	2:25	R2407552-005
		1:48	R2407923-001	2:26	R2407552-005S
		1:49	R2407924-001	2:27	R2407552-005SD
		1:50	R2407925-001	2:28	R2407552-005A
		1:51	R2407926-001	2:29	R2407552-005L 5X
		1:52	R2407927-001		
		S1:3	Continuing Calibration Verification		
		S1:4	Continuing Calibration Blank		

NM 8/22/24

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ICP-7 Run Log

Serial number: MY2309CQ22

Analyst: NM Date: 8/22/24 Data File: 082224-1CP7

	Prep Date	Lot #			Prep Date	Lot #
MRL				Cal Std 1		
ICSA				Cal Std 2		
ICSAB		NM 8/22/24		Cal Std 5/ HLCCV1		
Int. Std				HLCCV2		
ICV/CCV				HLCCV3		

(Cal Std 4 is a 1/5 and Cal Std 3 is a 1/100 dilution of Cal Std 5)

Blank Prep - Daily	NHO3	HCl	Pipet Used	DOD Pipet Verification	IEC Date
Lot					

S1:5	Continuing Calibration Verification1	3:1	PBW-443496
S1:6	Continuing Calibration Blank1	3:2	LCSW-443496
2:30	PBW-443497	3:3	R2407411-002
2:31	LCSW-443497	3:4	R2407411-004
2:32	R2407554-001	3:5	R2407411-006
2:33	R2407554-003	3:6	R2407411-008
2:34	R2407557-001	3:7	R2407454-002
2:35	R2407557-003	3:8	R2407454-004
2:36	R2407557-005	3:9	R2407479-002
2:37	R2407557-007	3:10	R2407479-004
2:38	R2407557-009	S1:5	Continuing Calibration Verification1
2:39	R2407634-003	S1:6	Continuing Calibration Blank1
S1:5	Continuing Calibration Verification1	3:11	R2407547-002
S1:6	Continuing Calibration Blank1	3:12	R2407547-004
2:40	R2407634-005	3:13	R2407547-004S
2:41	R2407634-005S	3:14	R2407547-004SD
2:42	R2407634-005SD	3:15	R2407547-004A
2:43	R2407634-005A	3:16	R2407547-004L 5X
2:44	R2407634-005L 5X	S1:5	Continuing Calibration Verification1
2:45	R2407634-007	S1:6	Continuing Calibration Blank1
2:46	R2407634-007S		
2:47	R2407634-007SD		
2:48	R2407634-007A		
2:49	R2407634-007L 5X		
S1:5	Continuing Calibration Verification1		
S1:6	Continuing Calibration Blank1		
2:50	R2407637-001		
2:51	R2407640-001		
2:52	R2407640-003		
2:53	R2407685-001		
2:54	R2407685-003		
2:55	R2407685-005		
2:56	R2407729-001		
S1:5	Continuing Calibration Verification1		
S1:6	Continuing Calibration Blank1		

S1:3 CCV
S1:4 CCB
3:25 R2407624-001 2X
3:26 R2407792-008 10X
2:57 R2407411-007
S1:3 CCV
S1:4 CCB

NM 8/22/24

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Created Date/Time	8/22/2024 11:00:47	Software Version	7.6.1.12212
Instrument Name	MY2309CQ22	Firmware Version	5590
File Path	C:\Agilent\ICP Expert\My Results\2024\082224-ICP7.esws		
Notes	NM 8/22/24		

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
8/22/2024 14:44:49	Blank	Ag (328.068 nm)	0.0000	N/A	27.0839
	Blank	Al (237.312 nm)	0.0000	N/A	-13.1429
	Blank	As (188.980 nm)	0.0000	N/A	-3.1287
	Blank	B (249.772 nm)	0.0000	N/A	75.1246
	Blank	Ba (230.424 nm)	0.0000	N/A	8.9147
	Blank	Be (313.107 nm)	0.0000	N/A	-17.1850
	Blank	Ca (317.933 nm)	0.0000	N/A	2831.2886
	Blank	Cd (214.439 nm)	0.0000	N/A	9.7238
	Blank	Co (230.786 nm)	0.0000	N/A	3.5551
	Blank	Cr (267.716 nm)	0.0000	N/A	23.9106
	Blank	Cu (327.395 nm)	0.0000	N/A	9.6658
	Blank	Fe (234.350 nm)	0.0000	N/A	50.8592
	Blank	K (766.491 nm)	0.0000	N/A	294.9533
	Blank	Mg (279.078 nm)	0.0000	N/A	-6.9694
	Blank	Mn (257.610 nm)	0.0000	N/A	9.1384
	Blank	Mo (202.032 nm)	0.0000	N/A	4.7392
	Blank	Na (588.995 nm)	0.0000	N/A	-13328.0860
	Blank	Ni (230.299 nm)	0.0000	N/A	1.4996
	Blank	Pb (220.353 nm)	0.0000	N/A	1.6028
	Blank	Sb (217.582 nm)	0.0000	N/A	1.6873
	Blank	Se (196.026 nm)	0.0000	N/A	0.4454
	Blank	Sn (189.925 nm)	0.0000	N/A	2.0713
	Blank	Sr (216.596 nm)	0.0000	N/A	6.3490
	Blank	Ti (336.122 nm)	0.0000	N/A	62.2630
	Blank	Tl (190.794 nm)	0.0000	N/A	-1.8574
	Blank	V (292.401 nm)	0.0000	N/A	10.5473
	Blank	Y (360.074 nm)	1.00	0.00	538118.84
	Blank	Y_R (360.074 nm)	1.00	0.00	539005.35
	Blank	Zn (213.857 nm)	0.0000	N/A	13.2318
8/22/2024 14:47:54	Standard 1	Ag (328.068 nm)		N/A	42.0005
	Standard 1	Al (237.312 nm)	0.1000	N/A	257.7095
	Standard 1	As (188.980 nm)	0.0100	N/A	14.8666
	Standard 1	B (249.772 nm)		N/A	81.0960
	Standard 1	Ba (230.424 nm)	0.0200	N/A	1230.2535
	Standard 1	Be (313.107 nm)	0.0030	N/A	3188.6328
	Standard 1	Ca (317.933 nm)		N/A	2824.6940
	Standard 1	Cd (214.439 nm)	0.0050	N/A	334.0306
	Standard 1	Co (230.786 nm)		N/A	2.0446
	Standard 1	Cr (267.716 nm)		N/A	31.4503
	Standard 1	Cu (327.395 nm)	0.0100	N/A	445.8129
	Standard 1	Fe (234.350 nm)		N/A	114.3443
	Standard 1	K (766.491 nm)		N/A	279.7640
	Standard 1	Mg (279.078 nm)		N/A	3.8110
	Standard 1	Mn (257.610 nm)	0.0100	N/A	3711.3802
	Standard 1	Mo (202.032 nm)	0.0250	N/A	247.6391
	Standard 1	Na (588.995 nm)		N/A	-13230.7052
	Standard 1	Ni (230.299 nm)		N/A	9.4609
	Standard 1	Pb (220.353 nm)	0.0050	N/A	25.8652
	Standard 1	Sb (217.582 nm)	0.0600	N/A	145.4144
	Standard 1	Se (196.026 nm)		N/A	1.2870
	Standard 1	Sn (189.925 nm)		N/A	3.6421
	Standard 1	Sr (216.596 nm)		N/A	6.2735

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Standard 1	Ti (336.122 nm)		N/A	58.6324
	Standard 1	Tl (190.794 nm)	0.0100	N/A	8.8227
	Standard 1	V (292.401 nm)		N/A	15.3179
	Standard 1	Y (360.074 nm)	1.00	0.29	537486.73
	Standard 1	Y_R (360.074 nm)	1.00	0.29	538392.78
	Standard 1	Zn (213.857 nm)		N/A	16.2239
8/22/2024 14:50:59	Standard 2	Ag (328.068 nm)	0.0100	N/A	693.5139
	Standard 2	Al (237.312 nm)	0.2000	N/A	545.5134
	Standard 2	As (188.980 nm)	0.0200	N/A	31.8723
	Standard 2	B (249.772 nm)	0.1000	N/A	4188.6765
	Standard 2	Ba (230.424 nm)	0.2000	N/A	12622.3436
	Standard 2	Be (313.107 nm)	0.0050	N/A	6230.2616
	Standard 2	Ca (317.933 nm)	0.5000	N/A	26900.0251
	Standard 2	Cd (214.439 nm)	0.0100	N/A	668.7357
	Standard 2	Co (230.786 nm)	0.0500	N/A	1082.3896
	Standard 2	Cr (267.716 nm)	0.0100	N/A	608.4385
	Standard 2	Cu (327.395 nm)	0.0250	N/A	1175.1375
	Standard 2	Fe (234.350 nm)	0.1000	N/A	2466.7599
	Standard 2	K (766.491 nm)	0.5000	N/A	859.2236
	Standard 2	Mg (279.078 nm)	0.5000	N/A	2196.8270
	Standard 2	Mn (257.610 nm)	0.0150	N/A	5575.1630
	Standard 2	Mo (202.032 nm)	0.0500	N/A	529.3179
	Standard 2	Na (588.995 nm)	0.5000	N/A	-4352.9556
	Standard 2	Ni (230.299 nm)	0.0400	N/A	545.7904
	Standard 2	Pb (220.353 nm)	0.0100	N/A	56.3200
	Standard 2	Sb (217.582 nm)	0.1000	N/A	240.5831
	Standard 2	Se (196.026 nm)	0.0100	N/A	8.9298
	Standard 2	Sn (189.925 nm)	0.1000	N/A	276.1793
	Standard 2	Sr (216.596 nm)	0.0500	N/A	1005.1695
	Standard 2	Ti (336.122 nm)	0.0500	N/A	7817.2514
	Standard 2	Tl (190.794 nm)	0.0200	N/A	17.8526
	Standard 2	V (292.401 nm)	0.0500	N/A	1916.6729
	Standard 2	Y (360.074 nm)	1.00	0.08	539722.03
	Standard 2	Y_R (360.074 nm)	1.00	0.09	540619.62
	Standard 2	Zn (213.857 nm)	0.0200	N/A	1529.2707
8/22/2024 14:54:04	Standard 3	Ag (328.068 nm)	0.0200	N/A	1381.9123
	Standard 3	Al (237.312 nm)	0.4000	N/A	1098.5074
	Standard 3	As (188.980 nm)	0.0400	N/A	68.1818
	Standard 3	B (249.772 nm)	0.2000	N/A	8298.1148
	Standard 3	Ba (230.424 nm)	0.4000	N/A	25309.1470
	Standard 3	Be (313.107 nm)	0.0100	N/A	12623.4595
	Standard 3	Ca (317.933 nm)	1.0000	N/A	42692.2562
	Standard 3	Cd (214.439 nm)	0.0200	N/A	1333.0239
	Standard 3	Co (230.786 nm)	0.1000	N/A	2164.8997
	Standard 3	Cr (267.716 nm)	0.0200	N/A	1184.4224
	Standard 3	Cu (327.395 nm)	0.0500	N/A	2396.7015
	Standard 3	Fe (234.350 nm)	0.2000	N/A	4852.9977
	Standard 3	K (766.491 nm)	1.0000	N/A	1482.5315
	Standard 3	Mg (279.078 nm)	1.0000	N/A	4393.1245
	Standard 3	Mn (257.610 nm)	0.0300	N/A	11099.9203
	Standard 3	Mo (202.032 nm)	0.1000	N/A	1057.5559
	Standard 3	Na (588.995 nm)	1.0000	N/A	4178.7284
	Standard 3	Ni (230.299 nm)	0.0800	N/A	1075.5775
	Standard 3	Pb (220.353 nm)	0.0200	N/A	112.1704
	Standard 3	Sb (217.582 nm)	0.2000	N/A	484.5657
	Standard 3	Se (196.026 nm)	0.0200	N/A	19.6415
	Standard 3	Sn (189.925 nm)	0.2000	N/A	554.1107

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Standard 3	Sr (216.596 nm)	0.1000	N/A	2009.7464
	Standard 3	Ti (336.122 nm)	0.1000	N/A	15644.5815
	Standard 3	Tl (190.794 nm)	0.0400	N/A	35.9999
	Standard 3	V (292.401 nm)	0.1000	N/A	3824.0607
	Standard 3	Y (360.074 nm)	1.00	0.22	539334.72
	Standard 3	Y_R (360.074 nm)	1.00	0.22	540309.69
	Standard 3	Zn (213.857 nm)	0.0400	N/A	2741.9411
8/22/2024 14:57:09	Standard 4	Ag (328.068 nm)	0.1000	N/A	6832.2536
	Standard 4	Al (237.312 nm)	2.0000	N/A	5477.8989
	Standard 4	As (188.980 nm)	0.2000	N/A	354.9495
	Standard 4	B (249.772 nm)	1.0000	N/A	41573.2929
	Standard 4	Ba (230.424 nm)	2.0000	N/A	125045.7878
	Standard 4	Be (313.107 nm)	0.0500	N/A	63744.5831
	Standard 4	Ca (317.933 nm)	5.0000	N/A	198006.2284
	Standard 4	Cd (214.439 nm)	0.1000	N/A	6572.8034
	Standard 4	Co (230.786 nm)	0.5000	N/A	10732.7287
	Standard 4	Cr (267.716 nm)	0.1000	N/A	5747.3345
	Standard 4	Cu (327.395 nm)	0.2500	N/A	12160.7286
	Standard 4	Fe (234.350 nm)	1.0000	N/A	23757.0147
	Standard 4	K (766.491 nm)	5.0000	N/A	6200.6728
	Standard 4	Mg (279.078 nm)	5.0000	N/A	21845.6547
	Standard 4	Mn (257.610 nm)	0.1500	N/A	54442.6500
	Standard 4	Mo (202.032 nm)	0.5000	N/A	5413.8683
	Standard 4	Na (588.995 nm)	5.0000	N/A	73396.9576
	Standard 4	Ni (230.299 nm)	0.4000	N/A	5315.4377
	Standard 4	Pb (220.353 nm)	0.1000	N/A	544.9275
	Standard 4	Sb (217.582 nm)	1.0000	N/A	2433.6418
	Standard 4	Se (196.026 nm)	0.1000	N/A	92.4872
	Standard 4	Sn (189.925 nm)	1.0000	N/A	2732.8631
	Standard 4	Sr (216.596 nm)	0.5000	N/A	9937.4895
	Standard 4	Ti (336.122 nm)	0.5000	N/A	77853.6212
	Standard 4	Tl (190.794 nm)	0.2000	N/A	192.9980
	Standard 4	V (292.401 nm)	0.5000	N/A	19167.7663
	Standard 4	Y (360.074 nm)	0.99	0.47	534174.75
	Standard 4	Y_R (360.074 nm)	0.99	0.47	535073.88
	Standard 4	Zn (213.857 nm)	0.2000	N/A	13648.7181
8/22/2024 15:00:14	Standard 5	Ag (328.068 nm)	0.2000	N/A	13751.2613
	Standard 5	Al (237.312 nm)	4.0000	N/A	11015.1289
	Standard 5	As (188.980 nm)	0.4000	N/A	721.9005
	Standard 5	B (249.772 nm)	2.0000	N/A	84307.5624
	Standard 5	Ba (230.424 nm)	4.0000	N/A	250161.8393
	Standard 5	Be (313.107 nm)	0.1000	N/A	128731.2636
	Standard 5	Ca (317.933 nm)	10.0000	N/A	393466.2658
	Standard 5	Cd (214.439 nm)	0.2000	N/A	13149.2614
	Standard 5	Co (230.786 nm)	1.0000	N/A	21407.5419
	Standard 5	Cr (267.716 nm)	0.2000	N/A	11513.9150
	Standard 5	Cu (327.395 nm)	0.5000	N/A	24578.3292
	Standard 5	Fe (234.350 nm)	2.0000	N/A	47278.1606
	Standard 5	K (766.491 nm)	10.0000	N/A	12362.3227
	Standard 5	Mg (279.078 nm)	10.0000	N/A	43580.1707
	Standard 5	Mn (257.610 nm)	0.3000	N/A	108517.6452
	Standard 5	Mo (202.032 nm)	1.0000	N/A	11001.7405
	Standard 5	Na (588.995 nm)	10.0000	N/A	162187.9526
	Standard 5	Ni (230.299 nm)	0.8000	N/A	10596.1034
	Standard 5	Pb (220.353 nm)	0.2000	N/A	1082.4062
	Standard 5	Sb (217.582 nm)	2.0000	N/A	4901.0710
	Standard 5	Se (196.026 nm)	0.2000	N/A	189.1154

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Standard 5	Sn (189.925 nm)	2.0000	N/A	5437.9420
	Standard 5	Sr (216.596 nm)	1.0000	N/A	19929.1197
	Standard 5	Ti (336.122 nm)	1.0000	N/A	158271.5004
	Standard 5	Tl (190.794 nm)	0.4000	N/A	387.5444
	Standard 5	V (292.401 nm)	1.0000	N/A	38405.2732
	Standard 5	Y (360.074 nm)	0.98	0.19	529687.65
	Standard 5	Y_R (360.074 nm)	0.98	0.19	530578.23
	Standard 5	Zn (213.857 nm)	0.4000	N/A	26950.2974
8/22/2024 15:03:19	Standard 6	Ag (328.068 nm)	1.0000	N/A	68511.9202
	Standard 6	Al (237.312 nm)	20.0000	N/A	54665.0353
	Standard 6	As (188.980 nm)	2.0000	N/A	3621.3316
	Standard 6	B (249.772 nm)	10.0000	N/A	427748.1588
	Standard 6	Ba (230.424 nm)	20.0000	N/A	1190784.9600
	Standard 6	Be (313.107 nm)	0.5000	N/A	630105.1418
	Standard 6	Ca (317.933 nm)	50.0000	N/A	1891356.1045
	Standard 6	Cd (214.439 nm)	1.0000	N/A	63695.7148
	Standard 6	Co (230.786 nm)	5.0000	N/A	103192.1611
	Standard 6	Cr (267.716 nm)	1.0000	N/A	56079.7546
	Standard 6	Cu (327.395 nm)	2.5000	N/A	124341.7041
	Standard 6	Fe (234.350 nm)	10.0000	N/A	229911.8454
	Standard 6	K (766.491 nm)	50.0000	N/A	63370.5314
	Standard 6	Mg (279.078 nm)	50.0000	N/A	216039.1611
	Standard 6	Mn (257.610 nm)	1.5000	N/A	527044.1180
	Standard 6	Mo (202.032 nm)	5.0000	N/A	54574.0825
	Standard 6	Na (588.995 nm)	50.0000	N/A	860563.6948
	Standard 6	Ni (230.299 nm)	4.0000	N/A	50879.9620
	Standard 6	Pb (220.353 nm)	1.0000	N/A	5208.1397
	Standard 6	Sb (217.582 nm)	10.0000	N/A	24412.3821
	Standard 6	Se (196.026 nm)	1.0000	N/A	924.1024
	Standard 6	Sn (189.925 nm)	10.0000	N/A	26508.8911
	Standard 6	Sr (216.596 nm)	5.0000	N/A	96386.4340
	Standard 6	Ti (336.122 nm)	5.0000	N/A	789481.4386
	Standard 6	Tl (190.794 nm)	2.0000	N/A	1869.6180
	Standard 6	V (292.401 nm)	5.0000	N/A	191442.5064
	Standard 6	Y (360.074 nm)	0.95	0.24	508958.08
	Standard 6	Y_R (360.074 nm)	0.95	0.24	509851.73
	Standard 6	Zn (213.857 nm)	2.0000	N/A	132953.5074
8/22/2024 15:06:54	Initial Calibration Verification	Ag (328.068 nm)	0.4801	0.22	32771.2297
	Initial Calibration Verification	Al (237.312 nm)	9.7846	0.14	26950.4440
	Initial Calibration Verification	As (188.980 nm)	0.9819	0.21	1776.2682
	Initial Calibration Verification	B (249.772 nm)	2.5792	0.15	107086.8708
	Initial Calibration Verification	Ba (230.424 nm)	9.5581	0.40	594460.1161
	Initial Calibration Verification	Be (313.107 nm)	0.2465	0.17	306910.8512
	Initial Calibration Verification	Ca (317.933 nm)	24.5236	0.24	968062.1479
	Initial Calibration Verification	Cd (214.439 nm)	0.4913	0.21	32079.0540
	Initial Calibration Verification	Co (230.786 nm)	2.4408	0.28	51716.6254
	Initial Calibration Verification	Cr (267.716 nm)	0.5047	0.21	28944.4134
	Initial Calibration Verification	Cu (327.395 nm)	1.2121	0.19	59691.5911
	Initial Calibration Verification	Fe (234.350 nm)	4.8378	0.31	114254.2425
	Initial Calibration Verification	K (766.491 nm)	24.2150	0.16	30556.2259
	Initial Calibration Verification	Mg (279.078 nm)	24.9547	0.19	109017.7672
	Initial Calibration Verification	Mn (257.610 nm)	0.7209	0.16	261139.5050
	Initial Calibration Verification	Mo (202.032 nm)	2.5297	0.30	27405.1510
	Initial Calibration Verification	Na (588.995 nm)	24.8475	0.35	419370.4435
	Initial Calibration Verification	Ni (230.299 nm)	1.9661	0.19	25754.9839
	Initial Calibration Verification	Pb (220.353 nm)	0.4933	0.19	2641.7745
	Initial Calibration Verification	Sb (217.582 nm)	4.8834	0.12	11924.2280

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Initial Calibration Verification	Se (196.026 nm)	0.4948	0.78	457.6628
	Initial Calibration Verification	Sn (189.925 nm)	4.9304	0.14	13450.9229
	Initial Calibration Verification	Sr (216.596 nm)	2.4297	0.22	48000.5841
	Initial Calibration Verification	Ti (336.122 nm)	2.5355	0.16	396365.5842
	Initial Calibration Verification	Tl (190.794 nm)	0.9974	0.50	941.1244
	Initial Calibration Verification	V (292.401 nm)	2.4963	0.13	95639.7424
	Initial Calibration Verification	Y (360.074 nm)	0.97	0.29	519707.28
	Initial Calibration Verification	Y_R (360.074 nm)	0.97	0.29	520610.24
	Initial Calibration Verification	Zn (213.857 nm)	0.9682	0.26	65808.7521
8/22/2024 15:09:58	Initial Calibration Blank	Ag (328.068 nm)	0.0000 u	> 100.00	25.3132
	Initial Calibration Blank	Al (237.312 nm)	0.0005	12.06	-11.6378
	Initial Calibration Blank	As (188.980 nm)	0.0003 u	> 100.00	-2.6485
	Initial Calibration Blank	B (249.772 nm)	0.0042	7.75	250.5726
	Initial Calibration Blank	Ba (230.424 nm)	0.0002	32.43	19.3506
	Initial Calibration Blank	Be (313.107 nm)	0.0000	68.00	-10.1486
	Initial Calibration Blank	Ca (317.933 nm)	0.0006	25.03	2855.9794
	Initial Calibration Blank	Cd (214.439 nm)	0.0000	96.70	11.9222
	Initial Calibration Blank	Co (230.786 nm)	0.0000 u	> 100.00	3.3462
	Initial Calibration Blank	Cr (267.716 nm)	0.0000 u	> 100.00	23.2863
	Initial Calibration Blank	Cu (327.395 nm)	-0.0001 u	30.68	3.2704
	Initial Calibration Blank	Fe (234.350 nm)	0.0054	18.11	177.7511
	Initial Calibration Blank	K (766.491 nm)	0.0463	36.06	352.7546
	Initial Calibration Blank	Mg (279.078 nm)	0.0023	7.25	3.1480
	Initial Calibration Blank	Mn (257.610 nm)	0.0000	24.46	15.4784
	Initial Calibration Blank	Mo (202.032 nm)	0.0056	9.06	65.3616
	Initial Calibration Blank	Na (588.995 nm)	0.0281	22.13	-12838.5993
	Initial Calibration Blank	Ni (230.299 nm)	0.0003 u	> 100.00	5.9596
	Initial Calibration Blank	Pb (220.353 nm)	-0.0001 u	> 100.00	1.2798
	Initial Calibration Blank	Sb (217.582 nm)	0.0106	4.44	27.5459
	Initial Calibration Blank	Se (196.026 nm)	0.0023	75.99	2.5977
	Initial Calibration Blank	Sn (189.925 nm)	0.0038	25.81	12.5574
	Initial Calibration Blank	Sr (216.596 nm)	-0.0001 u	> 100.00	5.2513
	Initial Calibration Blank	Ti (336.122 nm)	0.0067	26.74	1115.4844
	Initial Calibration Blank	Tl (190.794 nm)	0.0016	62.45	-0.3781
	Initial Calibration Blank	V (292.401 nm)	0.0001 u	> 100.00	15.4550
	Initial Calibration Blank	Y (360.074 nm)	1.01	0.21	541069.32
	Initial Calibration Blank	Y_R (360.074 nm)	1.01	0.21	541992.65
	Initial Calibration Blank	Zn (213.857 nm)	0.0000 u	> 100.00	15.1452
8/22/2024 15:13:20	Mixed SIC/ICS	Ag (328.068 nm)	-0.0002 u	0.91	13.9965
	Mixed SIC/ICS	Al (237.312 nm)	493.7435 o	0.30	1360605.5358
	Mixed SIC/ICS	As (188.980 nm)	0.0025	75.20	1.3743
	Mixed SIC/ICS	B (249.772 nm)	0.1200	0.24	5052.0865
	Mixed SIC/ICS	Ba (230.424 nm)	0.0025	8.47	163.5170
	Mixed SIC/ICS	Be (313.107 nm)	0.0006	1.19	717.7825
	Mixed SIC/ICS	Ca (317.933 nm)	418.9014 o	0.32	16490505.2135
	Mixed SIC/ICS	Cd (214.439 nm)	0.0030	4.19	206.9077
	Mixed SIC/ICS	Co (230.786 nm)	0.0009	18.50	23.4353
	Mixed SIC/ICS	Cr (267.716 nm)	0.0009	12.75	74.2853
	Mixed SIC/ICS	Cu (327.395 nm)	0.0002	> 100.00	21.8248
	Mixed SIC/ICS	Fe (234.350 nm)	171.1496 o	0.28	4040302.9138
	Mixed SIC/ICS	K (766.491 nm)	0.1579	17.74	492.2830
	Mixed SIC/ICS	Mg (279.078 nm)	505.3661 o	0.36	2207893.8269
	Mixed SIC/ICS	Mn (257.610 nm)	0.0018	0.29	663.9883
	Mixed SIC/ICS	Mo (202.032 nm)	0.0012	73.68	18.0683
	Mixed SIC/ICS	Na (588.995 nm)	-0.0193 u	41.93	-13663.6518
	Mixed SIC/ICS	Ni (230.299 nm)	0.0022	12.57	30.8265
	Mixed SIC/ICS	Pb (220.353 nm)	-0.0006 u	> 100.00	-1.8243

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Mixed SIC/ICS	Sb (217.582 nm)	0.0007	94.70	3.3335
	Mixed SIC/ICS	Se (196.026 nm)	-0.0090 u	45.91	-7.8512
	Mixed SIC/ICS	Sn (189.925 nm)	0.0031	50.57	10.5861
	Mixed SIC/ICS	Sr (216.596 nm)	0.0195	1.36	391.4423
	Mixed SIC/ICS	Ti (336.122 nm)	0.0011	46.01	238.5598
	Mixed SIC/ICS	Tl (190.794 nm)	0.0032	22.67	1.1621
	Mixed SIC/ICS	V (292.401 nm)	0.0003	35.43	23.4069
	Mixed SIC/ICS	Y (360.074 nm)	0.85	0.27	456971.58
	Mixed SIC/ICS	Y_R (360.074 nm)	0.85	0.27	457841.08
	Mixed SIC/ICS	Zn (213.857 nm)	0.0261 K	0.05	1788.7256 K
8/22/2024 15:16:25	HLCCVA	Ag (328.068 nm)	2.0295 o	0.12	138452.8825
	HLCCVA	Al (237.312 nm)	495.2875 o	0.07	1364860.1682
	HLCCVA	As (188.980 nm)	4.1583 o	0.74	7532.3193
	HLCCVA	B (249.772 nm)	51.7384 o	0.55	2146698.5616
	HLCCVA	Ba (230.424 nm)	37.1787 o	0.88	2312266.0275
	HLCCVA	Be (313.107 nm)	0.9868 o	0.82	1228606.6166
	HLCCVA	Ca (317.933 nm)	225.4333 o	0.95	8875730.5100
	HLCCVA	Cd (214.439 nm)	1.8866 o	1.46	123155.6636
	HLCCVA	Co (230.786 nm)	9.3401 o	0.88	197894.7749
	HLCCVA	Cr (267.716 nm)	9.6691 o	0.80	554087.5808
	HLCCVA	Cu (327.395 nm)	20.9183 o	0.23	1030003.0278
	HLCCVA	Fe (234.350 nm)	90.4931 o	0.92	2136281.7518
	HLCCVA	K (766.491 nm)	115.9212 Qo	0.78	145160.4740 Q
	HLCCVA	Mg (279.078 nm)	508.5127 o	1.24	2221640.7987
	HLCCVA	Mn (257.610 nm)	9.2385 o	0.75	3346692.9739
	HLCCVA	Mo (202.032 nm)	9.9274 o	0.85	107533.9095
	HLCCVA	Na (588.995 nm)	251.8106 o	0.87	4371737.9973
	HLCCVA	Ni (230.299 nm)	7.3570 o	0.94	96371.5909
	HLCCVA	Pb (220.353 nm)	9.3047 o	1.13	49801.0348
	HLCCVA	Sb (217.582 nm)	0.0169	0.44	42.9584
	HLCCVA	Se (196.026 nm)	9.5332 o	0.90	8808.7697
	HLCCVA	Sn (189.925 nm)	0.0021	16.02	7.8591
	HLCCVA	Sr (216.596 nm)	9.4874 o	1.05	187414.5668
	HLCCVA	Ti (336.122 nm)	9.9868 o	0.39	1561012.0239
	HLCCVA	Tl (190.794 nm)	3.7040 o	0.90	3499.9965
	HLCCVA	V (292.401 nm)	10.0215 o	0.54	383924.5845
	HLCCVA	Y (360.074 nm)	0.86	0.88	463531.60
	HLCCVA	Y_R (360.074 nm)	0.86	0.88	464452.70
	HLCCVA	Zn (213.857 nm)	9.6502 o	0.75	655791.3608
8/22/2024 15:19:29	HLCCVB	Ag (328.068 nm)	-0.0001 u	> 100.00	19.6060
	HLCCVB	Al (237.312 nm)	0.0216	3.02	46.4585
	HLCCVB	As (188.980 nm)	0.0024	40.13	1.2012
	HLCCVB	B (249.772 nm)	0.0526	6.71	2258.9225
	HLCCVB	Ba (230.424 nm)	0.0008	11.92	59.8418
	HLCCVB	Be (313.107 nm)	0.0000	2.76	-4.5971
	HLCCVB	Ca (317.933 nm)	182.5914 o	0.33	7189501.7470
	HLCCVB	Cd (214.439 nm)	0.0007	2.37	58.0455
	HLCCVB	Co (230.786 nm)	0.0000 u	> 100.00	2.5228
	HLCCVB	Cr (267.716 nm)	0.0012	10.35	90.6038
	HLCCVB	Cu (327.395 nm)	4.0953 o	0.12	201656.5319
	HLCCVB	Fe (234.350 nm)	37.7280 o	0.28	890678.2126
	HLCCVB	K (766.491 nm)	109.1875 o	0.26	136745.3889
	HLCCVB	Mg (279.078 nm)	414.9728 o	0.25	1812973.3005
	HLCCVB	Mn (257.610 nm)	0.0111	0.21	4032.4853
	HLCCVB	Mo (202.032 nm)	0.0083	14.47	94.7348
	HLCCVB	Na (588.995 nm)	152.1269 o	0.43	2635831.1679
	HLCCVB	Ni (230.299 nm)	0.0023	9.05	32.2016

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	HLCCVB	Pb (220.353 nm)	0.0006 u	> 100.00	4.9024
	HLCCVB	Sb (217.582 nm)	0.0002 u	> 100.00	2.1844
	HLCCVB	Se (196.026 nm)	0.0019	85.48	2.1630
	HLCCVB	Sn (189.925 nm)	0.0020	51.32	7.6273
	HLCCVB	Sr (216.596 nm)	0.0067	3.44	139.3818
	HLCCVB	Ti (336.122 nm)	0.0210	11.83	3351.9611
	HLCCVB	Tl (190.794 nm)	2.8413 o	0.48	2684.3788
	HLCCVB	V (292.401 nm)	0.0009	35.72	45.3083
	HLCCVB	Y (360.074 nm)	0.90	0.18	484268.36
	HLCCVB	Y_R (360.074 nm)	0.90	0.18	485246.46
	HLCCVB	Zn (213.857 nm)	0.0086	0.36	597.3975
8/22/2024 15:22:33	Continuing Calibration Verification	Ag (328.068 nm)	0.4757	0.02	32469.9066
	Continuing Calibration Verification	Al (237.312 nm)	9.7732	0.11	26919.0044
	Continuing Calibration Verification	As (188.980 nm)	0.9981	0.10	1805.5336
	Continuing Calibration Verification	B (249.772 nm)	2.6056	0.23	108181.6738
	Continuing Calibration Verification	Ba (230.424 nm)	9.6781	0.86	601920.9608
	Continuing Calibration Verification	Be (313.107 nm)	0.2497	0.20	310908.2072
	Continuing Calibration Verification	Ca (317.933 nm)	24.9914	0.20	986475.6190
	Continuing Calibration Verification	Cd (214.439 nm)	0.5052	0.25	32986.5514
	Continuing Calibration Verification	Co (230.786 nm)	2.4800	0.11	52547.7997
	Continuing Calibration Verification	Cr (267.716 nm)	0.5116	0.21	29340.5566
	Continuing Calibration Verification	Cu (327.395 nm)	1.2050	0.07	59341.2399
	Continuing Calibration Verification	Fe (234.350 nm)	4.9276	0.30	116374.5305
	Continuing Calibration Verification	K (766.491 nm)	24.2490	0.36	30598.6242
	Continuing Calibration Verification	Mg (279.078 nm)	25.5807	0.21	111753.0338
	Continuing Calibration Verification	Mn (257.610 nm)	0.7291	0.21	264125.3750
	Continuing Calibration Verification	Mo (202.032 nm)	2.5622	0.43	27757.8509
	Continuing Calibration Verification	Na (588.995 nm)	24.3443	0.27	410607.8204
	Continuing Calibration Verification	Ni (230.299 nm)	2.0027	0.14	26235.3302
	Continuing Calibration Verification	Pb (220.353 nm)	0.5035	0.38	2696.2795
	Continuing Calibration Verification	Sb (217.582 nm)	4.9042	0.16	11975.1933
	Continuing Calibration Verification	Se (196.026 nm)	0.4976	1.18	460.2175
	Continuing Calibration Verification	Sn (189.925 nm)	5.0385	0.18	13745.7957
	Continuing Calibration Verification	Sr (216.596 nm)	2.4795	0.40	48984.3055
	Continuing Calibration Verification	Ti (336.122 nm)	2.5346	0.17	396221.4817
	Continuing Calibration Verification	Tl (190.794 nm)	1.0093	0.13	952.3367
	Continuing Calibration Verification	V (292.401 nm)	2.5128	0.18	96273.9415
	Continuing Calibration Verification	Y (360.074 nm)	0.99	0.20	531997.39
	Continuing Calibration Verification	Y_R (360.074 nm)	0.99	0.20	532943.45
	Continuing Calibration Verification	Zn (213.857 nm)	0.9752	0.11	66283.9831
8/22/2024 15:25:37	Continuing Calibration Blank	Ag (328.068 nm)	-0.0001 u	46.64	20.0476
	Continuing Calibration Blank	Al (237.312 nm)	0.0010 u	> 100.00	-10.3798
	Continuing Calibration Blank	As (188.980 nm)	0.0030	44.85	2.3755
	Continuing Calibration Blank	B (249.772 nm)	0.0091	4.32	450.7301
	Continuing Calibration Blank	Ba (230.424 nm)	0.0002	48.01	18.5639
	Continuing Calibration Blank	Be (313.107 nm)	0.0000	9.04	-6.4355
	Continuing Calibration Blank	Ca (317.933 nm)	0.0016	5.17	2894.5980
	Continuing Calibration Blank	Cd (214.439 nm)	0.0000 u	> 100.00	10.8293
	Continuing Calibration Blank	Co (230.786 nm)	0.0000 u	> 100.00	4.1201
	Continuing Calibration Blank	Cr (267.716 nm)	0.0000 u	> 100.00	25.3748
	Continuing Calibration Blank	Cu (327.395 nm)	-0.0001 u	> 100.00	5.4146
	Continuing Calibration Blank	Fe (234.350 nm)	0.0068	18.90	210.9486
	Continuing Calibration Blank	K (766.491 nm)	0.2118	15.01	559.6919
	Continuing Calibration Blank	Mg (279.078 nm)	0.0025	5.73	4.0156
	Continuing Calibration Blank	Mn (257.610 nm)	0.0000	47.02	14.6065
	Continuing Calibration Blank	Mo (202.032 nm)	0.0053	14.18	61.7828
	Continuing Calibration Blank	Na (588.995 nm)	0.0495	6.66	-12466.2953

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank	Ni (230.299 nm)	0.0004	> 100.00	6.5430
	Continuing Calibration Blank	Pb (220.353 nm)	-0.0005 u	> 100.00	-0.8973
	Continuing Calibration Blank	Sb (217.582 nm)	0.0097	20.08	25.3983
	Continuing Calibration Blank	Se (196.026 nm)	0.0010 u	> 100.00	1.3291
	Continuing Calibration Blank	Sn (189.925 nm)	0.0025	55.81	9.0019
	Continuing Calibration Blank	Sr (216.596 nm)	0.0000 u	> 100.00	5.6571
	Continuing Calibration Blank	Ti (336.122 nm)	0.0060	26.24	996.0820
	Continuing Calibration Blank	Tl (190.794 nm)	0.0023	51.28	0.3444
	Continuing Calibration Blank	V (292.401 nm)	0.0001 u	> 100.00	13.2647
	Continuing Calibration Blank	Y (360.074 nm)	1.03	0.29	552888.25
	Continuing Calibration Blank	Y_R (360.074 nm)	1.03	0.29	553809.56
	Continuing Calibration Blank	Zn (213.857 nm)	0.0000 u	> 100.00	15.2770
8/22/2024 15:28:41	PBW-443447	Ag (328.068 nm)	-0.0002 u	55.79	15.7986
	PBW-443447	Al (237.312 nm)	0.0022	47.36	-7.0384
	PBW-443447	As (188.980 nm)	0.0007 u	> 100.00	-1.8152
	PBW-443447	B (249.772 nm)	0.0080	0.91	406.0279
	PBW-443447	Ba (230.424 nm)	0.0000 u	> 100.00	10.8677
	PBW-443447	Be (313.107 nm)	0.0000 u	> 100.00	-16.1767
	PBW-443447	Ca (317.933 nm)	0.0066	4.65	3090.2810
	PBW-443447	Cd (214.439 nm)	0.0001	70.75	13.6551
	PBW-443447	Co (230.786 nm)	-0.0001 u	> 100.00	1.5215
	PBW-443447	Cr (267.716 nm)	0.0002	20.83	33.8875
	PBW-443447	Cu (327.395 nm)	-0.0001 u	46.79	2.7816
	PBW-443447	Fe (234.350 nm)	0.0064	12.67	201.1812
	PBW-443447	K (766.491 nm)	0.1778	0.63	517.1502
	PBW-443447	Mg (279.078 nm)	0.0024	4.53	3.3090
	PBW-443447	Mn (257.610 nm)	0.0001	41.23	36.1447
	PBW-443447	Mo (202.032 nm)	0.0014	28.75	20.2403
	PBW-443447	Na (588.995 nm)	0.0839	9.17	-11867.5226
	PBW-443447	Ni (230.299 nm)	0.0003 u	> 100.00	5.3742
	PBW-443447	Pb (220.353 nm)	0.0002 u	> 100.00	2.4727
	PBW-443447	Sb (217.582 nm)	0.0182	6.83	46.0919
	PBW-443447	Se (196.026 nm)	0.0019 u	> 100.00	2.1567
	PBW-443447	Sn (189.925 nm)	0.0025	13.21	8.8786
	PBW-443447	Sr (216.596 nm)	0.0001 u	> 100.00	7.4932
	PBW-443447	Ti (336.122 nm)	0.0027	33.33	485.1477
	PBW-443447	Tl (190.794 nm)	0.0001 u	> 100.00	-1.7315
	PBW-443447	V (292.401 nm)	0.0001 u	> 100.00	15.8322
	PBW-443447	Y (360.074 nm)	1.04	0.30	562150.72
	PBW-443447	Y_R (360.074 nm)	1.04	0.31	563100.95
	PBW-443447	Zn (213.857 nm)	0.0020	2.21	146.4399
8/22/2024 15:31:45	LCSW-443447	Ag (328.068 nm)	0.0442	0.17	3044.9144
	LCSW-443447	Al (237.312 nm)	1.8615	0.45	5116.6570
	LCSW-443447	As (188.980 nm)	0.0373	4.57	64.4749
	LCSW-443447	B (249.772 nm)	0.9475	0.29	39388.1073
	LCSW-443447	Ba (230.424 nm)	1.9058	0.27	118539.6146
	LCSW-443447	Be (313.107 nm)	0.0474	0.29	58939.5531
	LCSW-443447	Ca (317.933 nm)	1.9208	0.37	78432.4009
	LCSW-443447	Cd (214.439 nm)	0.0489	0.37	3199.4580
	LCSW-443447	Co (230.786 nm)	0.4841	0.37	10259.3796
	LCSW-443447	Cr (267.716 nm)	0.1963	0.30	11272.9325
	LCSW-443447	Cu (327.395 nm)	0.2382	0.16	11739.1906
	LCSW-443447	Fe (234.350 nm)	0.9748	0.44	23062.9259
	LCSW-443447	K (766.491 nm)	18.0754	0.11	22883.5918
	LCSW-443447	Mg (279.078 nm)	1.8863	0.32	8234.0412
	LCSW-443447	Mn (257.610 nm)	0.4675	0.29	169352.6585
	LCSW-443447	Mo (202.032 nm)	0.4913	0.95	5325.9780

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	LCSW-443447	Na (588.995 nm)	18.6431	0.14	311325.1531
	LCSW-443447	Ni (230.299 nm)	0.4810	0.49	6302.6226
	LCSW-443447	Pb (220.353 nm)	0.4981	0.35	2667.7427
	LCSW-443447	Sb (217.582 nm)	0.4809	0.47	1175.7005
	LCSW-443447	Se (196.026 nm)	0.8850	0.83	818.1396
	LCSW-443447	Sn (189.925 nm)	4.8507	0.27	13233.4047
	LCSW-443447	Sr (216.596 nm)	1.9506	0.36	38536.7335
	LCSW-443447	Ti (336.122 nm)	0.4930	0.32	77125.9497
	LCSW-443447	Tl (190.794 nm)	1.9166	0.49	1810.1439
	LCSW-443447	V (292.401 nm)	0.4817	0.28	18464.5556
	LCSW-443447	Y (360.074 nm)	1.02	0.29	548284.05
	LCSW-443447	Y_R (360.074 nm)	1.02	0.29	549291.21
	LCSW-443447	Zn (213.857 nm)	0.4594	0.30	31229.5537
8/22/2024 15:34:49	R2407825-011 3X	Ag (328.068 nm)	-0.0001 u	11.99	18.0156
	R2407825-011 3X	Al (237.312 nm)	0.0251	5.51	55.9039
	R2407825-011 3X	As (188.980 nm)	0.0025	30.29	1.4430
	R2407825-011 3X	B (249.772 nm)	0.4178	0.35	17410.3752
	R2407825-011 3X	Ba (230.424 nm)	0.0028	1.74	180.5071
	R2407825-011 3X	Be (313.107 nm)	0.0000 u	> 100.00	-19.4515
	R2407825-011 3X	Ca (317.933 nm)	106.5617 o	0.18	4197025.7157
	R2407825-011 3X	Cd (214.439 nm)	0.0000	> 100.00	11.1602
	R2407825-011 3X	Co (230.786 nm)	-0.0001 u	> 100.00	1.6346
	R2407825-011 3X	Cr (267.716 nm)	0.0004	35.14	48.7982
	R2407825-011 3X	Cu (327.395 nm)	-0.0001 u	91.94	4.8246
	R2407825-011 3X	Fe (234.350 nm)	0.8154	0.16	19299.4931
	R2407825-011 3X	K (766.491 nm)	5.2249	1.01	6824.4256
	R2407825-011 3X	Mg (279.078 nm)	183.2142 o	0.17	800439.9620
	R2407825-011 3X	Mn (257.610 nm)	0.0364	0.41	13186.2441
	R2407825-011 3X	Mo (202.032 nm)	0.0041	9.49	49.1128
	R2407825-011 3X	Na (588.995 nm)	102.7209 o	0.76	1775467.8847
	R2407825-011 3X	Ni (230.299 nm)	0.0110	3.78	145.8881
	R2407825-011 3X	Pb (220.353 nm)	0.0005	> 100.00	4.0847
	R2407825-011 3X	Sb (217.582 nm)	0.0046	33.40	12.8216
	R2407825-011 3X	Se (196.026 nm)	0.0014	45.61	1.7536
	R2407825-011 3X	Sn (189.925 nm)	0.0028	25.81	9.6083
	R2407825-011 3X	Sr (216.596 nm)	3.1243	0.06	61722.3145
	R2407825-011 3X	Ti (336.122 nm)	0.0022	26.27	410.5936
	R2407825-011 3X	Tl (190.794 nm)	0.0022	15.70	0.1855
	R2407825-011 3X	V (292.401 nm)	0.0000 u	> 100.00	10.7479
	R2407825-011 3X	Y (360.074 nm)	0.95	0.11	513037.33
	R2407825-011 3X	Y_R (360.074 nm)	0.95	0.10	513965.84
	R2407825-011 3X	Zn (213.857 nm)	0.0034	0.65	245.9552
8/22/2024 15:37:53	R2407825-002 10X	Ag (328.068 nm)	0.0000 u	> 100.00	25.3286
	R2407825-002 10X	Al (237.312 nm)	0.0119	9.82	19.6960
	R2407825-002 10X	As (188.980 nm)	0.0003 u	> 100.00	-2.5069
	R2407825-002 10X	B (249.772 nm)	0.1368	0.22	5751.4306
	R2407825-002 10X	Ba (230.424 nm)	0.0011	9.29	75.5894
	R2407825-002 10X	Be (313.107 nm)	0.0000 u	> 100.00	-16.1076
	R2407825-002 10X	Ca (317.933 nm)	28.8050	0.27	1136575.9246
	R2407825-002 10X	Cd (214.439 nm)	0.0000 u	> 100.00	10.1080
	R2407825-002 10X	Co (230.786 nm)	0.0000 u	> 100.00	3.4936
	R2407825-002 10X	Cr (267.716 nm)	0.0002	85.60	33.8809
	R2407825-002 10X	Cu (327.395 nm)	-0.0001 u	89.60	7.0756
	R2407825-002 10X	Fe (234.350 nm)	0.2848	0.36	6775.1717
	R2407825-002 10X	K (766.491 nm)	1.4868	1.66	2153.0375
	R2407825-002 10X	Mg (279.078 nm)	20.3585	0.19	88937.4840
	R2407825-002 10X	Mn (257.610 nm)	0.0130	0.24	4720.0756

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-002 10X	Mo (202.032 nm)	0.0017	19.72	23.3578
	R2407825-002 10X	Na (588.995 nm)	19.8733	0.19	332748.1781
	R2407825-002 10X	Ni (230.299 nm)	0.0030	3.58	41.1091
	R2407825-002 10X	Pb (220.353 nm)	-0.0003 u	30.52	-0.1046
	R2407825-002 10X	Sb (217.582 nm)	0.0013	> 100.00	4.9640
	R2407825-002 10X	Se (196.026 nm)	0.0005 u	> 100.00	0.8715
	R2407825-002 10X	Sn (189.925 nm)	0.0002 u	> 100.00	2.6824
	R2407825-002 10X	Sr (216.596 nm)	0.8888	0.20	17563.9554
	R2407825-002 10X	Ti (336.122 nm)	0.0010	36.06	219.4835
	R2407825-002 10X	Tl (190.794 nm)	0.0008 u	> 100.00	-1.0880
	R2407825-002 10X	V (292.401 nm)	0.0000 u	> 100.00	11.1636
	R2407825-002 10X	Y (360.074 nm)	1.01	0.26	543811.96
	R2407825-002 10X	Y_R (360.074 nm)	1.01	0.26	544750.25
	R2407825-002 10X	Zn (213.857 nm)	0.0007	8.05	57.7973
8/22/2024 15:40:57	R2407825-004 10X	Ag (328.068 nm)	-0.0002 u	35.68	15.6815
	R2407825-004 10X	Al (237.312 nm)	0.0126	12.51	21.4581
	R2407825-004 10X	As (188.980 nm)	0.0000 u	> 100.00	-3.1696
	R2407825-004 10X	B (249.772 nm)	0.0107	1.59	517.6621
	R2407825-004 10X	Ba (230.424 nm)	0.0044	0.86	284.7894
	R2407825-004 10X	Be (313.107 nm)	0.0000 u	> 100.00	-21.5643
	R2407825-004 10X	Ca (317.933 nm)	43.0339	0.44	1696615.5902
	R2407825-004 10X	Cd (214.439 nm)	0.0000 u	> 100.00	8.4144
	R2407825-004 10X	Co (230.786 nm)	0.0001 u	> 100.00	4.8987
	R2407825-004 10X	Cr (267.716 nm)	0.0003	8.99	38.9957
	R2407825-004 10X	Cu (327.395 nm)	-0.0001 u	11.07	4.0532
	R2407825-004 10X	Fe (234.350 nm)	0.0395	0.21	984.0150
	R2407825-004 10X	K (766.491 nm)	0.2742	2.58	637.6440
	R2407825-004 10X	Mg (279.078 nm)	12.6408	0.56	55219.4815
	R2407825-004 10X	Mn (257.610 nm)	0.3974	0.55	143959.6406
	R2407825-004 10X	Mo (202.032 nm)	0.0005	51.83	10.3870
	R2407825-004 10X	Na (588.995 nm)	6.8427	0.94	105831.4490
	R2407825-004 10X	Ni (230.299 nm)	0.0033	15.21	44.3906
	R2407825-004 10X	Pb (220.353 nm)	0.0000 u	> 100.00	1.6722
	R2407825-004 10X	Sb (217.582 nm)	0.0032	51.53	9.5322
	R2407825-004 10X	Se (196.026 nm)	-0.0009 u	> 100.00	-0.3644
	R2407825-004 10X	Sn (189.925 nm)	0.0009	50.12	4.5585
	R2407825-004 10X	Sr (216.596 nm)	0.1137	0.32	2251.5230
	R2407825-004 10X	Ti (336.122 nm)	0.0008	20.39	183.5080
	R2407825-004 10X	Tl (190.794 nm)	0.0003 u	> 100.00	-1.5285
	R2407825-004 10X	V (292.401 nm)	-0.0001 u	> 100.00	5.3442
	R2407825-004 10X	Y (360.074 nm)	1.01	0.11	545056.11
	R2407825-004 10X	Y_R (360.074 nm)	1.01	0.11	546001.39
	R2407825-004 10X	Zn (213.857 nm)	0.0007	2.40	62.5123
8/22/2024 15:44:01	R2407825-006 10X	Ag (328.068 nm)	-0.0001 u	> 100.00	19.4970
	R2407825-006 10X	Al (237.312 nm)	0.0361	6.44	86.4705
	R2407825-006 10X	As (188.980 nm)	0.0009 u	> 100.00	-1.5857
	R2407825-006 10X	B (249.772 nm)	0.1540	0.03	6463.9617
	R2407825-006 10X	Ba (230.424 nm)	0.0012	5.72	86.4052
	R2407825-006 10X	Be (313.107 nm)	0.0000 u	> 100.00	-17.9298
	R2407825-006 10X	Ca (317.933 nm)	21.5261	0.16	850084.6581
	R2407825-006 10X	Cd (214.439 nm)	0.0000 u	> 100.00	8.7578
	R2407825-006 10X	Co (230.786 nm)	0.0000 u	> 100.00	3.7046
	R2407825-006 10X	Cr (267.716 nm)	0.0002	4.45	38.1805
	R2407825-006 10X	Cu (327.395 nm)	-0.0002 u	28.28	1.2523
	R2407825-006 10X	Fe (234.350 nm)	0.1387	0.18	3325.6140
	R2407825-006 10X	K (766.491 nm)	1.3162	1.01	1939.8196
	R2407825-006 10X	Mg (279.078 nm)	9.5162	0.12	41568.3034

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-006 10X	Mn (257.610 nm)	0.0271	0.26	9827.1290
	R2407825-006 10X	Mo (202.032 nm)	0.0016	12.12	21.6890
	R2407825-006 10X	Na (588.995 nm)	25.8094	0.57	436121.1216
	R2407825-006 10X	Ni (230.299 nm)	0.0025	10.54	34.2753
	R2407825-006 10X	Pb (220.353 nm)	0.0006 u	> 100.00	5.0148
	R2407825-006 10X	Sb (217.582 nm)	0.0015 u	> 100.00	5.2361
	R2407825-006 10X	Se (196.026 nm)	-0.0005 u	> 100.00	-0.0462
	R2407825-006 10X	Sn (189.925 nm)	0.0008	93.97	4.3398
	R2407825-006 10X	Sr (216.596 nm)	0.5663	0.23	11193.3750
	R2407825-006 10X	Ti (336.122 nm)	0.0012	14.04	252.1205
	R2407825-006 10X	Tl (190.794 nm)	0.0016	34.17	-0.3784
	R2407825-006 10X	V (292.401 nm)	-0.0001 u	> 100.00	6.6778
	R2407825-006 10X	Y (360.074 nm)	1.01	0.12	544679.05
	R2407825-006 10X	Y_R (360.074 nm)	1.01	0.12	545597.30
	R2407825-006 10X	Zn (213.857 nm)	0.0005	2.58	47.9568
8/22/2024 15:47:05	R2407825-009 10X	Ag (328.068 nm)	-0.0001 u	82.36	19.8665
	R2407825-009 10X	Al (237.312 nm)	0.0159	14.29	30.6837
	R2407825-009 10X	As (188.980 nm)	-0.0004 u	> 100.00	-3.8571
	R2407825-009 10X	B (249.772 nm)	0.0242	0.62	1080.7204
	R2407825-009 10X	Ba (230.424 nm)	0.0012	4.90	84.2469
	R2407825-009 10X	Be (313.107 nm)	0.0000 u	98.84	-15.0499
	R2407825-009 10X	Ca (317.933 nm)	45.0082	0.25	1774322.3464
	R2407825-009 10X	Cd (214.439 nm)	0.0000 u	39.89	7.4395
	R2407825-009 10X	Co (230.786 nm)	-0.0002 u	30.38	-0.4207
	R2407825-009 10X	Cr (267.716 nm)	0.0004	14.22	46.3058
	R2407825-009 10X	Cu (327.395 nm)	0.0000 u	> 100.00	10.7412
	R2407825-009 10X	Fe (234.350 nm)	0.0181	0.85	478.6887
	R2407825-009 10X	K (766.491 nm)	0.7467	1.67	1228.0928
	R2407825-009 10X	Mg (279.078 nm)	25.6316	0.30	111975.1166
	R2407825-009 10X	Mn (257.610 nm)	0.0031	0.39	1118.9726
	R2407825-009 10X	Mo (202.032 nm)	0.0001 u	> 100.00	6.0236
	R2407825-009 10X	Na (588.995 nm)	10.2200	0.51	164645.2768
	R2407825-009 10X	Ni (230.299 nm)	0.0029	1.90	39.6294
	R2407825-009 10X	Pb (220.353 nm)	-0.0005 u	22.49	-1.0129
	R2407825-009 10X	Sb (217.582 nm)	0.0012	70.82	4.6673
	R2407825-009 10X	Se (196.026 nm)	-0.0005 u	> 100.00	0.0230
	R2407825-009 10X	Sn (189.925 nm)	0.0002 u	> 100.00	2.5569
	R2407825-009 10X	Sr (216.596 nm)	0.3683	0.16	7281.7020
	R2407825-009 10X	Ti (336.122 nm)	0.0008	13.00	189.6004
	R2407825-009 10X	Tl (190.794 nm)	0.0021	86.72	0.1345
	R2407825-009 10X	V (292.401 nm)	0.0000 u	> 100.00	11.6985
	R2407825-009 10X	Y (360.074 nm)	1.01	0.32	543717.00
	R2407825-009 10X	Y_R (360.074 nm)	1.01	0.32	544625.56
	R2407825-009 10X	Zn (213.857 nm)	0.0008	4.58	67.8180
8/22/2024 15:50:09	R2407825-010 10X	Ag (328.068 nm)	-0.0001 u	45.60	19.9005
	R2407825-010 10X	Al (237.312 nm)	0.0014 u	> 100.00	-9.2996
	R2407825-010 10X	As (188.980 nm)	-0.0002 u	> 100.00	-3.5802
	R2407825-010 10X	B (249.772 nm)	0.3364	0.12	14032.6092
	R2407825-010 10X	Ba (230.424 nm)	0.0009	2.27	67.4631
	R2407825-010 10X	Be (313.107 nm)	0.0000 u	> 100.00	-16.6902
	R2407825-010 10X	Ca (317.933 nm)	49.0361	0.11	1932858.5469
	R2407825-010 10X	Cd (214.439 nm)	0.0000	94.04	11.5832
	R2407825-010 10X	Co (230.786 nm)	0.0001 u	> 100.00	4.7697
	R2407825-010 10X	Cr (267.716 nm)	0.0002	59.61	35.1326
	R2407825-010 10X	Cu (327.395 nm)	-0.0001 u	> 100.00	4.1218
	R2407825-010 10X	Fe (234.350 nm)	0.3399	0.06	8074.6459
	R2407825-010 10X	K (766.491 nm)	3.6654	0.54	4875.5654

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-010 10X	Mg (279.078 nm)	14.4520	0.20	63132.5869
	R2407825-010 10X	Mn (257.610 nm)	0.0565	0.27	20480.0879
	R2407825-010 10X	Mo (202.032 nm)	0.0012	26.24	17.9442
	R2407825-010 10X	Na (588.995 nm)	51.1212	0.52	876904.0402
	R2407825-010 10X	Ni (230.299 nm)	0.0015	29.19	20.9075
	R2407825-010 10X	Pb (220.353 nm)	-0.0003 u	> 100.00	0.1891
	R2407825-010 10X	Sb (217.582 nm)	0.0015	23.11	5.3502
	R2407825-010 10X	Se (196.026 nm)	0.0007 u	> 100.00	1.1301
	R2407825-010 10X	Sn (189.925 nm)	0.0009	33.87	4.4351
	R2407825-010 10X	Sr (216.596 nm)	1.0038	0.16	19835.6135
	R2407825-010 10X	Ti (336.122 nm)	0.0002	67.97	99.9938
	R2407825-010 10X	Tl (190.794 nm)	0.0011	48.37	-0.8573
	R2407825-010 10X	V (292.401 nm)	0.0002	> 100.00	17.3188
	R2407825-010 10X	Y (360.074 nm)	1.00	0.23	536847.32
	R2407825-010 10X	Y_R (360.074 nm)	1.00	0.23	537762.21
	R2407825-010 10X	Zn (213.857 nm)	0.0004	7.00	39.5375
8/22/2024 15:53:13	R2407825-018 10X	Ag (328.068 nm)	-0.0002 u	9.37	16.4464
	R2407825-018 10X	Al (237.312 nm)	0.0376	1.75	90.4327
	R2407825-018 10X	As (188.980 nm)	0.0023	42.32	1.0479
	R2407825-018 10X	B (249.772 nm)	0.0829	0.23	3516.0016
	R2407825-018 10X	Ba (230.424 nm)	0.0012	2.40	86.4888
	R2407825-018 10X	Be (313.107 nm)	0.0000 u	> 100.00	-18.7733
	R2407825-018 10X	Ca (317.933 nm)	19.8028	0.23	782257.4685
	R2407825-018 10X	Cd (214.439 nm)	0.0000 u	> 100.00	9.5315
	R2407825-018 10X	Co (230.786 nm)	-0.0001 u	> 100.00	1.0447
	R2407825-018 10X	Cr (267.716 nm)	0.0003	8.84	40.2341
	R2407825-018 10X	Cu (327.395 nm)	-0.0001 u	56.50	5.2498
	R2407825-018 10X	Fe (234.350 nm)	0.3204	0.18	7615.2807
	R2407825-018 10X	K (766.491 nm)	1.2469	2.32	1853.2213
	R2407825-018 10X	Mg (279.078 nm)	26.4918	0.22	115733.2821
	R2407825-018 10X	Mn (257.610 nm)	0.0129	0.24	4679.6092
	R2407825-018 10X	Mo (202.032 nm)	0.0012	24.52	17.5003
	R2407825-018 10X	Na (588.995 nm)	28.7741	0.21	487748.4577
	R2407825-018 10X	Ni (230.299 nm)	0.0035	6.58	46.9097
	R2407825-018 10X	Pb (220.353 nm)	-0.0007 u	7.79	-2.2702
	R2407825-018 10X	Sb (217.582 nm)	0.0006 u	> 100.00	3.0664
	R2407825-018 10X	Se (196.026 nm)	0.0024	59.97	2.6408
	R2407825-018 10X	Sn (189.925 nm)	0.0013	49.32	5.6826
	R2407825-018 10X	Sr (216.596 nm)	0.5892	0.26	11645.0108
	R2407825-018 10X	Ti (336.122 nm)	0.0014	47.31	280.7827
	R2407825-018 10X	Tl (190.794 nm)	-0.0009 u	98.15	-2.6914
	R2407825-018 10X	V (292.401 nm)	0.0000 u	> 100.00	10.7272
	R2407825-018 10X	Y (360.074 nm)	1.01	0.11	543550.49
	R2407825-018 10X	Y_R (360.074 nm)	1.01	0.11	544459.89
	R2407825-018 10X	Zn (213.857 nm)	0.0005	5.58	49.7757
8/22/2024 15:56:17	R2407825-019 10X	Ag (328.068 nm)	-0.0001 u	39.34	17.0952
	R2407825-019 10X	Al (237.312 nm)	0.0858	1.42	223.3297
	R2407825-019 10X	As (188.980 nm)	0.0018	53.21	0.2050
	R2407825-019 10X	B (249.772 nm)	0.2072	0.16	8673.1240
	R2407825-019 10X	Ba (230.424 nm)	0.0018	0.38	118.9094
	R2407825-019 10X	Be (313.107 nm)	0.0000	51.65	-12.2784
	R2407825-019 10X	Ca (317.933 nm)	30.3507	0.12	1197412.1661
	R2407825-019 10X	Cd (214.439 nm)	0.0000 u	> 100.00	10.1808
	R2407825-019 10X	Co (230.786 nm)	0.0000 u	> 100.00	3.1432
	R2407825-019 10X	Cr (267.716 nm)	0.0003	37.69	39.3672
	R2407825-019 10X	Cu (327.395 nm)	0.0000 u	> 100.00	8.6135
	R2407825-019 10X	Fe (234.350 nm)	0.2337	0.25	5567.8483

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-019 10X	K (766.491 nm)	1.6891	1.75	2405.8001
	R2407825-019 10X	Mg (279.078 nm)	27.0120	0.14	118005.9040
	R2407825-019 10X	Mn (257.610 nm)	0.0142	0.06	5161.9716
	R2407825-019 10X	Mo (202.032 nm)	0.0009	16.14	14.8981
	R2407825-019 10X	Na (588.995 nm)	22.4780	0.55	378107.0806
	R2407825-019 10X	Ni (230.299 nm)	0.0046	3.62	62.0142
	R2407825-019 10X	Pb (220.353 nm)	0.0003	> 100.00	3.3953
	R2407825-019 10X	Sb (217.582 nm)	0.0005 u	> 100.00	2.8420
	R2407825-019 10X	Se (196.026 nm)	-0.0001 u	> 100.00	0.3117
	R2407825-019 10X	Sn (189.925 nm)	0.0004 u	> 100.00	3.0697
	R2407825-019 10X	Sr (216.596 nm)	0.9939	0.19	19638.9090
	R2407825-019 10X	Ti (336.122 nm)	0.0033	14.16	573.2922
	R2407825-019 10X	Tl (190.794 nm)	-0.0001 u	> 100.00	-1.9487
	R2407825-019 10X	V (292.401 nm)	0.0002	89.98	17.4659
	R2407825-019 10X	Y (360.074 nm)	1.01	0.06	545364.27
	R2407825-019 10X	Y_R (360.074 nm)	1.01	0.06	546273.36
	R2407825-019 10X	Zn (213.857 nm)	0.0015	4.77	116.9242
8/22/2024 15:59:22	Continuing Calibration Verification	Ag (328.068 nm)	0.4707	0.06	32133.1417
	Continuing Calibration Verification	Al (237.312 nm)	9.6186	0.04	26492.9148
	Continuing Calibration Verification	As (188.980 nm)	0.9827	0.22	1777.5876
	Continuing Calibration Verification	B (249.772 nm)	2.5664	0.19	106553.6206
	Continuing Calibration Verification	Ba (230.424 nm)	9.5506	0.31	593988.9441
	Continuing Calibration Verification	Be (313.107 nm)	0.2473	0.16	307918.8413
	Continuing Calibration Verification	Ca (317.933 nm)	24.7596	0.21	977352.8638
	Continuing Calibration Verification	Cd (214.439 nm)	0.5004	0.20	32671.3211
	Continuing Calibration Verification	Co (230.786 nm)	2.4529	0.20	51972.8023
	Continuing Calibration Verification	Cr (267.716 nm)	0.5067	0.18	29057.4520
	Continuing Calibration Verification	Cu (327.395 nm)	1.1907	0.07	58640.7133
	Continuing Calibration Verification	Fe (234.350 nm)	4.8534	0.29	114623.1775
	Continuing Calibration Verification	K (766.491 nm)	23.6627	0.10	29865.9765
	Continuing Calibration Verification	Mg (279.078 nm)	25.3023	0.23	110536.4208
	Continuing Calibration Verification	Mn (257.610 nm)	0.7220	0.16	261546.7542
	Continuing Calibration Verification	Mo (202.032 nm)	2.5436	0.56	27556.4898
	Continuing Calibration Verification	Na (588.995 nm)	24.0049	0.24	404697.0569
	Continuing Calibration Verification	Ni (230.299 nm)	1.9852	0.35	26005.5774
	Continuing Calibration Verification	Pb (220.353 nm)	0.4993	0.45	2673.6622
	Continuing Calibration Verification	Sb (217.582 nm)	4.8382	0.21	11814.0731
	Continuing Calibration Verification	Se (196.026 nm)	0.4961	0.58	458.7956
	Continuing Calibration Verification	Sn (189.925 nm)	4.9798	0.10	13585.6306
	Continuing Calibration Verification	Sr (216.596 nm)	2.4633	0.08	48664.5883
	Continuing Calibration Verification	Ti (336.122 nm)	2.5010	0.15	390971.2642
	Continuing Calibration Verification	Tl (190.794 nm)	1.0030	0.17	946.3683
	Continuing Calibration Verification	V (292.401 nm)	2.4871	0.16	95286.9259
	Continuing Calibration Verification	Y (360.074 nm)	1.00	0.26	538239.76
	Continuing Calibration Verification	Y_R (360.074 nm)	1.00	0.26	539102.41
	Continuing Calibration Verification	Zn (213.857 nm)	0.9668	0.19	65711.2456
8/22/2024 16:02:25	Continuing Calibration Blank	Ag (328.068 nm)	-0.0002 u	9.29	13.7499
	Continuing Calibration Blank	Al (237.312 nm)	0.0000 u	> 100.00	-13.2248
	Continuing Calibration Blank	As (188.980 nm)	0.0015	> 100.00	-0.4401
	Continuing Calibration Blank	B (249.772 nm)	0.0023	10.15	169.7755
	Continuing Calibration Blank	Ba (230.424 nm)	0.0003	7.82	30.1718
	Continuing Calibration Blank	Be (313.107 nm)	0.0000 u	> 100.00	-13.5457
	Continuing Calibration Blank	Ca (317.933 nm)	0.0020	6.74	2908.3436
	Continuing Calibration Blank	Cd (214.439 nm)	0.0000 u	> 100.00	8.5657
	Continuing Calibration Blank	Co (230.786 nm)	0.0000 u	> 100.00	3.8403
	Continuing Calibration Blank	Cr (267.716 nm)	0.0001 u	> 100.00	27.7796
	Continuing Calibration Blank	Cu (327.395 nm)	-0.0001 u	37.44	4.2729

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank	Fe (234.350 nm)	0.0044	22.62	155.5101
	Continuing Calibration Blank	K (766.491 nm)	0.1347	23.31	463.2249
	Continuing Calibration Blank	Mg (279.078 nm)	0.0027	16.39	4.7423
	Continuing Calibration Blank	Mn (257.610 nm)	0.0000	12.37	22.1195
	Continuing Calibration Blank	Mo (202.032 nm)	0.0058	13.46	67.1182
	Continuing Calibration Blank	Na (588.995 nm)	0.0183	21.76	-13009.9165
	Continuing Calibration Blank	Ni (230.299 nm)	0.0002 u	> 100.00	3.7227
	Continuing Calibration Blank	Pb (220.353 nm)	0.0001 u	> 100.00	1.9796
	Continuing Calibration Blank	Sb (217.582 nm)	0.0126	13.85	32.4984
	Continuing Calibration Blank	Se (196.026 nm)	0.0002 u	> 100.00	0.6517
	Continuing Calibration Blank	Sn (189.925 nm)	0.0031	48.96	10.5766
	Continuing Calibration Blank	Sr (216.596 nm)	0.0000 u	> 100.00	5.5616
	Continuing Calibration Blank	Ti (336.122 nm)	0.0053	24.04	883.1165
	Continuing Calibration Blank	Tl (190.794 nm)	0.0010	> 100.00	-0.8856
	Continuing Calibration Blank	V (292.401 nm)	0.0001 u	> 100.00	12.8803
	Continuing Calibration Blank	Y (360.074 nm)	1.04	0.21	559689.82
	Continuing Calibration Blank	Y_R (360.074 nm)	1.04	0.21	560554.45
	Continuing Calibration Blank	Zn (213.857 nm)	0.0001	10.05	17.1210
8/22/2024 16:05:29	R2407825-020 10X	Ag (328.068 nm)	-0.0002 u	22.07	13.7158
	R2407825-020 10X	Al (237.312 nm)	0.0386	4.40	93.2107
	R2407825-020 10X	As (188.980 nm)	0.0024	27.45	1.1609
	R2407825-020 10X	B (249.772 nm)	0.1301	0.46	5473.5901
	R2407825-020 10X	Ba (230.424 nm)	0.0013	3.37	86.8804
	R2407825-020 10X	Be (313.107 nm)	0.0000 u	> 100.00	-17.0305
	R2407825-020 10X	Ca (317.933 nm)	27.8814	0.51	1100222.1527
	R2407825-020 10X	Cd (214.439 nm)	0.0000 u	> 100.00	9.8450
	R2407825-020 10X	Co (230.786 nm)	0.0001 u	> 100.00	4.6438
	R2407825-020 10X	Cr (267.716 nm)	0.0004	17.62	48.5227
	R2407825-020 10X	Cu (327.395 nm)	-0.0002 u	29.99	1.6836
	R2407825-020 10X	Fe (234.350 nm)	0.3066	0.39	7287.8042
	R2407825-020 10X	K (766.491 nm)	1.7353	1.89	2463.5043
	R2407825-020 10X	Mg (279.078 nm)	46.0835	0.55	201327.9256
	R2407825-020 10X	Mn (257.610 nm)	0.0193	0.44	6986.0551
	R2407825-020 10X	Mo (202.032 nm)	0.0022	12.46	29.0935
	R2407825-020 10X	Na (588.995 nm)	42.6250	0.72	728950.6545
	R2407825-020 10X	Ni (230.299 nm)	0.0028	0.37	37.8741
	R2407825-020 10X	Pb (220.353 nm)	0.0000 u	> 100.00	1.5204
	R2407825-020 10X	Sb (217.582 nm)	0.0077	11.03	20.3764
	R2407825-020 10X	Se (196.026 nm)	0.0017 u	> 100.00	2.0141
	R2407825-020 10X	Sn (189.925 nm)	0.0018	13.09	6.9540
	R2407825-020 10X	Sr (216.596 nm)	0.8699	0.56	17189.0273
	R2407825-020 10X	Ti (336.122 nm)	0.0025	17.41	450.8868
	R2407825-020 10X	Tl (190.794 nm)	0.0015 u	> 100.00	-0.4477
	R2407825-020 10X	V (292.401 nm)	0.0002	82.12	17.6054
	R2407825-020 10X	Y (360.074 nm)	1.00	0.33	538950.73
	R2407825-020 10X	Y_R (360.074 nm)	1.00	0.33	539843.92
	R2407825-020 10X	Zn (213.857 nm)	0.0013	5.41	101.6667
8/22/2024 16:08:34	R2407825-020L 50X	Ag (328.068 nm)	-0.0002 u	11.57	14.1643
	R2407825-020L 50X	Al (237.312 nm)	0.0092	7.82	12.2386
	R2407825-020L 50X	As (188.980 nm)	-0.0006 u	> 100.00	-4.2071
	R2407825-020L 50X	B (249.772 nm)	0.0265	0.52	1173.6608
	R2407825-020L 50X	Ba (230.424 nm)	0.0004	2.46	32.7183
	R2407825-020L 50X	Be (313.107 nm)	0.0000	> 100.00	-13.5716
	R2407825-020L 50X	Ca (317.933 nm)	5.6718	0.25	226069.5999
	R2407825-020L 50X	Cd (214.439 nm)	0.0000 u	> 100.00	9.6442
	R2407825-020L 50X	Co (230.786 nm)	-0.0001 u	76.47	1.4520
	R2407825-020L 50X	Cr (267.716 nm)	0.0001	53.20	31.1381

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-020L 50X	Cu (327.395 nm)	-0.0002 u	16.52	0.9737
	R2407825-020L 50X	Fe (234.350 nm)	0.0648	0.61	1579.6668
	R2407825-020L 50X	K (766.491 nm)	0.4056	2.48	801.8601
	R2407825-020L 50X	Mg (279.078 nm)	9.1032	0.27	39764.1916
	R2407825-020L 50X	Mn (257.610 nm)	0.0040	0.31	1459.6495
	R2407825-020L 50X	Mo (202.032 nm)	0.0009	14.04	14.8132
	R2407825-020L 50X	Na (588.995 nm)	8.5297	0.18	135209.4624
	R2407825-020L 50X	Ni (230.299 nm)	0.0008	56.05	11.6076
	R2407825-020L 50X	Pb (220.353 nm)	-0.0004 u	> 100.00	-0.5219
	R2407825-020L 50X	Sb (217.582 nm)	0.0043	17.44	12.2208
	R2407825-020L 50X	Se (196.026 nm)	-0.0005 u	> 100.00	0.0289
	R2407825-020L 50X	Sn (189.925 nm)	0.0009	57.56	4.4026
	R2407825-020L 50X	Sr (216.596 nm)	0.1758	0.11	3479.3156
	R2407825-020L 50X	Ti (336.122 nm)	0.0011	25.53	235.8481
	R2407825-020L 50X	Tl (190.794 nm)	0.0006 u	> 100.00	-1.3076
	R2407825-020L 50X	V (292.401 nm)	0.0000 u	> 100.00	12.2350
	R2407825-020L 50X	Y (360.074 nm)	1.03	0.26	554561.71
	R2407825-020L 50X	Y_R (360.074 nm)	1.03	0.25	555187.96
	R2407825-020L 50X	Zn (213.857 nm)	0.0003	6.81	36.8696
8/22/2024 16:11:38	PBW-443446	Ag (328.068 nm)	-0.0002 u	8.50	13.4581
	PBW-443446	Al (237.312 nm)	0.0007	36.80	-11.2254
	PBW-443446	As (188.980 nm)	0.0002 u	> 100.00	-2.7928
	PBW-443446	B (249.772 nm)	0.0024	3.92	176.5662
	PBW-443446	Ba (230.424 nm)	0.0001	28.78	13.0509
	PBW-443446	Be (313.107 nm)	0.0000	48.50	-11.4827
	PBW-443446	Ca (317.933 nm)	0.0053	5.50	3039.8200
	PBW-443446	Cd (214.439 nm)	0.0000	31.24	11.9284
	PBW-443446	Co (230.786 nm)	0.0000 u	> 100.00	3.3733
	PBW-443446	Cr (267.716 nm)	0.0003	43.65	39.7397
	PBW-443446	Cu (327.395 nm)	-0.0002 u	39.56	-0.6772
	PBW-443446	Fe (234.350 nm)	0.0035	11.89	132.9345
	PBW-443446	K (766.491 nm)	0.0402 u	87.90	345.1577
	PBW-443446	Mg (279.078 nm)	0.0015	37.13	-0.4906
	PBW-443446	Mn (257.610 nm)	0.0001	12.26	33.9782
	PBW-443446	Mo (202.032 nm)	0.0006	30.03	11.6022
	PBW-443446	Na (588.995 nm)	0.0220	9.29	-12945.6146
	PBW-443446	Ni (230.299 nm)	0.0003	33.33	5.8261
	PBW-443446	Pb (220.353 nm)	0.0000 u	> 100.00	1.5249
	PBW-443446	Sb (217.582 nm)	0.0156	4.59	39.8790
	PBW-443446	Se (196.026 nm)	-0.0007 u	15.75	-0.2447
	PBW-443446	Sn (189.925 nm)	0.0014	68.76	5.8340
	PBW-443446	Sr (216.596 nm)	0.0000 u	> 100.00	6.7458
	PBW-443446	Ti (336.122 nm)	0.0007	30.97	178.2642
	PBW-443446	Tl (190.794 nm)	0.0007 u	> 100.00	-1.2393
	PBW-443446	V (292.401 nm)	-0.0001 u	> 100.00	6.7773
	PBW-443446	Y (360.074 nm)	1.05	0.29	565305.98
	PBW-443446	Y_R (360.074 nm)	1.05	0.31	565887.96
	PBW-443446	Zn (213.857 nm)	0.0002	5.92	28.5643
8/22/2024 16:14:42	LCSW-443446	Ag (328.068 nm)	0.0439	0.36	3021.5666
	LCSW-443446	Al (237.312 nm)	1.8357	0.34	5045.5553
	LCSW-443446	As (188.980 nm)	0.0357	2.29	61.5208
	LCSW-443446	B (249.772 nm)	0.9350	0.19	38867.4804
	LCSW-443446	Ba (230.424 nm)	1.8907	0.19	117597.1122
	LCSW-443446	Be (313.107 nm)	0.0469	0.26	58393.1019
	LCSW-443446	Ca (317.933 nm)	1.9045	0.30	77790.4772
	LCSW-443446	Cd (214.439 nm)	0.0484	0.64	3171.0252
	LCSW-443446	Co (230.786 nm)	0.4775	0.20	10119.9202

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	LCSW-443446	Cr (267.716 nm)	0.1944	0.33	11163.0375
	LCSW-443446	Cu (327.395 nm)	0.2361	0.11	11635.1459
	LCSW-443446	Fe (234.350 nm)	0.9625	0.27	22772.7179
	LCSW-443446	K (766.491 nm)	17.6953	0.19	22408.5560
	LCSW-443446	Mg (279.078 nm)	1.8702	0.37	8163.7947
	LCSW-443446	Mn (257.610 nm)	0.4625	0.23	167564.0975
	LCSW-443446	Mo (202.032 nm)	0.4830	1.07	5236.1841
	LCSW-443446	Na (588.995 nm)	18.3782	0.22	306713.1321
	LCSW-443446	Ni (230.299 nm)	0.4787	0.30	6272.1691
	LCSW-443446	Pb (220.353 nm)	0.4941	0.03	2646.0529
	LCSW-443446	Sb (217.582 nm)	0.4737	0.47	1158.2459
	LCSW-443446	Se (196.026 nm)	0.8725	0.41	806.6152
	LCSW-443446	Sn (189.925 nm)	4.7722	0.32	13019.3404
	LCSW-443446	Sr (216.596 nm)	1.9159	0.30	37851.5554
	LCSW-443446	Ti (336.122 nm)	0.4841	0.14	75721.0790
	LCSW-443446	Tl (190.794 nm)	1.9111	0.19	1804.9421
	LCSW-443446	V (292.401 nm)	0.4768	0.16	18277.0554
	LCSW-443446	Y (360.074 nm)	1.03	0.32	553488.20
	LCSW-443446	Y_R (360.074 nm)	1.03	0.32	554148.98
	LCSW-443446	Zn (213.857 nm)	0.4552	0.19	30945.2231
8/22/2024 16:17:46	R2407573-010 10X	Ag (328.068 nm)	-0.0001 u	18.88	16.9216
	R2407573-010 10X	Al (237.312 nm)	0.0172	6.37	34.3628
	R2407573-010 10X	As (188.980 nm)	0.0007	> 100.00	-1.7881
	R2407573-010 10X	B (249.772 nm)	0.0161	0.47	744.4119
	R2407573-010 10X	Ba (230.424 nm)	0.0017	3.79	115.3059
	R2407573-010 10X	Be (313.107 nm)	0.0000 u	> 100.00	-15.9259
	R2407573-010 10X	Ca (317.933 nm)	35.7986	0.17	1411840.5660
	R2407573-010 10X	Cd (214.439 nm)	0.0000 u	> 100.00	9.9393
	R2407573-010 10X	Co (230.786 nm)	-0.0001 u	> 100.00	1.8215
	R2407573-010 10X	Cr (267.716 nm)	0.0004	3.48	44.9129
	R2407573-010 10X	Cu (327.395 nm)	-0.0001 u	27.09	2.3835
	R2407573-010 10X	Fe (234.350 nm)	0.0212	1.61	551.9917
	R2407573-010 10X	K (766.491 nm)	1.2274	1.73	1828.8517
	R2407573-010 10X	Mg (279.078 nm)	8.3093	0.21	36295.5721
	R2407573-010 10X	Mn (257.610 nm)	0.0018	0.61	645.3354
	R2407573-010 10X	Mo (202.032 nm)	0.0031	17.11	38.2101
	R2407573-010 10X	Na (588.995 nm)	0.9449	0.79	3125.8695
	R2407573-010 10X	Ni (230.299 nm)	0.0035	10.40	47.0328
	R2407573-010 10X	Pb (220.353 nm)	0.0001 u	> 100.00	2.2674
	R2407573-010 10X	Sb (217.582 nm)	0.0048	17.79	13.3226
	R2407573-010 10X	Se (196.026 nm)	0.0002 u	> 100.00	0.6614
	R2407573-010 10X	Sn (189.925 nm)	0.0021	34.64	7.6998
	R2407573-010 10X	Sr (216.596 nm)	1.7274	0.19	34127.5139
	R2407573-010 10X	Ti (336.122 nm)	0.0015	26.85	296.9889
	R2407573-010 10X	Tl (190.794 nm)	0.0030	21.83	1.0062
	R2407573-010 10X	V (292.401 nm)	0.0002	65.48	16.4843
	R2407573-010 10X	Y (360.074 nm)	1.03	0.25	554091.87
	R2407573-010 10X	Y_R (360.074 nm)	1.03	0.25	554829.00
	R2407573-010 10X	Zn (213.857 nm)	0.0004	9.42	40.9781
8/22/2024 16:20:49	R2407573-010L 50X	Ag (328.068 nm)	-0.0001 u	> 100.00	22.4170
	R2407573-010L 50X	Al (237.312 nm)	0.0058	7.56	2.7825
	R2407573-010L 50X	As (188.980 nm)	0.0015 u	> 100.00	-0.4385
	R2407573-010L 50X	B (249.772 nm)	0.0037	4.91	227.8754
	R2407573-010L 50X	Ba (230.424 nm)	0.0005	22.51	37.8734
	R2407573-010L 50X	Be (313.107 nm)	0.0000 u	> 100.00	-15.9880
	R2407573-010L 50X	Ca (317.933 nm)	7.2364	0.25	287650.2999
	R2407573-010L 50X	Cd (214.439 nm)	0.0000 u	> 100.00	9.7104

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407573-010L 50X	Co (230.786 nm)	0.0000	> 100.00	4.5856
	R2407573-010L 50X	Cr (267.716 nm)	0.0002	80.39	34.9256
	R2407573-010L 50X	Cu (327.395 nm)	-0.0001 u	93.31	3.6329
	R2407573-010L 50X	Fe (234.350 nm)	0.0059	0.43	191.2063
	R2407573-010L 50X	K (766.491 nm)	0.3238	5.63	699.6121
	R2407573-010L 50X	Mg (279.078 nm)	1.6572	0.31	7233.0298
	R2407573-010L 50X	Mn (257.610 nm)	0.0004	5.44	163.2819
	R2407573-010L 50X	Mo (202.032 nm)	0.0006	50.81	11.1255
	R2407573-010L 50X	Na (588.995 nm)	0.2057	1.25	-9745.3474
	R2407573-010L 50X	Ni (230.299 nm)	0.0013	11.97	19.0259
	R2407573-010L 50X	Pb (220.353 nm)	-0.0003 u	12.17	0.0902
	R2407573-010L 50X	Sb (217.582 nm)	0.0028	39.32	8.4491
	R2407573-010L 50X	Se (196.026 nm)	-0.0028 u	16.03	-2.1365
	R2407573-010L 50X	Sn (189.925 nm)	0.0005 u	> 100.00	3.3594
	R2407573-010L 50X	Sr (216.596 nm)	0.3457	0.18	6835.1753
	R2407573-010L 50X	Ti (336.122 nm)	0.0006	28.44	150.9252
	R2407573-010L 50X	Tl (190.794 nm)	0.0017	90.81	-0.2400
	R2407573-010L 50X	V (292.401 nm)	-0.0001 u	27.27	4.8861
	R2407573-010L 50X	Y (360.074 nm)	1.05	0.11	562587.45
	R2407573-010L 50X	Y_R (360.074 nm)	1.05	0.11	563326.00
	R2407573-010L 50X	Zn (213.857 nm)	0.0002	17.63	23.8041
8/22/2024 16:23:53	Continuing Calibration Verification	Ag (328.068 nm)	0.4705	0.12	32116.1423
	Continuing Calibration Verification	Al (237.312 nm)	9.5807	0.11	26388.6003
	Continuing Calibration Verification	As (188.980 nm)	0.9803	0.37	1773.2807
	Continuing Calibration Verification	B (249.772 nm)	2.5586	0.20	106233.1162
	Continuing Calibration Verification	Ba (230.424 nm)	9.5309	0.52	592767.8748
	Continuing Calibration Verification	Be (313.107 nm)	0.2471	0.28	307577.6435
	Continuing Calibration Verification	Ca (317.933 nm)	24.7088	0.22	975354.3935
	Continuing Calibration Verification	Cd (214.439 nm)	0.4991	0.29	32589.0726
	Continuing Calibration Verification	Co (230.786 nm)	2.4468	0.23	51845.5348
	Continuing Calibration Verification	Cr (267.716 nm)	0.5058	0.25	29008.9127
	Continuing Calibration Verification	Cu (327.395 nm)	1.1900	0.08	58601.4426
	Continuing Calibration Verification	Fe (234.350 nm)	4.8377	0.28	114252.0045
	Continuing Calibration Verification	K (766.491 nm)	23.5822	0.13	29765.3537
	Continuing Calibration Verification	Mg (279.078 nm)	25.2849	0.23	110460.6072
	Continuing Calibration Verification	Mn (257.610 nm)	0.7197	0.21	260712.3873
	Continuing Calibration Verification	Mo (202.032 nm)	2.5394	0.60	27510.7117
	Continuing Calibration Verification	Na (588.995 nm)	23.9918	0.19	404468.8287
	Continuing Calibration Verification	Ni (230.299 nm)	1.9848	0.21	26000.7597
	Continuing Calibration Verification	Pb (220.353 nm)	0.4975	0.19	2664.1696
	Continuing Calibration Verification	Sb (217.582 nm)	4.8288	0.29	11791.0083
	Continuing Calibration Verification	Se (196.026 nm)	0.4923	0.19	455.3385
	Continuing Calibration Verification	Sn (189.925 nm)	4.9781	0.17	13580.8394
	Continuing Calibration Verification	Sr (216.596 nm)	2.4546	0.57	48493.2391
	Continuing Calibration Verification	Ti (336.122 nm)	2.4976	0.20	390433.6313
	Continuing Calibration Verification	Tl (190.794 nm)	0.9976	0.49	941.3279
	Continuing Calibration Verification	V (292.401 nm)	2.4823	0.17	95106.3074
	Continuing Calibration Verification	Y (360.074 nm)	1.00	0.16	537625.79
	Continuing Calibration Verification	Y_R (360.074 nm)	1.00	0.16	538373.01
	Continuing Calibration Verification	Zn (213.857 nm)	0.9653	0.09	65613.4868
8/22/2024 16:26:57	Continuing Calibration Blank	Ag (328.068 nm)	-0.0001 u	28.06	23.6343
	Continuing Calibration Blank	Al (237.312 nm)	-0.0003 u	69.16	-13.8748
	Continuing Calibration Blank	As (188.980 nm)	0.0019	19.00	0.2891
	Continuing Calibration Blank	B (249.772 nm)	0.0021	3.44	161.0234
	Continuing Calibration Blank	Ba (230.424 nm)	0.0004	6.66	35.2449
	Continuing Calibration Blank	Be (313.107 nm)	0.0000	45.86	-13.9747
	Continuing Calibration Blank	Ca (317.933 nm)	0.0018	4.72	2901.7428

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank	Cd (214.439 nm)	0.0000 u	> 100.00	10.0629
	Continuing Calibration Blank	Co (230.786 nm)	0.0001	60.80	6.0310
	Continuing Calibration Blank	Cr (267.716 nm)	0.0000 u	> 100.00	25.3205
	Continuing Calibration Blank	Cu (327.395 nm)	-0.0002 u	19.21	-0.6820
	Continuing Calibration Blank	Fe (234.350 nm)	0.0045	12.07	156.4046
	Continuing Calibration Blank	K (766.491 nm)	0.0977	25.55	417.0575
	Continuing Calibration Blank	Mg (279.078 nm)	0.0034	9.69	7.9280
	Continuing Calibration Blank	Mn (257.610 nm)	0.0001	20.98	29.7678
	Continuing Calibration Blank	Mo (202.032 nm)	0.0060	14.34	70.2166
	Continuing Calibration Blank	Na (588.995 nm)	0.0041	> 100.00	-13256.8593
	Continuing Calibration Blank	Ni (230.299 nm)	0.0003 u	> 100.00	4.9648
	Continuing Calibration Blank	Pb (220.353 nm)	0.0001 u	> 100.00	2.1993
	Continuing Calibration Blank	Sb (217.582 nm)	0.0141	8.62	36.0697
	Continuing Calibration Blank	Se (196.026 nm)	0.0014 u	> 100.00	1.7097
	Continuing Calibration Blank	Sn (189.925 nm)	0.0034	21.71	11.4486
	Continuing Calibration Blank	Sr (216.596 nm)	0.0001 u	> 100.00	7.9559
	Continuing Calibration Blank	Ti (336.122 nm)	0.0054	23.19	905.9277
	Continuing Calibration Blank	Tl (190.794 nm)	0.0004	84.74	-1.4376
	Continuing Calibration Blank	V (292.401 nm)	-0.0001 u	> 100.00	8.3106
	Continuing Calibration Blank	Y (360.074 nm)	1.04	0.05	559735.66
	Continuing Calibration Blank	Y_R (360.074 nm)	1.04	0.05	560528.97
	Continuing Calibration Blank	Zn (213.857 nm)	0.0001	50.35	18.7197
8/22/2024 16:30:01	PBW-443448	Ag (328.068 nm)	-0.0001 u	87.87	20.3499
	PBW-443448	Al (237.312 nm)	0.0008 u	> 100.00	-10.9928
	PBW-443448	As (188.980 nm)	0.0001 u	> 100.00	-2.9540
	PBW-443448	B (249.772 nm)	0.0024	1.86	174.2555
	PBW-443448	Ba (230.424 nm)	0.0001	62.97	12.2867
	PBW-443448	Be (313.107 nm)	0.0000 u	> 100.00	-14.2149
	PBW-443448	Ca (317.933 nm)	0.0055	4.05	3048.9395
	PBW-443448	Cd (214.439 nm)	0.0001 u	> 100.00	13.4137
	PBW-443448	Co (230.786 nm)	0.0000 u	> 100.00	2.9572
	PBW-443448	Cr (267.716 nm)	0.0002	10.90	33.6930
	PBW-443448	Cu (327.395 nm)	-0.0002 u	42.59	1.5602
	PBW-443448	Fe (234.350 nm)	0.0032	13.14	127.3546
	PBW-443448	K (766.491 nm)	0.0687	41.36	380.8289
	PBW-443448	Mg (279.078 nm)	0.0023	18.55	3.2502
	PBW-443448	Mn (257.610 nm)	0.0001	13.67	30.0562
	PBW-443448	Mo (202.032 nm)	0.0016	18.18	21.9541
	PBW-443448	Na (588.995 nm)	0.0195	16.61	-12988.1831
	PBW-443448	Ni (230.299 nm)	0.0003 u	> 100.00	5.1767
	PBW-443448	Pb (220.353 nm)	-0.0002 u	> 100.00	0.3399
	PBW-443448	Sb (217.582 nm)	0.0191	7.83	48.2656
	PBW-443448	Se (196.026 nm)	-0.0012 u	60.81	-0.6279
	PBW-443448	Sn (189.925 nm)	0.0029	11.37	10.0015
	PBW-443448	Sr (216.596 nm)	0.0000 u	> 100.00	6.8056
	PBW-443448	Ti (336.122 nm)	0.0020	32.69	372.5001
	PBW-443448	Tl (190.794 nm)	0.0000 u	> 100.00	-1.9030
	PBW-443448	V (292.401 nm)	-0.0001 u	82.82	6.3918
	PBW-443448	Y (360.074 nm)	1.06	0.31	568093.30
	PBW-443448	Y_R (360.074 nm)	1.06	0.31	568855.90
	PBW-443448	Zn (213.857 nm)	0.0003	21.21	31.5666
8/22/2024 16:33:05	LCSW-443448	Ag (328.068 nm)	0.0439	0.14	3021.7258
	LCSW-443448	Al (237.312 nm)	1.8357	0.11	5045.6023
	LCSW-443448	As (188.980 nm)	0.0361	5.08	62.3148
	LCSW-443448	B (249.772 nm)	0.9317	0.26	38730.2780
	LCSW-443448	Ba (230.424 nm)	1.8871	0.51	117371.0186
	LCSW-443448	Be (313.107 nm)	0.0469	0.27	58377.3501

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	LCSW-443448	Ca (317.933 nm)	1.9038	0.31	77765.2806
	LCSW-443448	Cd (214.439 nm)	0.0483	0.33	3163.0476
	LCSW-443448	Co (230.786 nm)	0.4778	0.28	10126.8826
	LCSW-443448	Cr (267.716 nm)	0.1974	0.30	11337.5546
	LCSW-443448	Cu (327.395 nm)	0.2361	0.01	11634.5680
	LCSW-443448	Fe (234.350 nm)	0.9775	0.32	23126.2003
	LCSW-443448	K (766.491 nm)	17.7402	0.18	22464.6685
	LCSW-443448	Mg (279.078 nm)	1.8735	0.12	8178.3069
	LCSW-443448	Mn (257.610 nm)	0.4624	0.25	167513.7917
	LCSW-443448	Mo (202.032 nm)	0.4833	1.19	5239.7345
	LCSW-443448	Na (588.995 nm)	18.3966	0.18	307032.1777
	LCSW-443448	Ni (230.299 nm)	0.4781	0.22	6264.5668
	LCSW-443448	Pb (220.353 nm)	0.4925	0.46	2637.3124
	LCSW-443448	Sb (217.582 nm)	0.4762	0.65	1164.2773
	LCSW-443448	Se (196.026 nm)	0.8735	0.37	807.5450
	LCSW-443448	Sn (189.925 nm)	4.8004	0.13	13096.2195
	LCSW-443448	Sr (216.596 nm)	1.9263	0.32	38057.6096
	LCSW-443448	Ti (336.122 nm)	0.4866	0.21	76116.0969
	LCSW-443448	Tl (190.794 nm)	1.9007	0.46	1795.0858
	LCSW-443448	V (292.401 nm)	0.4775	0.24	18303.4187
	LCSW-443448	Y (360.074 nm)	1.03	0.31	554931.62
	LCSW-443448	Y_R (360.074 nm)	1.03	0.30	555648.07
	LCSW-443448	Zn (213.857 nm)	0.4555	0.25	30963.7944
8/22/2024 16:36:09	R2407724-003 10X	Ag (328.068 nm)	-0.0001 u	> 100.00	23.6642
	R2407724-003 10X	Al (237.312 nm)	0.0336	3.91	79.5032
	R2407724-003 10X	As (188.980 nm)	0.0009	27.25	-1.5300
	R2407724-003 10X	B (249.772 nm)	0.0115	2.48	551.2474
	R2407724-003 10X	Ba (230.424 nm)	0.0024	4.53	159.3194
	R2407724-003 10X	Be (313.107 nm)	0.0000 u	> 100.00	-14.3389
	R2407724-003 10X	Ca (317.933 nm)	34.6115	0.58	1365115.6210
	R2407724-003 10X	Cd (214.439 nm)	0.0000 u	> 100.00	7.1903
	R2407724-003 10X	Co (230.786 nm)	-0.0001 u	> 100.00	2.2236
	R2407724-003 10X	Cr (267.716 nm)	0.0002	46.81	36.9749
	R2407724-003 10X	Cu (327.395 nm)	-0.0002 u	13.95	1.8492
	R2407724-003 10X	Fe (234.350 nm)	0.2312	0.56	5507.5531
	R2407724-003 10X	K (766.491 nm)	1.3832	0.65	2023.5666
	R2407724-003 10X	Mg (279.078 nm)	10.0306	0.62	43815.8187
	R2407724-003 10X	Mn (257.610 nm)	0.2307	0.66	83570.5836
	R2407724-003 10X	Mo (202.032 nm)	0.0033	11.38	39.9497
	R2407724-003 10X	Na (588.995 nm)	9.0495	0.97	144260.6160
	R2407724-003 10X	Ni (230.299 nm)	0.0018	18.34	24.9957
	R2407724-003 10X	Pb (220.353 nm)	-0.0001 u	> 100.00	0.8408
	R2407724-003 10X	Sb (217.582 nm)	0.0055	28.97	15.1179
	R2407724-003 10X	Se (196.026 nm)	0.0007	84.64	1.0841
	R2407724-003 10X	Sn (189.925 nm)	0.0026	14.07	9.1005
	R2407724-003 10X	Sr (216.596 nm)	0.0390	0.50	776.4124
	R2407724-003 10X	Ti (336.122 nm)	0.0021	23.97	388.5972
	R2407724-003 10X	Tl (190.794 nm)	0.0017 u	> 100.00	-0.2368
	R2407724-003 10X	V (292.401 nm)	0.0002	82.13	16.7514
	R2407724-003 10X	Y (360.074 nm)	1.03	0.16	553251.87
	R2407724-003 10X	Y_R (360.074 nm)	1.03	0.16	554037.98
	R2407724-003 10X	Zn (213.857 nm)	0.0004	18.03	38.2711
8/22/2024 16:39:13	R2407825-021 10X	Ag (328.068 nm)	-0.0002 u	12.00	15.7852
	R2407825-021 10X	Al (237.312 nm)	0.0181	8.96	36.6355
	R2407825-021 10X	As (188.980 nm)	0.0018	54.07	0.1322
	R2407825-021 10X	B (249.772 nm)	0.2079	0.56	8702.3326
	R2407825-021 10X	Ba (230.424 nm)	0.0025	2.05	162.0218

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-021 10X	Be (313.107 nm)	0.0000	> 100.00	-11.5495
	R2407825-021 10X	Ca (317.933 nm)	42.8928	0.53	1691061.5893
	R2407825-021 10X	Cd (214.439 nm)	0.0000 u	> 100.00	9.8075
	R2407825-021 10X	Co (230.786 nm)	0.0001 u	> 100.00	5.3989
	R2407825-021 10X	Cr (267.716 nm)	0.0004	25.83	46.8114
	R2407825-021 10X	Cu (327.395 nm)	-0.0002 u	7.70	0.6260
	R2407825-021 10X	Fe (234.350 nm)	0.3735	0.45	8868.5037
	R2407825-021 10X	K (766.491 nm)	2.4063	0.54	3302.1301
	R2407825-021 10X	Mg (279.078 nm)	35.2533	0.58	154011.7447
	R2407825-021 10X	Mn (257.610 nm)	0.0343	0.65	12450.7775
	R2407825-021 10X	Mo (202.032 nm)	0.0014	23.39	20.3337
	R2407825-021 10X	Na (588.995 nm)	36.7121	0.95	625982.3105
	R2407825-021 10X	Ni (230.299 nm)	0.0022	12.85	29.9091
	R2407825-021 10X	Pb (220.353 nm)	-0.0002 u	> 100.00	0.4043
	R2407825-021 10X	Sb (217.582 nm)	0.0030	20.07	9.0056
	R2407825-021 10X	Se (196.026 nm)	0.0007 u	> 100.00	1.1190
	R2407825-021 10X	Sn (189.925 nm)	0.0006	56.31	3.6973
	R2407825-021 10X	Sr (216.596 nm)	0.9593	0.55	18956.7241
	R2407825-021 10X	Ti (336.122 nm)	0.0009	27.56	198.0442
	R2407825-021 10X	Tl (190.794 nm)	0.0024	10.46	0.4452
	R2407825-021 10X	V (292.401 nm)	0.0001	> 100.00	16.0656
	R2407825-021 10X	Y (360.074 nm)	1.01	0.17	541035.93
	R2407825-021 10X	Y_R (360.074 nm)	1.01	0.17	541819.68
	R2407825-021 10X	Zn (213.857 nm)	0.0009	5.75	73.5746
8/22/2024 16:42:17	R2407825-023 10X	Ag (328.068 nm)	-0.0001 u	> 100.00	21.7509
	R2407825-023 10X	Al (237.312 nm)	0.1040	1.06	273.4895
	R2407825-023 10X	As (188.980 nm)	0.0006 u	> 100.00	-2.1152
	R2407825-023 10X	B (249.772 nm)	0.0828	0.13	3510.9966
	R2407825-023 10X	Ba (230.424 nm)	0.0024	2.43	161.0051
	R2407825-023 10X	Be (313.107 nm)	0.0000 u	> 100.00	-14.8608
	R2407825-023 10X	Ca (317.933 nm)	20.4265	0.06	806805.3738
	R2407825-023 10X	Cd (214.439 nm)	0.0000 u	> 100.00	10.4431
	R2407825-023 10X	Co (230.786 nm)	0.0000 u	> 100.00	3.1652
	R2407825-023 10X	Cr (267.716 nm)	0.0005	19.10	50.5374
	R2407825-023 10X	Cu (327.395 nm)	0.0001 u	> 100.00	12.7225
	R2407825-023 10X	Fe (234.350 nm)	1.1299	0.09	26724.4819
	R2407825-023 10X	K (766.491 nm)	1.8039	0.52	2549.2478
	R2407825-023 10X	Mg (279.078 nm)	18.6164	0.09	81326.6120
	R2407825-023 10X	Mn (257.610 nm)	0.0199	0.12	7234.3305
	R2407825-023 10X	Mo (202.032 nm)	0.0024	11.15	31.1439
	R2407825-023 10X	Na (588.995 nm)	33.3061	0.26	566669.1243
	R2407825-023 10X	Ni (230.299 nm)	0.0026	14.35	35.5252
	R2407825-023 10X	Pb (220.353 nm)	-0.0005 u	> 100.00	-0.8096
	R2407825-023 10X	Sb (217.582 nm)	0.0029	42.24	8.8656
	R2407825-023 10X	Se (196.026 nm)	0.0009	88.71	1.2983
	R2407825-023 10X	Sn (189.925 nm)	0.0005 u	> 100.00	3.4354
	R2407825-023 10X	Sr (216.596 nm)	0.4987	0.11	9858.3683
	R2407825-023 10X	Ti (336.122 nm)	0.0024	7.05	432.5810
	R2407825-023 10X	Tl (190.794 nm)	0.0008 u	> 100.00	-1.1136
	R2407825-023 10X	V (292.401 nm)	0.0002	60.31	18.8243
	R2407825-023 10X	Y (360.074 nm)	1.02	0.25	547356.96
	R2407825-023 10X	Y_R (360.074 nm)	1.02	0.25	548152.01
	R2407825-023 10X	Zn (213.857 nm)	0.0049	1.77	347.9994
8/22/2024 16:45:21	R2407825-023L 50X	Ag (328.068 nm)	-0.0001 u	27.10	17.5468
	R2407825-023L 50X	Al (237.312 nm)	0.0232	4.05	50.8555
	R2407825-023L 50X	As (188.980 nm)	0.0009	44.12	-1.4865
	R2407825-023L 50X	B (249.772 nm)	0.0164	0.63	753.9298

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407825-023L 50X	Ba (230.424 nm)	0.0006	0.87	47.1924
	R2407825-023L 50X	Be (313.107 nm)	0.0000 u	> 100.00	-19.5105
	R2407825-023L 50X	Ca (317.933 nm)	4.0892	0.23	163780.9516
	R2407825-023L 50X	Cd (214.439 nm)	0.0000 u	> 100.00	9.3936
	R2407825-023L 50X	Co (230.786 nm)	0.0000 u	> 100.00	3.0267
	R2407825-023L 50X	Cr (267.716 nm)	0.0001	71.00	31.6618
	R2407825-023L 50X	Cu (327.395 nm)	-0.0002 u	17.05	0.0690
	R2407825-023L 50X	Fe (234.350 nm)	0.2272	0.27	5415.0258
	R2407825-023L 50X	K (766.491 nm)	0.4082	12.52	805.0978
	R2407825-023L 50X	Mg (279.078 nm)	3.6946	0.21	16134.5234
	R2407825-023L 50X	Mn (257.610 nm)	0.0041	0.14	1490.1926
	R2407825-023L 50X	Mo (202.032 nm)	0.0009	21.62	14.9308
	R2407825-023L 50X	Na (588.995 nm)	6.5884	0.31	101402.8201
	R2407825-023L 50X	Ni (230.299 nm)	0.0008	24.41	12.0534
	R2407825-023L 50X	Pb (220.353 nm)	0.0002 u	> 100.00	2.5838
	R2407825-023L 50X	Sb (217.582 nm)	0.0025	31.72	7.7067
	R2407825-023L 50X	Se (196.026 nm)	0.0011 u	> 100.00	1.4611
	R2407825-023L 50X	Sn (189.925 nm)	0.0008	12.42	4.2198
	R2407825-023L 50X	Sr (216.596 nm)	0.0996	0.34	1973.1897
	R2407825-023L 50X	Ti (336.122 nm)	0.0008	18.52	190.0554
	R2407825-023L 50X	Tl (190.794 nm)	-0.0002 u	> 100.00	-2.0203
	R2407825-023L 50X	V (292.401 nm)	-0.0001 u	> 100.00	8.5805
	R2407825-023L 50X	Y (360.074 nm)	1.04	0.16	558624.19
	R2407825-023L 50X	Y_R (360.074 nm)	1.04	0.16	559375.50
	R2407825-023L 50X	Zn (213.857 nm)	0.0011	4.84	86.7562
8/22/2024 16:48:25	Continuing Calibration Verification	Ag (328.068 nm)	0.4692	0.09	32031.2472
	Continuing Calibration Verification	Al (237.312 nm)	9.5385	0.08	26272.3469
	Continuing Calibration Verification	As (188.980 nm)	0.9771	0.71	1767.5675
	Continuing Calibration Verification	B (249.772 nm)	2.5476	0.21	105776.0610
	Continuing Calibration Verification	Ba (230.424 nm)	9.5207	0.57	592133.2301
	Continuing Calibration Verification	Be (313.107 nm)	0.2460	0.11	306281.4781
	Continuing Calibration Verification	Ca (317.933 nm)	24.6075	0.17	971364.3393
	Continuing Calibration Verification	Cd (214.439 nm)	0.4969	0.21	32443.6236
	Continuing Calibration Verification	Co (230.786 nm)	2.4352	0.48	51598.0221
	Continuing Calibration Verification	Cr (267.716 nm)	0.5038	0.18	28891.2865
	Continuing Calibration Verification	Cu (327.395 nm)	1.1858	0.10	58398.6040
	Continuing Calibration Verification	Fe (234.350 nm)	4.8152	0.25	113721.4716
	Continuing Calibration Verification	K (766.491 nm)	23.5202	0.07	29687.8799
	Continuing Calibration Verification	Mg (279.078 nm)	25.1840	0.18	110019.6258
	Continuing Calibration Verification	Mn (257.610 nm)	0.7164	0.18	259531.8716
	Continuing Calibration Verification	Mo (202.032 nm)	2.5254	0.47	27358.6009
	Continuing Calibration Verification	Na (588.995 nm)	23.9225	0.22	403261.1511
	Continuing Calibration Verification	Ni (230.299 nm)	1.9720	0.18	25832.1685
	Continuing Calibration Verification	Pb (220.353 nm)	0.4953	0.17	2652.6747
	Continuing Calibration Verification	Sb (217.582 nm)	4.8092	0.31	11743.1018
	Continuing Calibration Verification	Se (196.026 nm)	0.4920	1.22	455.0558
	Continuing Calibration Verification	Sn (189.925 nm)	4.9538	0.02	13514.7392
	Continuing Calibration Verification	Sr (216.596 nm)	2.4372	0.25	48148.8886
	Continuing Calibration Verification	Ti (336.122 nm)	2.4881	0.17	388950.4889
	Continuing Calibration Verification	Tl (190.794 nm)	0.9976	0.20	941.2980
	Continuing Calibration Verification	V (292.401 nm)	2.4738	0.16	94779.4067
	Continuing Calibration Verification	Y (360.074 nm)	1.00	0.19	539764.28
	Continuing Calibration Verification	Y_R (360.074 nm)	1.00	0.19	540580.57
	Continuing Calibration Verification	Zn (213.857 nm)	0.9600	0.18	65249.6838
8/22/2024 16:51:29	Continuing Calibration Blank	Ag (328.068 nm)	-0.0002 u	55.89	16.0970
	Continuing Calibration Blank	Al (237.312 nm)	0.0010 u	> 100.00	-10.3648
	Continuing Calibration Blank	As (188.980 nm)	0.0024	64.33	1.1404

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank	B (249.772 nm)	0.0018	7.75	150.0106
	Continuing Calibration Blank	Ba (230.424 nm)	0.0006	10.74	48.9535
	Continuing Calibration Blank	Be (313.107 nm)	0.0000 u	> 100.00	-15.1914
	Continuing Calibration Blank	Ca (317.933 nm)	0.0027	10.50	2937.4203
	Continuing Calibration Blank	Cd (214.439 nm)	0.0000 u	> 100.00	9.4061
	Continuing Calibration Blank	Co (230.786 nm)	0.0000 u	> 100.00	3.7812
	Continuing Calibration Blank	Cr (267.716 nm)	0.0000 u	> 100.00	22.3673
	Continuing Calibration Blank	Cu (327.395 nm)	0.0000 u	> 100.00	7.5820
	Continuing Calibration Blank	Fe (234.350 nm)	0.0046	14.74	159.5674
	Continuing Calibration Blank	K (766.491 nm)	0.1159	17.90	439.8479
	Continuing Calibration Blank	Mg (279.078 nm)	0.0042	29.90	11.1907
	Continuing Calibration Blank	Mn (257.610 nm)	0.0001	15.64	33.6515
	Continuing Calibration Blank	Mo (202.032 nm)	0.0058	9.23	67.2912
	Continuing Calibration Blank	Na (588.995 nm)	0.0033 u	> 100.00	-13271.0624
	Continuing Calibration Blank	Ni (230.299 nm)	0.0004	45.43	6.2306
	Continuing Calibration Blank	Pb (220.353 nm)	-0.0008 u	> 100.00	-2.5918
	Continuing Calibration Blank	Sb (217.582 nm)	0.0149	6.54	38.1211
	Continuing Calibration Blank	Se (196.026 nm)	0.0000 u	> 100.00	0.4751
	Continuing Calibration Blank	Sn (189.925 nm)	0.0046	24.53	14.4906
	Continuing Calibration Blank	Sr (216.596 nm)	0.0001	> 100.00	8.5273
	Continuing Calibration Blank	Ti (336.122 nm)	0.0054	24.87	903.0116
	Continuing Calibration Blank	Tl (190.794 nm)	-0.0007 u	> 100.00	-2.4842
	Continuing Calibration Blank	V (292.401 nm)	0.0001 u	> 100.00	15.1402
	Continuing Calibration Blank	Y (360.074 nm)	1.04	0.05	560076.01
	Continuing Calibration Blank	Y_R (360.074 nm)	1.04	0.05	560938.40
	Continuing Calibration Blank	Zn (213.857 nm)	0.0001 u	> 100.00	17.7286
8/22/2024 16:54:33	PBW-443498	Ag (328.068 nm)	-0.0001 u	> 100.00	19.9942
	PBW-443498	Al (237.312 nm)	0.0028	29.55	-5.5491
	PBW-443498	As (188.980 nm)	0.0020	55.89	0.5142
	PBW-443498	B (249.772 nm)	0.0000 u	> 100.00	74.9351
	PBW-443498	Ba (230.424 nm)	0.0002	14.35	19.5873
	PBW-443498	Be (313.107 nm)	0.0000 u	> 100.00	-13.6430
	PBW-443498	Ca (317.933 nm)	0.0003	> 100.00	2842.4623
	PBW-443498	Cd (214.439 nm)	0.0000 u	> 100.00	8.6425
	PBW-443498	Co (230.786 nm)	0.0000 u	> 100.00	3.9740
	PBW-443498	Cr (267.716 nm)	0.0000	68.08	26.7316
	PBW-443498	Cu (327.395 nm)	0.0000 u	> 100.00	7.5107
	PBW-443498	Fe (234.350 nm)	0.0017	9.38	92.0489
	PBW-443498	K (766.491 nm)	0.0456	31.66	351.8955
	PBW-443498	Mg (279.078 nm)	0.0022	4.70	2.8270
	PBW-443498	Mn (257.610 nm)	0.0000	45.53	24.8850
	PBW-443498	Mo (202.032 nm)	0.0014	25.51	20.3101
	PBW-443498	Na (588.995 nm)	0.0053	40.26	-13235.4003
	PBW-443498	Ni (230.299 nm)	0.0004	39.63	7.1679
	PBW-443498	Pb (220.353 nm)	0.0000 u	> 100.00	1.4132
	PBW-443498	Sb (217.582 nm)	0.0072	12.63	19.2753
	PBW-443498	Se (196.026 nm)	0.0009	26.55	1.2636
	PBW-443498	Sn (189.925 nm)	0.0011 u	> 100.00	5.0534
	PBW-443498	Sr (216.596 nm)	0.0000 u	> 100.00	5.7781
	PBW-443498	Ti (336.122 nm)	0.0012	40.22	243.1365
	PBW-443498	Tl (190.794 nm)	0.0000 u	> 100.00	-1.8765
	PBW-443498	V (292.401 nm)	-0.0001 u	> 100.00	7.1520
	PBW-443498	Y (360.074 nm)	1.06	0.15	571693.98
	PBW-443498	Y_R (360.074 nm)	1.06	0.15	572504.00
	PBW-443498	Zn (213.857 nm)	0.0003	8.95	30.5379
8/22/2024 16:57:38	LCSW-443498	Ag (328.068 nm)	0.0446	0.24	3065.7172
	LCSW-443498	Al (237.312 nm)	1.8716	0.42	5144.4831

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	LCSW-443498	As (188.980 nm)	0.0349	0.92	60.1597
	LCSW-443498	B (249.772 nm)	0.9558	0.21	39729.7330
	LCSW-443498	Ba (230.424 nm)	1.8854	0.23	117269.5663
	LCSW-443498	Be (313.107 nm)	0.0471	0.24	58613.1988
	LCSW-443498	Ca (317.933 nm)	1.9036	0.19	77757.3091
	LCSW-443498	Cd (214.439 nm)	0.0490	0.25	3211.0175
	LCSW-443498	Co (230.786 nm)	0.4797	0.19	10166.2984
	LCSW-443498	Cr (267.716 nm)	0.1939	0.32	11135.8240
	LCSW-443498	Cu (327.395 nm)	0.2349	0.35	11576.5170
	LCSW-443498	Fe (234.350 nm)	0.9484	0.27	22439.5549
	LCSW-443498	K (766.491 nm)	17.8262	0.30	22572.1954
	LCSW-443498	Mg (279.078 nm)	1.8928	0.25	8262.7093
	LCSW-443498	Mn (257.610 nm)	0.4616	0.23	167214.9052
	LCSW-443498	Mo (202.032 nm)	0.4784	2.27	5186.1246
	LCSW-443498	Na (588.995 nm)	18.3760	0.40	306674.0267
	LCSW-443498	Ni (230.299 nm)	0.4797	0.15	6285.7261
	LCSW-443498	Pb (220.353 nm)	0.4973	0.27	2663.2778
	LCSW-443498	Sb (217.582 nm)	0.4742	0.53	1159.5103
	LCSW-443498	Se (196.026 nm)	0.9406	0.65	869.5217
	LCSW-443498	Sn (189.925 nm)	4.5740	0.71	12478.6275
	LCSW-443498	Sr (216.596 nm)	1.9172	0.21	37878.4573
	LCSW-443498	Ti (336.122 nm)	0.4798	0.23	75060.9237
	LCSW-443498	Tl (190.794 nm)	1.9172	0.25	1810.6465
	LCSW-443498	V (292.401 nm)	0.4752	0.18	18216.4272
	LCSW-443498	Y (360.074 nm)	1.04	0.16	557995.00
	LCSW-443498	Y_R (360.074 nm)	1.04	0.16	558837.89
	LCSW-443498	Zn (213.857 nm)	0.4743	0.21	32245.6373
8/22/2024 17:00:42	R2407634-004	Ag (328.068 nm)	-0.0002 u	11.95	15.4028
	R2407634-004	Al (237.312 nm)	0.0135	10.30	24.1857
	R2407634-004	As (188.980 nm)	0.0010	41.36	-1.3929
	R2407634-004	B (249.772 nm)	0.0091	0.25	453.4558
	R2407634-004	Ba (230.424 nm)	0.0407	0.62	2539.6606
	R2407634-004	Be (313.107 nm)	0.0000 u	> 100.00	-12.1606
	R2407634-004	Ca (317.933 nm)	5.5854	0.18	222668.9315
	R2407634-004	Cd (214.439 nm)	-0.0001 u	> 100.00	6.4321
	R2407634-004	Co (230.786 nm)	0.0000 u	> 100.00	3.5497
	R2407634-004	Cr (267.716 nm)	0.0004	17.15	47.9341
	R2407634-004	Cu (327.395 nm)	0.0002	31.44	17.1943
	R2407634-004	Fe (234.350 nm)	0.1375	0.44	3297.2776
	R2407634-004	K (766.491 nm)	0.8454	2.77	1351.4692
	R2407634-004	Mg (279.078 nm)	0.9716	0.25	4238.0681
	R2407634-004	Mn (257.610 nm)	0.0062	0.27	2238.7264
	R2407634-004	Mo (202.032 nm)	0.0041	14.92	48.9524
	R2407634-004	Na (588.995 nm)	0.9924	0.85	3953.5599
	R2407634-004	Ni (230.299 nm)	0.0043	11.76	57.8113
	R2407634-004	Pb (220.353 nm)	0.0002 u	> 100.00	2.6147
	R2407634-004	Sb (217.582 nm)	0.0062	21.96	16.7817
	R2407634-004	Se (196.026 nm)	0.0017 u	> 100.00	2.0581
	R2407634-004	Sn (189.925 nm)	0.0469	24.54	129.8662
	R2407634-004	Sr (216.596 nm)	0.0215	1.14	431.7995
	R2407634-004	Ti (336.122 nm)	0.0025	25.71	447.4203
	R2407634-004	Tl (190.794 nm)	0.0014	55.76	-0.5069
	R2407634-004	V (292.401 nm)	-0.0001 u	76.31	6.8630
	R2407634-004	Y (360.074 nm)	1.06	0.14	568866.18
	R2407634-004	Y_R (360.074 nm)	1.06	0.14	569723.42
	R2407634-004	Zn (213.857 nm)	0.0047	0.56	332.1018
8/22/2024 17:03:46	R2407364-006	Ag (328.068 nm)	-0.0001 u	89.39	19.3695

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407364-006	Al (237.312 nm)	0.0389	1.56	94.1711
	R2407364-006	As (188.980 nm)	0.0018	65.38	0.0447
	R2407364-006	B (249.772 nm)	0.0068	3.22	356.4492
	R2407364-006	Ba (230.424 nm)	0.0113	0.83	714.4814
	R2407364-006	Be (313.107 nm)	0.0000	68.02	-5.6949
	R2407364-006	Ca (317.933 nm)	10.9071	0.21	432127.7052
	R2407364-006	Cd (214.439 nm)	0.0000 u	> 100.00	10.4347
	R2407364-006	Co (230.786 nm)	-0.0001 u	> 100.00	2.1124
	R2407364-006	Cr (267.716 nm)	0.0008	4.96	68.2544
	R2407364-006	Cu (327.395 nm)	0.0002	76.20	19.5757
	R2407364-006	Fe (234.350 nm)	0.1780	0.53	4253.0789
	R2407364-006	K (766.491 nm)	0.4866	4.95	903.0928
	R2407364-006	Mg (279.078 nm)	2.9432	0.23	12851.6227
	R2407364-006	Mn (257.610 nm)	0.0303	0.20	11002.8500
	R2407364-006	Mo (202.032 nm)	0.0010	38.76	15.9884
	R2407364-006	Na (588.995 nm)	3.0473	0.30	39737.9445
	R2407364-006	Ni (230.299 nm)	0.0034	4.66	46.0428
	R2407364-006	Pb (220.353 nm)	0.0001 u	> 100.00	1.9357
	R2407364-006	Sb (217.582 nm)	0.0041	16.49	11.8044
	R2407364-006	Se (196.026 nm)	-0.0019 u	98.31	-1.3240
	R2407364-006	Sn (189.925 nm)	0.0112	39.89	32.6222
	R2407364-006	Sr (216.596 nm)	0.0278	0.43	556.4803
	R2407364-006	Ti (336.122 nm)	0.0011	25.59	233.1396
	R2407364-006	Tl (190.794 nm)	0.0008 u	> 100.00	-1.0854
	R2407364-006	V (292.401 nm)	0.0001 u	89.36	16.1681
	R2407364-006	Y (360.074 nm)	1.05	0.12	566741.97
	R2407364-006	Y_R (360.074 nm)	1.05	0.12	567591.46
	R2407364-006	Zn (213.857 nm)	0.0039	0.67	281.5998
8/22/2024 17:06:50	R2407634-006S	Ag (328.068 nm)	0.0439	0.27	3021.0296
	R2407634-006S	Al (237.312 nm)	1.8913	0.41	5198.7703
	R2407634-006S	As (188.980 nm)	0.0382	3.31	66.1184
	R2407634-006S	B (249.772 nm)	0.9605	0.25	39926.0753
	R2407634-006S	Ba (230.424 nm)	1.8688	0.44	116236.0828
	R2407634-006S	Be (313.107 nm)	0.0470	0.23	58470.0117
	R2407634-006S	Ca (317.933 nm)	12.4591	0.23	493213.1836
	R2407634-006S	Cd (214.439 nm)	0.0481	0.62	3148.8424
	R2407634-006S	Co (230.786 nm)	0.4721	0.20	10006.8999
	R2407634-006S	Cr (267.716 nm)	0.1936	0.11	11119.3059
	R2407634-006S	Cu (327.395 nm)	0.2339	0.16	11524.3862
	R2407634-006S	Fe (234.350 nm)	1.1161	0.06	26396.9660
	R2407634-006S	K (766.491 nm)	18.2781	0.12	23136.9082
	R2407634-006S	Mg (279.078 nm)	4.7111	0.24	20575.5912
	R2407634-006S	Mn (257.610 nm)	0.4870	0.20	176408.6677
	R2407634-006S	Mo (202.032 nm)	0.4818	1.86	5223.9352
	R2407634-006S	Na (588.995 nm)	21.2924	0.31	357461.6041
	R2407634-006S	Ni (230.299 nm)	0.4753	0.11	6227.7470
	R2407634-006S	Pb (220.353 nm)	0.4897	0.20	2622.6236
	R2407634-006S	Sb (217.582 nm)	0.4758	0.71	1163.3970
	R2407634-006S	Se (196.026 nm)	0.9353	0.61	864.5901
	R2407634-006S	Sn (189.925 nm)	4.6171	0.57	12596.2316
	R2407634-006S	Sr (216.596 nm)	1.9275	0.30	38081.9326
	R2407634-006S	Ti (336.122 nm)	0.4827	0.14	75502.5899
	R2407634-006S	Tl (190.794 nm)	1.8972	0.29	1791.7503
	R2407634-006S	V (292.401 nm)	0.4745	0.23	18190.0398
	R2407634-006S	Y (360.074 nm)	1.03	0.12	554078.10
	R2407634-006S	Y_R (360.074 nm)	1.03	0.12	554920.79
	R2407634-006S	Zn (213.857 nm)	0.4706	0.21	31990.2132

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
8/22/2024 17:09:54	R2407634-006SD	Ag (328.068 nm)	0.0455	0.21	3129.4703
	R2407634-006SD	Al (237.312 nm)	1.9612	0.26	5391.3769
	R2407634-006SD	As (188.980 nm)	0.0391	8.49	67.6423
	R2407634-006SD	B (249.772 nm)	0.9971	0.15	41444.3672
	R2407634-006SD	Ba (230.424 nm)	1.9394	0.21	120624.5152
	R2407634-006SD	Be (313.107 nm)	0.0487	0.21	60609.8090
	R2407634-006SD	Ca (317.933 nm)	12.6472	0.24	500615.3234
	R2407634-006SD	Cd (214.439 nm)	0.0499	0.37	3265.7898
	R2407634-006SD	Co (230.786 nm)	0.4905	0.12	10396.5863
	R2407634-006SD	Cr (267.716 nm)	0.2009	0.17	11536.2650
	R2407634-006SD	Cu (327.395 nm)	0.2428	0.37	11963.1210
	R2407634-006SD	Fe (234.350 nm)	1.1546	0.06	27307.7267
	R2407634-006SD	K (766.491 nm)	19.0002	0.05	24039.2404
	R2407634-006SD	Mg (279.078 nm)	4.8097	0.17	21006.3978
	R2407634-006SD	Mn (257.610 nm)	0.5044	0.17	182744.2496
	R2407634-006SD	Mo (202.032 nm)	0.4996	1.11	5416.3486
	R2407634-006SD	Na (588.995 nm)	22.0250	0.41	370219.3186
	R2407634-006SD	Ni (230.299 nm)	0.4930	0.32	6459.5744
	R2407634-006SD	Pb (220.353 nm)	0.5042	0.20	2700.3331
	R2407634-006SD	Sb (217.582 nm)	0.4918	0.55	1202.3524
	R2407634-006SD	Se (196.026 nm)	0.9662	0.47	893.2145
	R2407634-006SD	Sn (189.925 nm)	4.8227	0.37	13157.1610
	R2407634-006SD	Sr (216.596 nm)	1.9768	0.21	39054.1707
	R2407634-006SD	Ti (336.122 nm)	0.4986	0.07	77997.2864
	R2407634-006SD	Tl (190.794 nm)	1.9639	0.38	1854.8230
	R2407634-006SD	V (292.401 nm)	0.4921	0.19	18864.2641
	R2407634-006SD	Y (360.074 nm)	1.03	0.22	554015.34
	R2407634-006SD	Y_R (360.074 nm)	1.03	0.22	554862.45
	R2407634-006SD	Zn (213.857 nm)	0.4876	0.13	33145.7690
8/22/2024 17:12:57	R2407634-006A	Ag (328.068 nm)	0.0449	0.88	3086.9462
	R2407634-006A	Al (237.312 nm)	1.9259	0.81	5294.0797
	R2407634-006A	As (188.980 nm)	0.0379	3.29	65.5045
	R2407634-006A	B (249.772 nm)	0.9775	0.62	40632.8939
	R2407634-006A	Ba (230.424 nm)	1.8951	0.67	117871.5294
	R2407634-006A	Be (313.107 nm)	0.0476	0.60	59260.3063
	R2407634-006A	Ca (317.933 nm)	12.4639	0.21	493400.9255
	R2407634-006A	Cd (214.439 nm)	0.0487	0.89	3186.6155
	R2407634-006A	Co (230.786 nm)	0.4783	0.69	10138.3222
	R2407634-006A	Cr (267.716 nm)	0.1960	0.62	11257.4185
	R2407634-006A	Cu (327.395 nm)	0.2378	0.78	11718.6750
	R2407634-006A	Fe (234.350 nm)	1.1291	0.47	26704.1467
	R2407634-006A	K (766.491 nm)	18.6733	0.63	23630.8069
	R2407634-006A	Mg (279.078 nm)	4.7319	0.25	20666.1810
	R2407634-006A	Mn (257.610 nm)	0.4933	0.61	178696.0280
	R2407634-006A	Mo (202.032 nm)	0.4893	0.98	5304.6547
	R2407634-006A	Na (588.995 nm)	21.6610	0.59	363878.9724
	R2407634-006A	Ni (230.299 nm)	0.4808	0.81	6299.3548
	R2407634-006A	Pb (220.353 nm)	0.4952	0.93	2651.9715
	R2407634-006A	Sb (217.582 nm)	0.4847	0.57	1185.1727
	R2407634-006A	Se (196.026 nm)	0.9509	0.12	879.0499
	R2407634-006A	Sn (189.925 nm)	4.7269	0.19	12895.7483
	R2407634-006A	Sr (216.596 nm)	1.9418	0.40	38363.4792
	R2407634-006A	Ti (336.122 nm)	0.4887	0.18	76443.1022
	R2407634-006A	Tl (190.794 nm)	1.9234	0.67	1816.5642
	R2407634-006A	V (292.401 nm)	0.4814	0.62	18452.0970
	R2407634-006A	Y (360.074 nm)	1.03	0.11	555185.99
	R2407634-006A	Y_R (360.074 nm)	1.03	0.11	556055.57

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407634-006A	Zn (213.857 nm)	0.4802	0.62	32644.4261
8/22/2024 17:16:01	R2407634-006L 5X	Ag (328.068 nm)	-0.0002 u	43.37	15.3297
	R2407634-006L 5X	Al (237.312 nm)	0.0088	9.34	11.0147
	R2407634-006L 5X	As (188.980 nm)	0.0013	> 100.00	-0.7288
	R2407634-006L 5X	B (249.772 nm)	0.0024	7.46	174.0211
	R2407634-006L 5X	Ba (230.424 nm)	0.0023	5.11	154.6675
	R2407634-006L 5X	Be (313.107 nm)	0.0000 u	> 100.00	-15.9680
	R2407634-006L 5X	Ca (317.933 nm)	2.1657	0.26	88073.2383
	R2407634-006L 5X	Cd (214.439 nm)	-0.0001 u	82.74	4.8192
	R2407634-006L 5X	Co (230.786 nm)	0.0001	98.01	6.2967
	R2407634-006L 5X	Cr (267.716 nm)	0.0002	36.24	36.2745
	R2407634-006L 5X	Cu (327.395 nm)	-0.0001 u	> 100.00	3.5467
	R2407634-006L 5X	Fe (234.350 nm)	0.0395	0.91	983.7417
	R2407634-006L 5X	K (766.491 nm)	0.1888	21.36	530.8555
	R2407634-006L 5X	Mg (279.078 nm)	0.5869	0.05	2557.2274
	R2407634-006L 5X	Mn (257.610 nm)	0.0061	0.36	2236.7382
	R2407634-006L 5X	Mo (202.032 nm)	0.0037	17.95	45.0154
	R2407634-006L 5X	Na (588.995 nm)	0.6360	0.76	-2251.8373
	R2407634-006L 5X	Ni (230.299 nm)	0.0011	30.18	15.8967
	R2407634-006L 5X	Pb (220.353 nm)	-0.0009 u	45.24	-3.0953
	R2407634-006L 5X	Sb (217.582 nm)	0.0062	18.02	16.9215
	R2407634-006L 5X	Se (196.026 nm)	0.0032 u	92.41	3.4126
	R2407634-006L 5X	Sn (189.925 nm)	0.0528	32.22	146.0335
	R2407634-006L 5X	Sr (216.596 nm)	0.0053	1.61	111.3511
	R2407634-006L 5X	Ti (336.122 nm)	0.0023	28.39	414.6399
	R2407634-006L 5X	Tl (190.794 nm)	0.0009	83.31	-0.9858
	R2407634-006L 5X	V (292.401 nm)	-0.0001 u	52.20	5.6352
	R2407634-006L 5X	Y (360.074 nm)	1.05	0.16	563944.15
	R2407634-006L 5X	Y_R (360.074 nm)	1.05	0.16	564843.57
	R2407634-006L 5X	Zn (213.857 nm)	0.0009	5.30	71.9147
8/22/2024 17:19:05	R2407634-008	Ag (328.068 nm)	-0.0001 u	> 100.00	23.1449
	R2407634-008	Al (237.312 nm)	0.0176	8.95	35.4403
	R2407634-008	As (188.980 nm)	0.0014	45.36	-0.5122
	R2407634-008	B (249.772 nm)	0.0070	1.71	363.7807
	R2407634-008	Ba (230.424 nm)	0.0114	0.34	720.8636
	R2407634-008	Be (313.107 nm)	0.0000 u	> 100.00	-16.9892
	R2407634-008	Ca (317.933 nm)	11.1997	0.18	443643.6920
	R2407634-008	Cd (214.439 nm)	0.0000 u	> 100.00	8.1465
	R2407634-008	Co (230.786 nm)	0.0001 u	> 100.00	5.7748
	R2407634-008	Cr (267.716 nm)	0.0005	14.45	53.9336
	R2407634-008	Cu (327.395 nm)	0.0000 u	> 100.00	9.8029
	R2407634-008	Fe (234.350 nm)	0.0922	0.73	2227.7439
	R2407634-008	K (766.491 nm)	0.4677	4.28	879.4554
	R2407634-008	Mg (279.078 nm)	3.0679	0.19	13396.2959
	R2407634-008	Mn (257.610 nm)	0.0046	0.55	1686.7007
	R2407634-008	Mo (202.032 nm)	0.0013	38.31	18.7203
	R2407634-008	Na (588.995 nm)	3.2276	0.15	42878.3927
	R2407634-008	Ni (230.299 nm)	0.0032	2.93	43.9062
	R2407634-008	Pb (220.353 nm)	-0.0001 u	> 100.00	1.3348
	R2407634-008	Sb (217.582 nm)	0.0044	16.11	12.4242
	R2407634-008	Se (196.026 nm)	0.0009	84.42	1.2861
	R2407634-008	Sn (189.925 nm)	0.0174	36.54	49.4622
	R2407634-008	Sr (216.596 nm)	0.0287	0.35	573.4398
	R2407634-008	Ti (336.122 nm)	0.0007	32.79	175.1908
	R2407634-008	Tl (190.794 nm)	0.0009 u	> 100.00	-1.0249
	R2407634-008	V (292.401 nm)	0.0000 u	> 100.00	12.0273
	R2407634-008	Y (360.074 nm)	1.05	0.08	565839.14

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407634-008	Y_R (360.074 nm)	1.05	0.07	566734.38
	R2407634-008	Zn (213.857 nm)	0.0031	0.63	224.4884
8/22/2024 17:22:09	R2407634-008S	Ag (328.068 nm)	0.0448	0.33	3080.4391
	R2407634-008S	Al (237.312 nm)	1.9140	0.26	5261.2244
	R2407634-008S	As (188.980 nm)	0.0381	3.51	65.9579
	R2407634-008S	B (249.772 nm)	0.9803	0.17	40746.7827
	R2407634-008S	Ba (230.424 nm)	1.9001	0.24	118182.1261
	R2407634-008S	Be (313.107 nm)	0.0478	0.18	59488.7986
	R2407634-008S	Ca (317.933 nm)	12.8341	0.16	507970.9990
	R2407634-008S	Cd (214.439 nm)	0.0490	0.16	3205.8450
	R2407634-008S	Co (230.786 nm)	0.4813	0.17	10200.5187
	R2407634-008S	Cr (267.716 nm)	0.1966	0.27	11287.2377
	R2407634-008S	Cu (327.395 nm)	0.2383	0.21	11742.7297
	R2407634-008S	Fe (234.350 nm)	1.0488	0.07	24809.1568
	R2407634-008S	K (766.491 nm)	18.7424	0.47	23717.1577
	R2407634-008S	Mg (279.078 nm)	4.8764	0.16	21297.7175
	R2407634-008S	Mn (257.610 nm)	0.4706	0.16	170486.3303
	R2407634-008S	Mo (202.032 nm)	0.4865	1.53	5274.8179
	R2407634-008S	Na (588.995 nm)	21.9546	0.38	368991.9869
	R2407634-008S	Ni (230.299 nm)	0.4835	0.15	6334.2303
	R2407634-008S	Pb (220.353 nm)	0.4966	0.44	2659.4609
	R2407634-008S	Sb (217.582 nm)	0.4790	0.52	1171.1293
	R2407634-008S	Se (196.026 nm)	0.9513	0.29	879.3741
	R2407634-008S	Sn (189.925 nm)	4.6627	0.45	12720.4800
	R2407634-008S	Sr (216.596 nm)	1.9420	0.15	38368.2491
	R2407634-008S	Ti (336.122 nm)	0.4865	0.10	76099.1038
	R2407634-008S	Tl (190.794 nm)	1.9330	0.21	1825.5810
	R2407634-008S	V (292.401 nm)	0.4828	0.13	18507.7537
	R2407634-008S	Y (360.074 nm)	1.03	0.14	552831.89
	R2407634-008S	Y_R (360.074 nm)	1.03	0.14	553682.10
	R2407634-008S	Zn (213.857 nm)	0.4778	0.19	32483.7245
8/22/2024 17:25:13	Continuing Calibration Verification	Ag (328.068 nm)	0.4699	0.14	32077.4849
	Continuing Calibration Verification	Al (237.312 nm)	9.5912	0.09	26417.5841
	Continuing Calibration Verification	As (188.980 nm)	0.9805	0.08	1773.6800
	Continuing Calibration Verification	B (249.772 nm)	2.5503	0.24	105888.1042
	Continuing Calibration Verification	Ba (230.424 nm)	9.4732	0.39	589174.9776
	Continuing Calibration Verification	Be (313.107 nm)	0.2460	0.25	306224.3610
	Continuing Calibration Verification	Ca (317.933 nm)	24.5831	0.30	970404.0102
	Continuing Calibration Verification	Cd (214.439 nm)	0.4972	0.26	32463.4435
	Continuing Calibration Verification	Co (230.786 nm)	2.4368	0.17	51633.2586
	Continuing Calibration Verification	Cr (267.716 nm)	0.5034	0.24	28869.8318
	Continuing Calibration Verification	Cu (327.395 nm)	1.1886	0.18	58536.6784
	Continuing Calibration Verification	Fe (234.350 nm)	4.8213	0.33	113864.0251
	Continuing Calibration Verification	K (766.491 nm)	23.6448	0.25	29843.6358
	Continuing Calibration Verification	Mg (279.078 nm)	25.1442	0.25	109845.8258
	Continuing Calibration Verification	Mn (257.610 nm)	0.7165	0.25	259577.7388
	Continuing Calibration Verification	Mo (202.032 nm)	2.5272	0.50	27378.7431
	Continuing Calibration Verification	Na (588.995 nm)	24.0361	0.17	405239.9305
	Continuing Calibration Verification	Ni (230.299 nm)	1.9737	0.27	25855.1904
	Continuing Calibration Verification	Pb (220.353 nm)	0.4961	0.20	2656.7648
	Continuing Calibration Verification	Sb (217.582 nm)	4.8385	0.34	11814.7511
	Continuing Calibration Verification	Se (196.026 nm)	0.4940	0.64	456.8823
	Continuing Calibration Verification	Sn (189.925 nm)	5.0191	0.57	13692.8631
	Continuing Calibration Verification	Sr (216.596 nm)	2.4403	0.21	48210.9490
	Continuing Calibration Verification	Ti (336.122 nm)	2.4971	0.21	390368.0243
	Continuing Calibration Verification	Tl (190.794 nm)	0.9967	0.50	940.4174
	Continuing Calibration Verification	V (292.401 nm)	2.4732	0.24	94754.9357

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification	Y (360.074 nm)	1.00	0.23	537806.67
	Continuing Calibration Verification	Y_R (360.074 nm)	1.00	0.23	538660.87
	Continuing Calibration Verification	Zn (213.857 nm)	0.9611	0.32	65322.0078
8/22/2024 17:28:17	Continuing Calibration Blank	Ag (328.068 nm)	-0.0001 u	> 100.00	23.4941
	Continuing Calibration Blank	Al (237.312 nm)	0.0022	31.67	-7.1222
	Continuing Calibration Blank	As (188.980 nm)	0.0012 u	> 100.00	-0.8741
	Continuing Calibration Blank	B (249.772 nm)	0.0022	9.64	168.3516
	Continuing Calibration Blank	Ba (230.424 nm)	0.0008	8.08	59.3301
	Continuing Calibration Blank	Be (313.107 nm)	0.0000	58.53	-10.4362
	Continuing Calibration Blank	Ca (317.933 nm)	0.0033	8.31	2961.6323
	Continuing Calibration Blank	Cd (214.439 nm)	0.0000 u	> 100.00	10.5675
	Continuing Calibration Blank	Co (230.786 nm)	0.0001	49.29	5.9153
	Continuing Calibration Blank	Cr (267.716 nm)	0.0001	9.87	29.3005
	Continuing Calibration Blank	Cu (327.395 nm)	-0.0002 u	27.12	1.0987
	Continuing Calibration Blank	Fe (234.350 nm)	0.0034	9.71	131.1902
	Continuing Calibration Blank	K (766.491 nm)	0.0983	23.05	417.7548
	Continuing Calibration Blank	Mg (279.078 nm)	0.0039	21.57	10.0621
	Continuing Calibration Blank	Mn (257.610 nm)	0.0001	30.23	36.9366
	Continuing Calibration Blank	Mo (202.032 nm)	0.0054	10.84	62.7092
	Continuing Calibration Blank	Na (588.995 nm)	0.0074	35.41	-13199.2413
	Continuing Calibration Blank	Ni (230.299 nm)	0.0002	99.81	4.2112
	Continuing Calibration Blank	Pb (220.353 nm)	0.0001 u	> 100.00	2.2070
	Continuing Calibration Blank	Sb (217.582 nm)	0.0181	9.04	45.9598
	Continuing Calibration Blank	Se (196.026 nm)	0.0001 u	> 100.00	0.5005
	Continuing Calibration Blank	Sn (189.925 nm)	0.0151	35.22	43.1342
	Continuing Calibration Blank	Sr (216.596 nm)	0.0001	66.46	8.5457
	Continuing Calibration Blank	Ti (336.122 nm)	0.0042	24.70	726.3416
	Continuing Calibration Blank	Tl (190.794 nm)	0.0005 u	> 100.00	-1.4259
	Continuing Calibration Blank	V (292.401 nm)	0.0000	66.15	11.5405
	Continuing Calibration Blank	Y (360.074 nm)	1.04	0.15	559019.40
	Continuing Calibration Blank	Y_R (360.074 nm)	1.04	0.15	559848.13
	Continuing Calibration Blank	Zn (213.857 nm)	0.0001	37.56	19.4109
8/22/2024 17:31:21	R2407634-008SD	Ag (328.068 nm)	0.0452	0.35	3109.0013
	R2407634-008SD	Al (237.312 nm)	1.9280	0.20	5299.9847
	R2407634-008SD	As (188.980 nm)	0.0386	3.70	66.8831
	R2407634-008SD	B (249.772 nm)	0.9887	0.14	41094.4533
	R2407634-008SD	Ba (230.424 nm)	1.9202	0.23	119434.9560
	R2407634-008SD	Be (313.107 nm)	0.0482	0.12	60031.1011
	R2407634-008SD	Ca (317.933 nm)	12.9881	0.08	514032.5166
	R2407634-008SD	Cd (214.439 nm)	0.0494	0.18	3231.0205
	R2407634-008SD	Co (230.786 nm)	0.4856	0.25	10291.9923
	R2407634-008SD	Cr (267.716 nm)	0.1985	0.17	11399.9764
	R2407634-008SD	Cu (327.395 nm)	0.2398	0.12	11818.7192
	R2407634-008SD	Fe (234.350 nm)	1.0593	0.11	25056.3318
	R2407634-008SD	K (766.491 nm)	18.8150	0.25	23807.9110
	R2407634-008SD	Mg (279.078 nm)	4.9484	0.11	21612.3260
	R2407634-008SD	Mn (257.610 nm)	0.4747	0.13	171985.2635
	R2407634-008SD	Mo (202.032 nm)	0.4932	1.60	5346.7307
	R2407634-008SD	Na (588.995 nm)	22.0933	0.23	371408.4680
	R2407634-008SD	Ni (230.299 nm)	0.4873	0.24	6385.1672
	R2407634-008SD	Pb (220.353 nm)	0.5019	0.12	2687.6348
	R2407634-008SD	Sb (217.582 nm)	0.4848	1.01	1185.1950
	R2407634-008SD	Se (196.026 nm)	0.9616	0.66	888.9134
	R2407634-008SD	Sn (189.925 nm)	4.7003	0.58	12823.2229
	R2407634-008SD	Sr (216.596 nm)	1.9567	0.19	38658.4999
	R2407634-008SD	Ti (336.122 nm)	0.4919	0.25	76940.3503
	R2407634-008SD	Tl (190.794 nm)	1.9465	0.28	1838.3568

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407634-008SD	V (292.401 nm)	0.4870	0.10	18667.0296
	R2407634-008SD	Y (360.074 nm)	1.03	0.08	555275.94
	R2407634-008SD	Y_R (360.074 nm)	1.03	0.08	556143.31
	R2407634-008SD	Zn (213.857 nm)	0.4817	0.10	32745.6763
8/22/2024 17:34:25	R2407634-008A	Ag (328.068 nm)	0.0440	0.21	3027.0057
	R2407634-008A	Al (237.312 nm)	1.8697	0.13	5139.2958
	R2407634-008A	As (188.980 nm)	0.0363	5.65	62.6731
	R2407634-008A	B (249.772 nm)	0.9602	0.10	39915.3606
	R2407634-008A	Ba (230.424 nm)	1.8631	0.10	115878.1681
	R2407634-008A	Be (313.107 nm)	0.0467	0.05	58147.9977
	R2407634-008A	Ca (317.933 nm)	12.7356	0.16	504096.4296
	R2407634-008A	Cd (214.439 nm)	0.0479	0.48	3133.9535
	R2407634-008A	Co (230.786 nm)	0.4713	0.14	9988.0525
	R2407634-008A	Cr (267.716 nm)	0.1923	0.19	11043.6605
	R2407634-008A	Cu (327.395 nm)	0.2326	0.11	11464.0833
	R2407634-008A	Fe (234.350 nm)	1.0283	0.21	24325.7258
	R2407634-008A	K (766.491 nm)	18.3195	0.50	23188.6693
	R2407634-008A	Mg (279.078 nm)	4.8242	0.08	21069.5764
	R2407634-008A	Mn (257.610 nm)	0.4604	0.08	166799.0781
	R2407634-008A	Mo (202.032 nm)	0.4868	1.06	5277.9925
	R2407634-008A	Na (588.995 nm)	21.4690	0.25	360537.0349
	R2407634-008A	Ni (230.299 nm)	0.4728	0.16	6194.3448
	R2407634-008A	Pb (220.353 nm)	0.4880	0.29	2613.6823
	R2407634-008A	Sb (217.582 nm)	0.4811	0.65	1176.3312
	R2407634-008A	Se (196.026 nm)	0.9469	0.48	875.3652
	R2407634-008A	Sn (189.925 nm)	4.6900	0.49	12794.9733
	R2407634-008A	Sr (216.596 nm)	1.9277	0.21	38084.8840
	R2407634-008A	Ti (336.122 nm)	0.4849	0.13	75856.3851
	R2407634-008A	Tl (190.794 nm)	1.8927	0.49	1787.5328
	R2407634-008A	V (292.401 nm)	0.4723	0.06	18103.0506
	R2407634-008A	Y (360.074 nm)	1.03	0.12	554005.14
	R2407634-008A	Y_R (360.074 nm)	1.03	0.12	554895.18
	R2407634-008A	Zn (213.857 nm)	0.4676	0.05	31790.7138
8/22/2024 17:37:29	R2407634-008L 5X	Ag (328.068 nm)	-0.0001 u	40.62	19.7009
	R2407634-008L 5X	Al (237.312 nm)	0.0045	10.49	-0.7349
	R2407634-008L 5X	As (188.980 nm)	0.0013 u	> 100.00	-0.7055
	R2407634-008L 5X	B (249.772 nm)	0.0024	6.23	176.7640
	R2407634-008L 5X	Ba (230.424 nm)	0.0025	3.42	162.1513
	R2407634-008L 5X	Be (313.107 nm)	0.0000	> 100.00	-14.3071
	R2407634-008L 5X	Ca (317.933 nm)	2.2783	0.30	92505.0891
	R2407634-008L 5X	Cd (214.439 nm)	0.0000 u	> 100.00	9.0085
	R2407634-008L 5X	Co (230.786 nm)	-0.0001 u	59.16	0.8797
	R2407634-008L 5X	Cr (267.716 nm)	0.0002	28.66	34.3439
	R2407634-008L 5X	Cu (327.395 nm)	-0.0001 u	35.76	4.5002
	R2407634-008L 5X	Fe (234.350 nm)	0.0223	1.28	576.3028
	R2407634-008L 5X	K (766.491 nm)	0.1947	14.97	538.3135
	R2407634-008L 5X	Mg (279.078 nm)	0.6265	0.25	2730.2848
	R2407634-008L 5X	Mn (257.610 nm)	0.0010	0.77	376.2962
	R2407634-008L 5X	Mo (202.032 nm)	0.0035	12.68	43.0648
	R2407634-008L 5X	Na (588.995 nm)	0.6699	0.90	-1663.1810
	R2407634-008L 5X	Ni (230.299 nm)	0.0012	12.28	17.0877
	R2407634-008L 5X	Pb (220.353 nm)	0.0004 u	> 100.00	3.9167
	R2407634-008L 5X	Sb (217.582 nm)	0.0066	23.96	17.8060
	R2407634-008L 5X	Se (196.026 nm)	0.0031	93.06	3.3353
	R2407634-008L 5X	Sn (189.925 nm)	0.0486	32.47	134.6563
	R2407634-008L 5X	Sr (216.596 nm)	0.0056	1.94	117.3530
	R2407634-008L 5X	Ti (336.122 nm)	0.0021	26.58	390.1517

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407634-008L 5X	Tl (190.794 nm)	0.0000 u	> 100.00	-1.8806
	R2407634-008L 5X	V (292.401 nm)	0.0000 u	> 100.00	9.0559
	R2407634-008L 5X	Y (360.074 nm)	1.05	0.14	563894.44
	R2407634-008L 5X	Y_R (360.074 nm)	1.05	0.14	564777.05
	R2407634-008L 5X	Zn (213.857 nm)	0.0007	7.43	59.9200
8/22/2024 17:40:34	R2407637-002	Ag (328.068 nm)	0.0001 u	> 100.00	30.6009
	R2407637-002	Al (237.312 nm)	0.0014	77.34	-9.2864
	R2407637-002	As (188.980 nm)	0.0009 u	> 100.00	-1.5187
	R2407637-002	B (249.772 nm)	0.2788	0.14	11644.0838
	R2407637-002	Ba (230.424 nm)	0.0340	0.03	2125.3790
	R2407637-002	Be (313.107 nm)	0.0000 u	> 100.00	-20.4366
	R2407637-002	Ca (317.933 nm)	117.9466 o	0.23	4645127.1104
	R2407637-002	Cd (214.439 nm)	-0.0001 u	20.85	5.7012
	R2407637-002	Co (230.786 nm)	0.0001 u	> 100.00	5.9585
	R2407637-002	Cr (267.716 nm)	0.0006	4.41	55.8591
	R2407637-002	Cu (327.395 nm)	0.0001	45.39	14.9908
	R2407637-002	Fe (234.350 nm)	0.0181	0.92	478.0798
	R2407637-002	K (766.491 nm)	7.9046	0.46	10173.2657
	R2407637-002	Mg (279.078 nm)	60.2780 o	0.19	263342.5451
	R2407637-002	Mn (257.610 nm)	0.1436	0.16	52045.6521
	R2407637-002	Mo (202.032 nm)	0.0013	24.16	19.3122
	R2407637-002	Na (588.995 nm)	68.3500 o	0.19	1176929.6003
	R2407637-002	Ni (230.299 nm)	0.0191	2.45	252.2188
	R2407637-002	Pb (220.353 nm)	-0.0003 u	> 100.00	-0.1329
	R2407637-002	Sb (217.582 nm)	0.0026	45.20	8.0473
	R2407637-002	Se (196.026 nm)	-0.0023 u	> 100.00	-1.6502
	R2407637-002	Sn (189.925 nm)	0.0164	35.68	46.8783
	R2407637-002	Sr (216.596 nm)	2.4573	0.10	48545.5638
	R2407637-002	Ti (336.122 nm)	0.0005	52.83	134.2984
	R2407637-002	Tl (190.794 nm)	0.0011 u	> 100.00	-0.7836
	R2407637-002	V (292.401 nm)	0.0002	34.96	17.1450
	R2407637-002	Y (360.074 nm)	0.99	0.26	532740.26
	R2407637-002	Y_R (360.074 nm)	0.99	0.27	533672.93
	R2407637-002	Zn (213.857 nm)	0.0027	0.35	198.5891
8/22/2024 17:43:38	R2407729-002	Ag (328.068 nm)	-0.0001 u	> 100.00	19.6522
	R2407729-002	Al (237.312 nm)	0.0189	11.14	39.0620
	R2407729-002	As (188.980 nm)	0.0024	23.22	1.2921
	R2407729-002	B (249.772 nm)	0.0182	0.35	828.5310
	R2407729-002	Ba (230.424 nm)	0.0028	1.74	184.0798
	R2407729-002	Be (313.107 nm)	0.0000 u	> 100.00	-17.5485
	R2407729-002	Ca (317.933 nm)	8.8423	0.25	350857.1280
	R2407729-002	Cd (214.439 nm)	0.0000 u	> 100.00	8.1346
	R2407729-002	Co (230.786 nm)	0.0002 u	> 100.00	7.9166
	R2407729-002	Cr (267.716 nm)	0.0004	6.86	46.6997
	R2407729-002	Cu (327.395 nm)	0.0001 u	> 100.00	15.7595
	R2407729-002	Fe (234.350 nm)	0.1647	0.58	3939.1936
	R2407729-002	K (766.491 nm)	1.7395	1.79	2468.8038
	R2407729-002	Mg (279.078 nm)	2.0156	0.27	8798.9258
	R2407729-002	Mn (257.610 nm)	0.0036	0.08	1299.2072
	R2407729-002	Mo (202.032 nm)	0.0006	84.93	11.3327
	R2407729-002	Na (588.995 nm)	9.7439	0.30	156353.1011
	R2407729-002	Ni (230.299 nm)	0.0008	21.37	12.0166
	R2407729-002	Pb (220.353 nm)	-0.0004 u	42.24	-0.3040
	R2407729-002	Sb (217.582 nm)	0.0022	39.30	7.1329
	R2407729-002	Se (196.026 nm)	0.0026	56.45	2.8692
	R2407729-002	Sn (189.925 nm)	0.0095	32.49	28.0898
	R2407729-002	Sr (216.596 nm)	0.0295	0.32	590.0106

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407729-002	Ti (336.122 nm)	0.0006	30.24	153.1318
	R2407729-002	Tl (190.794 nm)	0.0010	55.69	-0.9160
	R2407729-002	V (292.401 nm)	0.0000 u	> 100.00	11.5966
	R2407729-002	Y (360.074 nm)	1.05	0.11	563691.71
	R2407729-002	Y_R (360.074 nm)	1.05	0.11	564625.85
	R2407729-002	Zn (213.857 nm)	0.0039	0.48	279.6691
8/22/2024 17:46:41	R2407778-001	Ag (328.068 nm)	-0.0001 u	77.63	18.3323
	R2407778-001	Al (237.312 nm)	0.0027	9.52	-5.6748
	R2407778-001	As (188.980 nm)	0.0017 u	> 100.00	-0.1368
	R2407778-001	B (249.772 nm)	0.0192	0.56	873.2402
	R2407778-001	Ba (230.424 nm)	0.0239	0.06	1495.2906
	R2407778-001	Be (313.107 nm)	0.0000 u	> 100.00	-17.5850
	R2407778-001	Ca (317.933 nm)	38.6126	0.21	1522595.9973
	R2407778-001	Cd (214.439 nm)	0.0000 u	> 100.00	10.6879
	R2407778-001	Co (230.786 nm)	0.0000 u	> 100.00	3.4727
	R2407778-001	Cr (267.716 nm)	0.0004	1.54	46.5798
	R2407778-001	Cu (327.395 nm)	0.0295	0.24	1459.8858
	R2407778-001	Fe (234.350 nm)	0.0065	1.52	204.2173
	R2407778-001	K (766.491 nm)	2.0817	1.69	2896.4850
	R2407778-001	Mg (279.078 nm)	11.8087	0.29	51584.4159
	R2407778-001	Mn (257.610 nm)	0.0003	2.93	121.5624
	R2407778-001	Mo (202.032 nm)	0.0013	14.50	18.5757
	R2407778-001	Na (588.995 nm)	28.4759	0.41	482554.8722
	R2407778-001	Ni (230.299 nm)	0.0041	3.63	55.6915
	R2407778-001	Pb (220.353 nm)	0.0001 u	> 100.00	2.3508
	R2407778-001	Sb (217.582 nm)	0.0031	38.51	9.2905
	R2407778-001	Se (196.026 nm)	0.0005 u	> 100.00	0.9134
	R2407778-001	Sn (189.925 nm)	0.0060	39.72	18.5567
	R2407778-001	Sr (216.596 nm)	0.1097	0.46	2174.2719
	R2407778-001	Ti (336.122 nm)	0.0004	42.38	119.7315
	R2407778-001	Tl (190.794 nm)	0.0017	78.18	-0.2243
	R2407778-001	V (292.401 nm)	0.0001	47.70	14.0303
	R2407778-001	Y (360.074 nm)	1.02	0.12	550287.13
	R2407778-001	Y_R (360.074 nm)	1.02	0.12	551144.99
	R2407778-001	Zn (213.857 nm)	0.0017	0.60	130.5893
8/22/2024 17:49:45	R2407778-002	Ag (328.068 nm)	-0.0001 u	60.05	16.8762
	R2407778-002	Al (237.312 nm)	0.0026	50.32	-5.8702
	R2407778-002	As (188.980 nm)	0.0020	39.21	0.4919
	R2407778-002	B (249.772 nm)	0.0190	0.84	863.1297
	R2407778-002	Ba (230.424 nm)	0.0239	0.07	1493.5286
	R2407778-002	Be (313.107 nm)	0.0000 u	> 100.00	-16.3848
	R2407778-002	Ca (317.933 nm)	38.2159	0.10	1506981.4818
	R2407778-002	Cd (214.439 nm)	-0.0001 u	> 100.00	6.2448
	R2407778-002	Co (230.786 nm)	0.0000 u	> 100.00	3.3650
	R2407778-002	Cr (267.716 nm)	0.0005	0.94	54.1251
	R2407778-002	Cu (327.395 nm)	0.1119	0.19	5518.8470
	R2407778-002	Fe (234.350 nm)	0.0082	1.62	244.1525
	R2407778-002	K (766.491 nm)	2.0564	1.88	2864.8389
	R2407778-002	Mg (279.078 nm)	11.6173	0.06	50748.0002
	R2407778-002	Mn (257.610 nm)	0.0002	2.40	96.9182
	R2407778-002	Mo (202.032 nm)	0.0010	25.92	15.4845
	R2407778-002	Na (588.995 nm)	28.1058	0.21	476110.7549
	R2407778-002	Ni (230.299 nm)	0.0051	3.77	68.2647
	R2407778-002	Pb (220.353 nm)	0.0010	36.50	6.7264
	R2407778-002	Sb (217.582 nm)	0.0027	99.70	8.2356
	R2407778-002	Se (196.026 nm)	-0.0003 u	> 100.00	0.1695
	R2407778-002	Sn (189.925 nm)	0.0046	41.55	14.5709

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407778-002	Sr (216.596 nm)	0.1105	0.24	2188.6871
	R2407778-002	Ti (336.122 nm)	0.0003	49.78	106.4843
	R2407778-002	Tl (190.794 nm)	-0.0006 u	> 100.00	-2.4624
	R2407778-002	V (292.401 nm)	0.0002	50.52	16.6735
	R2407778-002	Y (360.074 nm)	1.02	0.08	550054.41
	R2407778-002	Y_R (360.074 nm)	1.02	0.08	550946.89
	R2407778-002	Zn (213.857 nm)	0.0067	0.44	471.8529
8/22/2024 17:52:49	R2407778-003	Ag (328.068 nm)	-0.0002 u	16.22	15.5429
	R2407778-003	Al (237.312 nm)	0.0025	55.01	-6.3730
	R2407778-003	As (188.980 nm)	0.0011	> 100.00	-1.1681
	R2407778-003	B (249.772 nm)	0.0190	0.37	865.4278
	R2407778-003	Ba (230.424 nm)	0.0237	0.97	1485.9953
	R2407778-003	Be (313.107 nm)	0.0000	43.72	-11.7292
	R2407778-003	Ca (317.933 nm)	38.3715	0.20	1513106.9723
	R2407778-003	Cd (214.439 nm)	0.0000 u	> 100.00	10.3001
	R2407778-003	Co (230.786 nm)	-0.0002 u	28.15	-0.4450
	R2407778-003	Cr (267.716 nm)	0.0005	29.03	51.1324
	R2407778-003	Cu (327.395 nm)	0.1793	0.42	8840.5324
	R2407778-003	Fe (234.350 nm)	0.0059	3.53	189.5022
	R2407778-003	K (766.491 nm)	2.0757	0.84	2888.9820
	R2407778-003	Mg (279.078 nm)	11.7415	0.26	51290.6202
	R2407778-003	Mn (257.610 nm)	0.0002	1.99	91.2017
	R2407778-003	Mo (202.032 nm)	0.0008	25.00	13.2781
	R2407778-003	Na (588.995 nm)	28.3436	0.46	480252.0330
	R2407778-003	Ni (230.299 nm)	0.0048	7.02	64.4902
	R2407778-003	Pb (220.353 nm)	0.0010	47.78	7.2011
	R2407778-003	Sb (217.582 nm)	0.0010	95.21	4.1615
	R2407778-003	Se (196.026 nm)	0.0007 u	> 100.00	1.0531
	R2407778-003	Sn (189.925 nm)	0.0038	55.46	12.3780
	R2407778-003	Sr (216.596 nm)	0.1092	0.18	2163.8932
	R2407778-003	Ti (336.122 nm)	0.0002	37.36	95.8244
	R2407778-003	Tl (190.794 nm)	0.0013	22.58	-0.5832
	R2407778-003	V (292.401 nm)	0.0001	94.47	16.2014
	R2407778-003	Y (360.074 nm)	1.02	0.11	550214.58
	R2407778-003	Y_R (360.074 nm)	1.02	0.11	551135.47
	R2407778-003	Zn (213.857 nm)	0.0144	0.15	989.9135
8/22/2024 17:55:53	R2407778-004	Ag (328.068 nm)	-0.0001 u	> 100.00	22.5060
	R2407778-004	Al (237.312 nm)	0.0027	11.42	-5.5848
	R2407778-004	As (188.980 nm)	0.0001 u	> 100.00	-2.9899
	R2407778-004	B (249.772 nm)	0.0188	0.11	854.5677
	R2407778-004	Ba (230.424 nm)	0.0237	0.37	1481.8416
	R2407778-004	Be (313.107 nm)	0.0000 u	> 100.00	-14.4207
	R2407778-004	Ca (317.933 nm)	38.2044	0.15	1506531.8191
	R2407778-004	Cd (214.439 nm)	0.0000 u	> 100.00	10.3262
	R2407778-004	Co (230.786 nm)	0.0000 u	> 100.00	2.7573
	R2407778-004	Cr (267.716 nm)	0.0005	9.32	52.4291
	R2407778-004	Cu (327.395 nm)	0.2041	0.46	10058.7442
	R2407778-004	Fe (234.350 nm)	0.0064	2.08	201.2050
	R2407778-004	K (766.491 nm)	2.0794	1.94	2893.5502
	R2407778-004	Mg (279.078 nm)	11.6123	0.26	50726.2346
	R2407778-004	Mn (257.610 nm)	0.0002	4.03	83.5081
	R2407778-004	Mo (202.032 nm)	0.0008	26.32	13.8300
	R2407778-004	Na (588.995 nm)	28.0631	0.45	475366.1757
	R2407778-004	Ni (230.299 nm)	0.0043	2.26	58.1690
	R2407778-004	Pb (220.353 nm)	0.0004	> 100.00	3.7598
	R2407778-004	Sb (217.582 nm)	0.0028	51.86	8.5150
	R2407778-004	Se (196.026 nm)	-0.0005 u	> 100.00	0.0032

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407778-004	Sn (189.925 nm)	0.0028	53.80	9.6426
	R2407778-004	Sr (216.596 nm)	0.1108	0.34	2195.1667
	R2407778-004	Ti (336.122 nm)	0.0001	78.52	84.9473
	R2407778-004	Tl (190.794 nm)	0.0014 u	> 100.00	-0.4920
	R2407778-004	V (292.401 nm)	0.0001 u	> 100.00	14.4115
	R2407778-004	Y (360.074 nm)	1.02	0.10	550346.58
	R2407778-004	Y_R (360.074 nm)	1.02	0.10	551260.48
	R2407778-004	Zn (213.857 nm)	0.0060	0.73	419.0011
8/22/2024 17:58:57	R2407801-001	Ag (328.068 nm)	0.0000 u	> 100.00	24.1792
	R2407801-001	Al (237.312 nm)	0.0017	77.30	-8.5771
	R2407801-001	As (188.980 nm)	0.0006 u	> 100.00	-1.9822
	R2407801-001	B (249.772 nm)	0.1357	0.09	5704.5944
	R2407801-001	Ba (230.424 nm)	0.9760	0.22	60709.9037
	R2407801-001	Be (313.107 nm)	0.0000 u	> 100.00	-12.3120
	R2407801-001	Ca (317.933 nm)	93.7408 o	0.13	3692406.8012
	R2407801-001	Cd (214.439 nm)	0.0000 u	> 100.00	10.3495
	R2407801-001	Co (230.786 nm)	0.0001 u	> 100.00	5.6164
	R2407801-001	Cr (267.716 nm)	0.0003	24.77	40.9086
	R2407801-001	Cu (327.395 nm)	0.0181	1.14	901.7377
	R2407801-001	Fe (234.350 nm)	0.9317	0.57	22044.6793
	R2407801-001	K (766.491 nm)	1.7737	0.36	2511.5331
	R2407801-001	Mg (279.078 nm)	20.8821	0.17	91225.1424
	R2407801-001	Mn (257.610 nm)	0.1178	0.14	42675.7454
	R2407801-001	Mo (202.032 nm)	0.0004	67.17	8.9044
	R2407801-001	Na (588.995 nm)	39.9393	0.26	682180.2577
	R2407801-001	Ni (230.299 nm)	0.0213	0.11	280.0554
	R2407801-001	Pb (220.353 nm)	-0.0002 u	> 100.00	0.7661
	R2407801-001	Sb (217.582 nm)	0.0014	> 100.00	5.1149
	R2407801-001	Se (196.026 nm)	0.0011	80.75	1.4241
	R2407801-001	Sn (189.925 nm)	0.0035	9.79	11.5031
	R2407801-001	Sr (216.596 nm)	0.7106	0.15	14042.8106
	R2407801-001	Ti (336.122 nm)	0.0000 u	> 100.00	59.4208
	R2407801-001	Tl (190.794 nm)	0.0008	91.92	-1.0817
	R2407801-001	V (292.401 nm)	0.0002 u	> 100.00	18.5583
	R2407801-001	Y (360.074 nm)	1.00	0.07	539824.12
	R2407801-001	Y_R (360.074 nm)	1.00	0.07	540749.38
	R2407801-001	Zn (213.857 nm)	0.0161	0.29	1108.8500
8/22/2024 18:02:01	Continuing Calibration Verification	Ag (328.068 nm)	0.4684	0.24	31972.1689
	Continuing Calibration Verification	Al (237.312 nm)	9.5865	0.13	26404.4280
	Continuing Calibration Verification	As (188.980 nm)	0.9776	0.50	1768.3961
	Continuing Calibration Verification	B (249.772 nm)	2.5477	0.26	105780.3732
	Continuing Calibration Verification	Ba (230.424 nm)	9.4689	0.31	588907.2430
	Continuing Calibration Verification	Be (313.107 nm)	0.2455	0.17	305693.4867
	Continuing Calibration Verification	Ca (317.933 nm)	24.5478	0.24	969016.8316
	Continuing Calibration Verification	Cd (214.439 nm)	0.4960	0.32	32384.8827
	Continuing Calibration Verification	Co (230.786 nm)	2.4353	0.14	51601.8362
	Continuing Calibration Verification	Cr (267.716 nm)	0.5025	0.28	28819.7391
	Continuing Calibration Verification	Cu (327.395 nm)	1.1863	0.16	58419.4214
	Continuing Calibration Verification	Fe (234.350 nm)	4.8116	0.34	113636.4359
	Continuing Calibration Verification	K (766.491 nm)	23.6306	0.07	29825.8296
	Continuing Calibration Verification	Mg (279.078 nm)	25.0859	0.25	109591.0254
	Continuing Calibration Verification	Mn (257.610 nm)	0.7156	0.21	259254.3727
	Continuing Calibration Verification	Mo (202.032 nm)	2.5196	0.47	27295.6647
	Continuing Calibration Verification	Na (588.995 nm)	24.0041	0.14	404683.3919
	Continuing Calibration Verification	Ni (230.299 nm)	1.9695	0.30	25799.5518
	Continuing Calibration Verification	Pb (220.353 nm)	0.4954	0.25	2653.1289
	Continuing Calibration Verification	Sb (217.582 nm)	4.8486	0.18	11839.3919

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification	Se (196.026 nm)	0.4901	0.45	453.2412
	Continuing Calibration Verification	Sn (189.925 nm)	4.9576	0.25	13525.0334
	Continuing Calibration Verification	Sr (216.596 nm)	2.4336	0.31	48079.0498
	Continuing Calibration Verification	Ti (336.122 nm)	2.4894	0.21	389151.9479
	Continuing Calibration Verification	Tl (190.794 nm)	0.9948	0.60	938.6644
	Continuing Calibration Verification	V (292.401 nm)	2.4694	0.23	94608.9580
	Continuing Calibration Verification	Y (360.074 nm)	1.00	0.21	538388.17
	Continuing Calibration Verification	Y_R (360.074 nm)	1.00	0.21	539290.62
	Continuing Calibration Verification	Zn (213.857 nm)	0.9557	0.16	64959.0289
8/22/2024 18:05:05	Continuing Calibration Blank	Ag (328.068 nm)	-0.0001 u	94.32	22.6593
	Continuing Calibration Blank	Al (237.312 nm)	0.0017	85.50	-8.4171
	Continuing Calibration Blank	As (188.980 nm)	0.0001 u	> 100.00	-2.9741
	Continuing Calibration Blank	B (249.772 nm)	0.0021	3.06	160.7602
	Continuing Calibration Blank	Ba (230.424 nm)	0.0011	1.23	74.4275
	Continuing Calibration Blank	Be (313.107 nm)	0.0000	34.28	-7.4245
	Continuing Calibration Blank	Ca (317.933 nm)	0.0041	0.30	2994.5761
	Continuing Calibration Blank	Cd (214.439 nm)	0.0001	75.61	14.0753
	Continuing Calibration Blank	Co (230.786 nm)	0.0001 u	> 100.00	6.5200
	Continuing Calibration Blank	Cr (267.716 nm)	0.0000 u	> 100.00	26.4252
	Continuing Calibration Blank	Cu (327.395 nm)	-0.0001 u	> 100.00	3.8891
	Continuing Calibration Blank	Fe (234.350 nm)	0.0040	13.28	145.4401
	Continuing Calibration Blank	K (766.491 nm)	0.1085	11.62	430.4951
	Continuing Calibration Blank	Mg (279.078 nm)	0.0045	13.13	12.8030
	Continuing Calibration Blank	Mn (257.610 nm)	0.0001	4.58	44.8859
	Continuing Calibration Blank	Mo (202.032 nm)	0.0052	10.60	61.0052
	Continuing Calibration Blank	Na (588.995 nm)	0.0255	26.29	-12884.3902
	Continuing Calibration Blank	Ni (230.299 nm)	0.0003 u	92.37	5.4123
	Continuing Calibration Blank	Pb (220.353 nm)	0.0004	48.22	3.8929
	Continuing Calibration Blank	Sb (217.582 nm)	0.0165	2.70	41.9607
	Continuing Calibration Blank	Se (196.026 nm)	0.0008	67.44	1.2028
	Continuing Calibration Blank	Sn (189.925 nm)	0.0047	22.23	14.9435
	Continuing Calibration Blank	Sr (216.596 nm)	0.0002	55.37	11.2272
	Continuing Calibration Blank	Ti (336.122 nm)	0.0046	23.45	786.3380
	Continuing Calibration Blank	Tl (190.794 nm)	0.0000 u	> 100.00	-1.8206
	Continuing Calibration Blank	V (292.401 nm)	0.0001	57.10	15.6338
	Continuing Calibration Blank	Y (360.074 nm)	1.04	0.07	560664.02
	Continuing Calibration Blank	Y_R (360.074 nm)	1.04	0.07	561583.21
	Continuing Calibration Blank	Zn (213.857 nm)	0.0001	48.81	20.0353
8/22/2024 18:08:08	R2407826-001	Ag (328.068 nm)	-0.0002 u	3.83	16.1747
	R2407826-001	Al (237.312 nm)	0.0119	9.96	19.5217
	R2407826-001	As (188.980 nm)	0.0060	33.02	7.6838
	R2407826-001	B (249.772 nm)	0.9034	0.06	37555.1564
	R2407826-001	Ba (230.424 nm)	0.0211	0.46	1319.7065
	R2407826-001	Be (313.107 nm)	0.0000 u	> 100.00	-19.0399
	R2407826-001	Ca (317.933 nm)	273.1289 o	0.10	10752996.1739
	R2407826-001	Cd (214.439 nm)	0.0001	37.92	16.4948
	R2407826-001	Co (230.786 nm)	0.0009	18.73	21.6058
	R2407826-001	Cr (267.716 nm)	0.0006	8.77	60.0137
	R2407826-001	Cu (327.395 nm)	-0.0001 u	78.50	2.8168
	R2407826-001	Fe (234.350 nm)	3.5348	0.33	83496.3729
	R2407826-001	K (766.491 nm)	11.0495	0.16	14103.4417
	R2407826-001	Mg (279.078 nm)	406.8982 o	0.12	1777695.9882
	R2407826-001	Mn (257.610 nm)	1.3429	0.17	486480.9615
	R2407826-001	Mo (202.032 nm)	0.0050	12.05	59.1417
	R2407826-001	Na (588.995 nm)	317.7105 o	0.71	5519329.3313
	R2407826-001	Ni (230.299 nm)	0.0365	0.91	479.2045
	R2407826-001	Pb (220.353 nm)	0.0011	55.41	7.3421

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407826-001	Sb (217.582 nm)	0.0054	6.14	14.9676
	R2407826-001	Se (196.026 nm)	-0.0018 u	> 100.00	-1.2480
	R2407826-001	Sn (189.925 nm)	0.0020	53.74	7.6178
	R2407826-001	Sr (216.596 nm)	5.3229	0.14	105151.2939
	R2407826-001	Ti (336.122 nm)	0.0007	49.00	172.3427
	R2407826-001	Tl (190.794 nm)	0.0017	77.65	-0.2044
	R2407826-001	V (292.401 nm)	0.0003	20.43	22.8486
	R2407826-001	Y (360.074 nm)	0.91	0.12	489075.40
	R2407826-001	Y_R (360.074 nm)	0.91	0.13	490059.14
	R2407826-001	Zn (213.857 nm)	0.0028	2.31	206.3741
8/22/2024 18:11:12	R2407826-002	Ag (328.068 nm)	0.0000 u	> 100.00	27.9315
	R2407826-002	Al (237.312 nm)	0.0228	1.04	49.6797
	R2407826-002	As (188.980 nm)	0.0009 u	> 100.00	-1.4313
	R2407826-002	B (249.772 nm)	0.6698	0.29	27864.3658
	R2407826-002	Ba (230.424 nm)	0.0284	0.25	1772.9974
	R2407826-002	Be (313.107 nm)	0.0000 u	> 100.00	-15.1981
	R2407826-002	Ca (317.933 nm)	249.2751 o	0.19	9814128.8133
	R2407826-002	Cd (214.439 nm)	0.0000	69.92	12.7603
	R2407826-002	Co (230.786 nm)	0.0008	41.47	21.4954
	R2407826-002	Cr (267.716 nm)	0.0009	13.92	74.2011
	R2407826-002	Cu (327.395 nm)	0.0008	18.25	50.2273
	R2407826-002	Fe (234.350 nm)	0.7547	0.65	17866.4723
	R2407826-002	K (766.491 nm)	10.5333	0.19	13458.3287
	R2407826-002	Mg (279.078 nm)	344.0617 o	0.21	1503168.8326
	R2407826-002	Mn (257.610 nm)	1.0846	0.26	392923.7851
	R2407826-002	Mo (202.032 nm)	0.0049	3.95	57.9112
	R2407826-002	Na (588.995 nm)	286.2908 o	0.67	4972180.9424
	R2407826-002	Ni (230.299 nm)	0.0336	1.58	441.9657
	R2407826-002	Pb (220.353 nm)	0.0010	74.26	6.7463
	R2407826-002	Sb (217.582 nm)	0.0013	45.13	4.7852
	R2407826-002	Se (196.026 nm)	-0.0010 u	> 100.00	-0.5134
	R2407826-002	Sn (189.925 nm)	0.0022	37.20	8.1088
	R2407826-002	Sr (216.596 nm)	4.5045	0.31	88985.0853
	R2407826-002	Ti (336.122 nm)	0.0008	36.58	180.8885
	R2407826-002	Tl (190.794 nm)	0.0024 u	> 100.00	0.3983
	R2407826-002	V (292.401 nm)	0.0003	45.31	22.3156
	R2407826-002	Y (360.074 nm)	0.92	0.05	494364.41
	R2407826-002	Y_R (360.074 nm)	0.92	0.05	495334.22
	R2407826-002	Zn (213.857 nm)	0.0145	0.30	999.2631
8/22/2024 18:14:16	R2407828-001	Ag (328.068 nm)	-0.0001 u	> 100.00	23.6304
	R2407828-001	Al (237.312 nm)	-0.0041 u	37.48	-24.3966
	R2407828-001	As (188.980 nm)	0.0032	45.24	2.7335
	R2407828-001	B (249.772 nm)	4.3571	0.14	180850.3180
	R2407828-001	Ba (230.424 nm)	0.0101	0.76	637.4801
	R2407828-001	Be (313.107 nm)	0.0000 u	> 100.00	-24.2980
	R2407828-001	Ca (317.933 nm)	417.2414 o	0.21	16425167.2484
	R2407828-001	Cd (214.439 nm)	0.0001	19.15	18.4784
	R2407828-001	Co (230.786 nm)	0.0001 u	> 100.00	5.6164
	R2407828-001	Cr (267.716 nm)	0.0006	15.85	59.4144
	R2407828-001	Cu (327.395 nm)	0.0021	8.08	112.0450
	R2407828-001	Fe (234.350 nm)	8.3915	0.22	198145.5641
	R2407828-001	K (766.491 nm)	58.6846 o	0.30	73632.5364
	R2407828-001	Mg (279.078 nm)	75.2347 o	0.12	328687.0120
	R2407828-001	Mn (257.610 nm)	1.7619 o	0.22	638278.2484
	R2407828-001	Mo (202.032 nm)	0.0143	3.65	160.1245
	R2407828-001	Na (588.995 nm)	728.7406 o	0.93	12677067.3207
	R2407828-001	Ni (230.299 nm)	0.0126	4.64	166.6207

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407828-001	Pb (220.353 nm)	0.0009	77.59	6.6056
	R2407828-001	Sb (217.582 nm)	0.0014	27.26	5.0757
	R2407828-001	Se (196.026 nm)	-0.0011 u	> 100.00	-0.5996
	R2407828-001	Sn (189.925 nm)	0.0022	42.75	8.1474
	R2407828-001	Sr (216.596 nm)	9.8600 o	0.18	194774.5202
	R2407828-001	Ti (336.122 nm)	-0.0003 u	41.49	17.8109
	R2407828-001	Tl (190.794 nm)	0.0027	42.15	0.6494
	R2407828-001	V (292.401 nm)	0.0005	9.02	28.9240
	R2407828-001	Y (360.074 nm)	0.88	0.12	472645.27
	R2407828-001	Y_R (360.074 nm)	0.88	0.12	473612.04
	R2407828-001	Zn (213.857 nm)	0.0032	0.96	231.8399
8/22/2024 18:17:20	R2407921-001	Ag (328.068 nm)	-0.0001 u	> 100.00	23.3996
	R2407921-001	Al (237.312 nm)	0.0003	> 100.00	-12.2423
	R2407921-001	As (188.980 nm)	0.0001 u	> 100.00	-3.0199
	R2407921-001	B (249.772 nm)	0.0399	0.83	1729.2510
	R2407921-001	Ba (230.424 nm)	0.1600	0.34	9958.6285
	R2407921-001	Be (313.107 nm)	0.0000 u	> 100.00	-16.7092
	R2407921-001	Ca (317.933 nm)	39.0422	0.18	1539503.5921
	R2407921-001	Cd (214.439 nm)	0.0000 u	> 100.00	9.9697
	R2407921-001	Co (230.786 nm)	0.0000 u	> 100.00	3.8800
	R2407921-001	Cr (267.716 nm)	0.0000 u	> 100.00	25.6626
	R2407921-001	Cu (327.395 nm)	0.1537	0.43	7578.6756
	R2407921-001	Fe (234.350 nm)	0.1890	0.30	4512.3178
	R2407921-001	K (766.491 nm)	1.4591	2.46	2118.3899
	R2407921-001	Mg (279.078 nm)	7.4163	0.15	32394.3160
	R2407921-001	Mn (257.610 nm)	0.4119	0.23	149228.5176
	R2407921-001	Mo (202.032 nm)	0.0012	10.68	17.3569
	R2407921-001	Na (588.995 nm)	11.3119	0.46	183659.1749
	R2407921-001	Ni (230.299 nm)	0.0132	5.49	174.3821
	R2407921-001	Pb (220.353 nm)	0.0009	19.88	6.5903
	R2407921-001	Sb (217.582 nm)	0.0016	84.60	5.5297
	R2407921-001	Se (196.026 nm)	-0.0003 u	> 100.00	0.1338
	R2407921-001	Sn (189.925 nm)	0.0016	14.48	6.4885
	R2407921-001	Sr (216.596 nm)	0.0982	0.50	1946.6794
	R2407921-001	Ti (336.122 nm)	0.0001 u	> 100.00	75.9181
	R2407921-001	Tl (190.794 nm)	0.0002 u	> 100.00	-1.6704
	R2407921-001	V (292.401 nm)	-0.0002 u	68.79	4.7775
	R2407921-001	Y (360.074 nm)	1.03	0.12	555325.78
	R2407921-001	Y_R (360.074 nm)	1.03	0.12	556398.78
	R2407921-001	Zn (213.857 nm)	0.0057	1.34	397.2385
8/22/2024 18:20:24	R2407922-001	Ag (328.068 nm)	-0.0002 u	33.87	14.7682
	R2407922-001	Al (237.312 nm)	0.0024	43.54	-6.5235
	R2407922-001	As (188.980 nm)	0.0033	32.94	2.8517
	R2407922-001	B (249.772 nm)	0.2090	0.23	8747.3474
	R2407922-001	Ba (230.424 nm)	0.0079	0.38	498.8063
	R2407922-001	Be (313.107 nm)	0.0000	> 100.00	-14.2861
	R2407922-001	Ca (317.933 nm)	0.3727	0.22	17498.8962
	R2407922-001	Cd (214.439 nm)	0.0054	0.79	361.4969
	R2407922-001	Co (230.786 nm)	0.0001 u	> 100.00	5.6566
	R2407922-001	Cr (267.716 nm)	0.0003	11.59	40.6362
	R2407922-001	Cu (327.395 nm)	0.0244	0.75	1209.7544
	R2407922-001	Fe (234.350 nm)	0.5394	0.67	12783.2851
	R2407922-001	K (766.491 nm)	1.6060	1.69	2301.9816
	R2407922-001	Mg (279.078 nm)	0.1039	0.38	446.8680
	R2407922-001	Mn (257.610 nm)	0.0052	0.42	1891.9742
	R2407922-001	Mo (202.032 nm)	0.0013	17.75	18.8562
	R2407922-001	Na (588.995 nm)	357.7204 o LR	0.76	6216068.0427

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407922-001	Ni (230.299 nm)	0.0115	2.76	152.2539
	R2407922-001	Pb (220.353 nm)	0.0428	1.01	230.7831
	R2407922-001	Sb (217.582 nm)	0.0017	77.32	5.9487
	R2407922-001	Se (196.026 nm)	-0.0021 u	65.97	-1.5278
	R2407922-001	Sn (189.925 nm)	0.0020	19.73	7.5303
	R2407922-001	Sr (216.596 nm)	0.0034	2.24	73.3044
	R2407922-001	Ti (336.122 nm)	0.0002	46.96	90.4285
	R2407922-001	Tl (190.794 nm)	-0.0013 u	90.36	-3.0942
	R2407922-001	V (292.401 nm)	-0.0001 u	96.17	7.8350
	R2407922-001	Y (360.074 nm)	0.96	0.04	515281.80
	R2407922-001	Y_R (360.074 nm)	0.96	0.04	516303.19
	R2407922-001	Zn (213.857 nm)	0.6022	0.21	40934.0135
8/22/2024 18:23:29	R2407923-001	Ag (328.068 nm)	-0.0001 u	45.68	17.2445
	R2407923-001	Al (237.312 nm)	0.0230	3.98	50.2484
	R2407923-001	As (188.980 nm)	0.0010	23.23	-1.3756
	R2407923-001	B (249.772 nm)	0.0177	0.67	809.1129
	R2407923-001	Ba (230.424 nm)	0.0934	0.21	5816.6848
	R2407923-001	Be (313.107 nm)	0.0000 u	> 100.00	-16.8957
	R2407923-001	Ca (317.933 nm)	28.8326	0.37	1137664.3311
	R2407923-001	Cd (214.439 nm)	0.0000 u	> 100.00	10.4117
	R2407923-001	Co (230.786 nm)	0.0000 u	> 100.00	3.9361
	R2407923-001	Cr (267.716 nm)	0.0002	55.17	35.6424
	R2407923-001	Cu (327.395 nm)	0.2119	0.48	10441.8128
	R2407923-001	Fe (234.350 nm)	0.0543	1.16	1332.7315
	R2407923-001	K (766.491 nm)	9.3685	0.51	12002.7182
	R2407923-001	Mg (279.078 nm)	7.6071	0.08	33227.6800
	R2407923-001	Mn (257.610 nm)	0.0007	1.22	280.1470
	R2407923-001	Mo (202.032 nm)	0.0003	67.21	8.0864
	R2407923-001	Na (588.995 nm)	4.8150	0.46	70521.8048
	R2407923-001	Ni (230.299 nm)	0.0114	0.94	150.3087
	R2407923-001	Pb (220.353 nm)	0.0002 u	> 100.00	2.6155
	R2407923-001	Sb (217.582 nm)	0.0025	67.27	7.7358
	R2407923-001	Se (196.026 nm)	-0.0024 u	57.52	-1.7613
	R2407923-001	Sn (189.925 nm)	0.0037	5.05	12.1825
	R2407923-001	Sr (216.596 nm)	0.0523	0.80	1039.3777
	R2407923-001	Ti (336.122 nm)	0.0003	24.29	116.5147
	R2407923-001	Tl (190.794 nm)	0.0009	80.67	-0.9728
	R2407923-001	V (292.401 nm)	0.0003	36.41	21.4072
	R2407923-001	Y (360.074 nm)	1.03	0.12	556798.04
	R2407923-001	Y_R (360.074 nm)	1.03	0.12	557835.51
	R2407923-001	Zn (213.857 nm)	0.0241	0.46	1654.1388
8/22/2024 18:26:33	R2407924-001	Ag (328.068 nm)	0.0001 u	> 100.00	32.9949
	R2407924-001	Al (237.312 nm)	0.0000 u	> 100.00	-13.1731
	R2407924-001	As (188.980 nm)	0.0050	9.30	5.9537
	R2407924-001	B (249.772 nm)	0.0114	1.58	547.7646
	R2407924-001	Ba (230.424 nm)	0.3013	0.23	18747.4877
	R2407924-001	Be (313.107 nm)	0.0000 u	> 100.00	-16.9741
	R2407924-001	Ca (317.933 nm)	72.3485 o	0.22	2850418.4254
	R2407924-001	Cd (214.439 nm)	0.0000 u	> 100.00	8.2016
	R2407924-001	Co (230.786 nm)	0.0000 u	> 100.00	2.8037
	R2407924-001	Cr (267.716 nm)	0.0001	57.12	31.5112
	R2407924-001	Cu (327.395 nm)	0.0214	0.21	1062.1877
	R2407924-001	Fe (234.350 nm)	0.2007	0.33	4788.5225
	R2407924-001	K (766.491 nm)	0.7576	2.93	1241.6605
	R2407924-001	Mg (279.078 nm)	2.5883	0.19	11301.1578
	R2407924-001	Mn (257.610 nm)	1.1270	0.23	408283.7762
	R2407924-001	Mo (202.032 nm)	0.0002	59.48	7.4419

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407924-001	Na (588.995 nm)	4.5263	0.24	65493.2516
	R2407924-001	Ni (230.299 nm)	0.0167	3.85	219.7549
	R2407924-001	Pb (220.353 nm)	0.0017	51.11	10.7161
	R2407924-001	Sb (217.582 nm)	0.0007	49.95	3.2774
	R2407924-001	Se (196.026 nm)	-0.0018 u	> 100.00	-1.1721
	R2407924-001	Sn (189.925 nm)	0.0017	58.85	6.6441
	R2407924-001	Sr (216.596 nm)	0.1263	0.51	2501.4536
	R2407924-001	Ti (336.122 nm)	-0.0002 u	36.36	34.4045
	R2407924-001	Tl (190.794 nm)	0.0017 u	> 100.00	-0.2632
	R2407924-001	V (292.401 nm)	-0.0001 u	72.55	5.2934
	R2407924-001	Y (360.074 nm)	1.02	0.14	550934.97
	R2407924-001	Y_R (360.074 nm)	1.02	0.14	551940.40
	R2407924-001	Zn (213.857 nm)	0.0564	0.32	3848.2601
8/22/2024 18:29:36	R2407925-001	Ag (328.068 nm)	0.0000 u	> 100.00	23.8753
	R2407925-001	Al (237.312 nm)	0.0186	5.15	38.0765
	R2407925-001	As (188.980 nm)	0.0011	39.98	-1.1145
	R2407925-001	B (249.772 nm)	0.0118	2.03	566.1731
	R2407925-001	Ba (230.424 nm)	0.5774	0.76	35920.6906
	R2407925-001	Be (313.107 nm)	0.0000 u	> 100.00	-14.6847
	R2407925-001	Ca (317.933 nm)	28.0309	0.21	1106106.4923
	R2407925-001	Cd (214.439 nm)	0.0000 u	> 100.00	10.2169
	R2407925-001	Co (230.786 nm)	0.0001	43.41	5.7214
	R2407925-001	Cr (267.716 nm)	0.0001	53.48	32.1088
	R2407925-001	Cu (327.395 nm)	0.1596	0.28	7867.4683
	R2407925-001	Fe (234.350 nm)	0.4621	0.41	10958.7491
	R2407925-001	K (766.491 nm)	1.0945	1.70	1662.7993
	R2407925-001	Mg (279.078 nm)	4.1087	0.23	17943.7791
	R2407925-001	Mn (257.610 nm)	0.2057	0.20	74525.4153
	R2407925-001	Mo (202.032 nm)	0.0004	58.35	9.2291
	R2407925-001	Na (588.995 nm)	3.3182	0.19	44455.9290
	R2407925-001	Ni (230.299 nm)	0.0275	0.43	361.9995
	R2407925-001	Pb (220.353 nm)	0.0055	13.57	31.2422
	R2407925-001	Sb (217.582 nm)	0.0013	41.47	4.8329
	R2407925-001	Se (196.026 nm)	-0.0006 u	69.40	-0.1256
	R2407925-001	Sn (189.925 nm)	0.0020	35.17	7.6329
	R2407925-001	Sr (216.596 nm)	0.0661	0.62	1311.2182
	R2407925-001	Ti (336.122 nm)	0.0001	63.61	85.0807
	R2407925-001	Tl (190.794 nm)	-0.0014 u	> 100.00	-3.1438
	R2407925-001	V (292.401 nm)	0.0001	> 100.00	14.0542
	R2407925-001	Y (360.074 nm)	1.04	0.13	559472.38
	R2407925-001	Y_R (360.074 nm)	1.04	0.14	560496.22
	R2407925-001	Zn (213.857 nm)	0.0699	0.16	4763.3810
8/22/2024 18:32:40	R2407926-001	Ag (328.068 nm)	-0.0001 u	85.31	23.6467
	R2407926-001	Al (237.312 nm)	0.0044	10.37	-1.1393
	R2407926-001	As (188.980 nm)	0.0049	26.32	5.7582
	R2407926-001	B (249.772 nm)	0.0094	1.55	466.2459
	R2407926-001	Ba (230.424 nm)	0.3125	0.26	19444.4247
	R2407926-001	Be (313.107 nm)	0.0000	58.93	-12.9224
	R2407926-001	Ca (317.933 nm)	52.8192	0.13	2081756.8936
	R2407926-001	Cd (214.439 nm)	0.0000 u	94.72	8.4346
	R2407926-001	Co (230.786 nm)	0.0000 u	> 100.00	3.4608
	R2407926-001	Cr (267.716 nm)	0.0001 u	> 100.00	27.1586
	R2407926-001	Cu (327.395 nm)	0.0649	0.41	3207.0262
	R2407926-001	Fe (234.350 nm)	0.0440	0.84	1089.4045
	R2407926-001	K (766.491 nm)	0.8125	4.71	1310.3488
	R2407926-001	Mg (279.078 nm)	4.0164	0.22	17540.4787
	R2407926-001	Mn (257.610 nm)	0.2283	0.18	82729.0098

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407926-001	Mo (202.032 nm)	0.0001 u	> 100.00	5.4683
	R2407926-001	Na (588.995 nm)	4.6640	0.36	67890.9619
	R2407926-001	Ni (230.299 nm)	0.0138	2.13	181.8399
	R2407926-001	Pb (220.353 nm)	0.0003 u	> 100.00	3.0120
	R2407926-001	Sb (217.582 nm)	0.0013	81.52	4.8405
	R2407926-001	Se (196.026 nm)	0.0028 u	> 100.00	3.0121
	R2407926-001	Sn (189.925 nm)	0.0019	51.83	7.2207
	R2407926-001	Sr (216.596 nm)	0.0913	0.13	1809.9018
	R2407926-001	Ti (336.122 nm)	-0.0002 u	25.09	30.7611
	R2407926-001	Tl (190.794 nm)	0.0017	83.24	-0.2902
	R2407926-001	V (292.401 nm)	0.0000 u	> 100.00	8.9908
	R2407926-001	Y (360.074 nm)	1.03	0.12	554388.18
	R2407926-001	Y_R (360.074 nm)	1.03	0.13	555454.58
	R2407926-001	Zn (213.857 nm)	0.0357	0.03	2439.4688
8/22/2024 18:35:44	R2407927-001	Ag (328.068 nm)	-0.0001 u	93.96	20.9173
	R2407927-001	Al (237.312 nm)	0.0272	6.97	61.7389
	R2407927-001	As (188.980 nm)	0.0025	10.22	1.3266
	R2407927-001	B (249.772 nm)	0.0057	0.55	309.5968
	R2407927-001	Ba (230.424 nm)	0.1806	0.19	11242.1435
	R2407927-001	Be (313.107 nm)	0.0000	37.37	-9.7713
	R2407927-001	Ca (317.933 nm)	11.3306	0.17	448794.5485
	R2407927-001	Cd (214.439 nm)	0.0001 u	> 100.00	13.3862
	R2407927-001	Co (230.786 nm)	-0.0002 u	75.97	0.3705
	R2407927-001	Cr (267.716 nm)	0.0003	17.47	38.8600
	R2407927-001	Cu (327.395 nm)	0.0404	0.80	1998.4719
	R2407927-001	Fe (234.350 nm)	0.0735	0.68	1786.0990
	R2407927-001	K (766.491 nm)	0.6322	6.62	1084.9668
	R2407927-001	Mg (279.078 nm)	1.0318	0.27	4501.0174
	R2407927-001	Mn (257.610 nm)	0.0182	0.13	6614.4676
	R2407927-001	Mo (202.032 nm)	0.0002	90.40	6.5251
	R2407927-001	Na (588.995 nm)	3.2996	0.24	44131.1238
	R2407927-001	Ni (230.299 nm)	0.0093	3.28	123.0896
	R2407927-001	Pb (220.353 nm)	0.0057	18.03	32.1073
	R2407927-001	Sb (217.582 nm)	0.0008 u	> 100.00	3.7625
	R2407927-001	Se (196.026 nm)	-0.0011 u	94.01	-0.5354
	R2407927-001	Sn (189.925 nm)	0.0019	20.70	7.3174
	R2407927-001	Sr (216.596 nm)	0.0271	0.60	542.4697
	R2407927-001	Ti (336.122 nm)	0.0002	18.67	97.1515
	R2407927-001	Tl (190.794 nm)	-0.0004 u	> 100.00	-2.2773
	R2407927-001	V (292.401 nm)	0.0002	44.07	17.3555
	R2407927-001	Y (360.074 nm)	1.05	0.23	564677.54
	R2407927-001	Y_R (360.074 nm)	1.05	0.23	565723.08
	R2407927-001	Zn (213.857 nm)	0.4514	0.18	30689.2745
8/22/2024 18:38:47	Continuing Calibration Verification	Ag (328.068 nm)	0.4675	0.13	31912.9343
	Continuing Calibration Verification	Al (237.312 nm)	9.6115	0.08	26473.4999
	Continuing Calibration Verification	As (188.980 nm)	0.9791	0.01	1771.0521
	Continuing Calibration Verification	B (249.772 nm)	2.5484	0.29	105809.1652
	Continuing Calibration Verification	Ba (230.424 nm)	9.4874	0.65	590057.5143
	Continuing Calibration Verification	Be (313.107 nm)	0.2455	0.24	305680.8943
	Continuing Calibration Verification	Ca (317.933 nm)	24.5562	0.33	969344.6089
	Continuing Calibration Verification	Cd (214.439 nm)	0.4972	0.34	32463.5991
	Continuing Calibration Verification	Co (230.786 nm)	2.4420	0.11	51742.4036
	Continuing Calibration Verification	Cr (267.716 nm)	0.5035	0.35	28874.8931
	Continuing Calibration Verification	Cu (327.395 nm)	1.1846	0.11	58338.6029
	Continuing Calibration Verification	Fe (234.350 nm)	4.8197	0.38	113827.8656
	Continuing Calibration Verification	K (766.491 nm)	23.7492	0.11	29974.0654
	Continuing Calibration Verification	Mg (279.078 nm)	25.0657	0.30	109502.8279

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification	Mn (257.610 nm)	0.7172	0.28	259811.6159
	Continuing Calibration Verification	Mo (202.032 nm)	2.5226	0.64	27328.4963
	Continuing Calibration Verification	Na (588.995 nm)	24.0222	0.06	404997.8112
	Continuing Calibration Verification	Ni (230.299 nm)	1.9698	0.39	25803.8184
	Continuing Calibration Verification	Pb (220.353 nm)	0.4938	0.19	2644.6356
	Continuing Calibration Verification	Sb (217.582 nm)	4.8496	0.25	11841.8688
	Continuing Calibration Verification	Se (196.026 nm)	0.4887	0.14	452.0301
	Continuing Calibration Verification	Sn (189.925 nm)	4.9519	0.22	13509.4520
	Continuing Calibration Verification	Sr (216.596 nm)	2.4407	0.30	48219.1292
	Continuing Calibration Verification	Ti (336.122 nm)	2.4918	0.25	389530.9977
	Continuing Calibration Verification	Tl (190.794 nm)	0.9951	0.83	938.9205
	Continuing Calibration Verification	V (292.401 nm)	2.4724	0.24	94725.7906
	Continuing Calibration Verification	Y (360.074 nm)	1.00	0.13	537400.32
	Continuing Calibration Verification	Y_R (360.074 nm)	1.00	0.13	538440.82
	Continuing Calibration Verification	Zn (213.857 nm)	0.9584	0.15	65138.8002
8/22/2024 18:41:51	Continuing Calibration Blank	Ag (328.068 nm)	-0.0001 u	> 100.00	21.8485
	Continuing Calibration Blank	Al (237.312 nm)	0.0017	87.92	-8.3479
	Continuing Calibration Blank	As (188.980 nm)	0.0021	73.35	0.7276
	Continuing Calibration Blank	B (249.772 nm)	0.0022	11.41	165.9186
	Continuing Calibration Blank	Ba (230.424 nm)	0.0012	8.01	84.4485
	Continuing Calibration Blank	Be (313.107 nm)	0.0000	16.41	-6.1523
	Continuing Calibration Blank	Ca (317.933 nm)	0.0050	1.14	3028.2815
	Continuing Calibration Blank	Cd (214.439 nm)	0.0001	80.20	14.5705
	Continuing Calibration Blank	Co (230.786 nm)	0.0004	66.44	12.3673
	Continuing Calibration Blank	Cr (267.716 nm)	0.0000 u	> 100.00	25.5994
	Continuing Calibration Blank	Cu (327.395 nm)	-0.0001 u	> 100.00	5.6988
	Continuing Calibration Blank	Fe (234.350 nm)	0.0046	16.28	159.0105
	Continuing Calibration Blank	K (766.491 nm)	0.1207	42.25	445.8086
	Continuing Calibration Blank	Mg (279.078 nm)	0.0044	11.83	12.3385
	Continuing Calibration Blank	Mn (257.610 nm)	0.0001	17.00	45.8124
	Continuing Calibration Blank	Mo (202.032 nm)	0.0056	15.33	65.0046
	Continuing Calibration Blank	Na (588.995 nm)	0.0752	9.57	-12018.5653
	Continuing Calibration Blank	Ni (230.299 nm)	0.0003	42.82	5.9757
	Continuing Calibration Blank	Pb (220.353 nm)	-0.0004 u	10.88	-0.4372
	Continuing Calibration Blank	Sb (217.582 nm)	0.0151	8.12	38.4585
	Continuing Calibration Blank	Se (196.026 nm)	-0.0008 u	> 100.00	-0.2826
	Continuing Calibration Blank	Sn (189.925 nm)	0.0040	34.78	12.8822
	Continuing Calibration Blank	Sr (216.596 nm)	0.0001	37.26	7.7708
	Continuing Calibration Blank	Ti (336.122 nm)	0.0048	22.27	815.0600
	Continuing Calibration Blank	Tl (190.794 nm)	0.0001 u	> 100.00	-1.7270
	Continuing Calibration Blank	V (292.401 nm)	0.0005	25.88	31.2375
	Continuing Calibration Blank	Y (360.074 nm)	1.04	0.11	560552.53
	Continuing Calibration Blank	Y_R (360.074 nm)	1.04	0.11	561628.50
	Continuing Calibration Blank	Zn (213.857 nm)	0.0002	9.37	25.1025
8/22/2024 18:44:55	PBW-443495	Ag (328.068 nm)	0.0000 u	> 100.00	24.4171
	PBW-443495	Al (237.312 nm)	0.0013	76.36	-9.6253
	PBW-443495	As (188.980 nm)	0.0003 u	> 100.00	-2.5147
	PBW-443495	B (249.772 nm)	0.0001	88.45	80.0553
	PBW-443495	Ba (230.424 nm)	0.0002	30.19	19.0683
	PBW-443495	Be (313.107 nm)	0.0000	36.36	-13.7341
	PBW-443495	Ca (317.933 nm)	0.0050	2.48	3027.5425
	PBW-443495	Cd (214.439 nm)	0.0000 u	> 100.00	10.9828
	PBW-443495	Co (230.786 nm)	-0.0001 u	> 100.00	2.1963
	PBW-443495	Cr (267.716 nm)	0.0001	50.08	30.0515
	PBW-443495	Cu (327.395 nm)	-0.0002 u	44.79	-0.1667
	PBW-443495	Fe (234.350 nm)	0.0008	16.77	70.0996
	PBW-443495	K (766.491 nm)	0.0680	12.47	379.8804

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	PBW-443495	Mg (279.078 nm)	0.0028	14.72	5.4688
	PBW-443495	Mn (257.610 nm)	0.0000	51.40	20.6282
	PBW-443495	Mo (202.032 nm)	0.0013	15.68	18.8035
	PBW-443495	Na (588.995 nm)	0.0725	3.65	-12066.2342
	PBW-443495	Ni (230.299 nm)	0.0005	64.61	7.7664
	PBW-443495	Pb (220.353 nm)	-0.0001 u	> 100.00	1.1875
	PBW-443495	Sb (217.582 nm)	0.0042	44.72	11.9286
	PBW-443495	Se (196.026 nm)	0.0000 u	> 100.00	0.4624
	PBW-443495	Sn (189.925 nm)	0.0011	70.18	5.0888
	PBW-443495	Sr (216.596 nm)	0.0000 u	> 100.00	5.8435
	PBW-443495	Ti (336.122 nm)	0.0010	45.20	212.2370
	PBW-443495	Tl (190.794 nm)	0.0017	85.98	-0.2059
	PBW-443495	V (292.401 nm)	0.0000 u	> 100.00	11.9989
	PBW-443495	Y (360.074 nm)	1.06	0.16	571732.79
	PBW-443495	Y_R (360.074 nm)	1.06	0.16	572774.29
	PBW-443495	Zn (213.857 nm)	0.0002	17.46	28.1208
8/22/2024 18:47:58	LCSW-443495	Ag (328.068 nm)	0.0449	0.13	3089.2390
	LCSW-443495	Al (237.312 nm)	1.9105	0.22	5251.6828
	LCSW-443495	As (188.980 nm)	0.0359	1.66	62.0069
	LCSW-443495	B (249.772 nm)	0.9670	0.28	40194.7842
	LCSW-443495	Ba (230.424 nm)	1.9126	0.29	118961.0207
	LCSW-443495	Be (313.107 nm)	0.0476	0.19	59229.4530
	LCSW-443495	Ca (317.933 nm)	1.9246	0.24	78584.0857
	LCSW-443495	Cd (214.439 nm)	0.0497	0.22	3254.0348
	LCSW-443495	Co (230.786 nm)	0.4868	0.32	10317.7734
	LCSW-443495	Cr (267.716 nm)	0.1964	0.29	11275.3712
	LCSW-443495	Cu (327.395 nm)	0.2377	0.30	11712.8723
	LCSW-443495	Fe (234.350 nm)	0.9614	0.11	22745.6231
	LCSW-443495	K (766.491 nm)	18.1628	0.05	22992.7920
	LCSW-443495	Mg (279.078 nm)	1.9056	0.30	8318.5174
	LCSW-443495	Mn (257.610 nm)	0.4679	0.23	169502.3682
	LCSW-443495	Mo (202.032 nm)	0.4851	1.90	5259.6486
	LCSW-443495	Na (588.995 nm)	18.6708	0.11	311807.3668
	LCSW-443495	Ni (230.299 nm)	0.4846	0.27	6349.3529
	LCSW-443495	Pb (220.353 nm)	0.5010	0.38	2682.9917
	LCSW-443495	Sb (217.582 nm)	0.4792	0.47	1171.6476
	LCSW-443495	Se (196.026 nm)	0.9522	0.26	880.2326
	LCSW-443495	Sn (189.925 nm)	4.6412	0.56	12661.9060
	LCSW-443495	Sr (216.596 nm)	1.9415	0.27	38356.8652
	LCSW-443495	Ti (336.122 nm)	0.4866	0.37	76123.1211
	LCSW-443495	Tl (190.794 nm)	1.9332	0.34	1825.7840
	LCSW-443495	V (292.401 nm)	0.4804	0.16	18415.3753
	LCSW-443495	Y (360.074 nm)	1.04	0.14	557535.37
	LCSW-443495	Y_R (360.074 nm)	1.04	0.14	558655.61
	LCSW-443495	Zn (213.857 nm)	0.4789	0.15	32557.6102
8/22/2024 18:51:02	R2407411-001	Ag (328.068 nm)	-0.0002 u	10.57	15.6166
	R2407411-001	Al (237.312 nm)	0.0050	19.90	0.7379
	R2407411-001	As (188.980 nm)	-0.0004 u	> 100.00	-3.8193
	R2407411-001	B (249.772 nm)	0.0179	0.56	817.6265
	R2407411-001	Ba (230.424 nm)	0.0154	0.57	964.9507
	R2407411-001	Be (313.107 nm)	0.0000	75.79	-9.9019
	R2407411-001	Ca (317.933 nm)	31.6526	0.37	1248656.4083
	R2407411-001	Cd (214.439 nm)	0.0000 u	> 100.00	9.1250
	R2407411-001	Co (230.786 nm)	-0.0001 u	> 100.00	2.3702
	R2407411-001	Cr (267.716 nm)	0.0005	8.19	51.3691
	R2407411-001	Cu (327.395 nm)	0.0001 u	> 100.00	16.4258
	R2407411-001	Fe (234.350 nm)	0.0067	5.11	208.1252

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407411-001	K (766.491 nm)	2.1224	0.63	2947.2785
	R2407411-001	Mg (279.078 nm)	9.7032	0.33	42385.5004
	R2407411-001	Mn (257.610 nm)	0.0011	0.94	395.0619
	R2407411-001	Mo (202.032 nm)	0.0042	6.31	50.3839
	R2407411-001	Na (588.995 nm)	17.2489	0.12	287046.4612
	R2407411-001	Ni (230.299 nm)	0.0043	7.87	58.1828
	R2407411-001	Pb (220.353 nm)	-0.0006 u	> 100.00	-1.4200
	R2407411-001	Sb (217.582 nm)	0.0036	6.29	10.5004
	R2407411-001	Se (196.026 nm)	-0.0001 u	> 100.00	0.3330
	R2407411-001	Sn (189.925 nm)	0.0449	25.77	124.4765
	R2407411-001	Sr (216.596 nm)	0.0856	0.38	1697.7530
	R2407411-001	Ti (336.122 nm)	0.0017	29.70	331.3088
	R2407411-001	Tl (190.794 nm)	-0.0001 u	> 100.00	-1.9267
	R2407411-001	V (292.401 nm)	0.0001	72.27	14.2484
	R2407411-001	Y (360.074 nm)	1.03	0.12	554722.60
	R2407411-001	Y_R (360.074 nm)	1.03	0.12	555808.84
	R2407411-001	Zn (213.857 nm)	0.0018	0.12	132.5628
8/22/2024 18:54:06	R2407411-003	Ag (328.068 nm)	-0.0001 u	20.74	18.6542
	R2407411-003	Al (237.312 nm)	0.0067	5.79	5.3286
	R2407411-003	As (188.980 nm)	0.0009	87.41	-1.4275
	R2407411-003	B (249.772 nm)	0.0177	0.62	810.0997
	R2407411-003	Ba (230.424 nm)	0.0156	0.09	981.4825
	R2407411-003	Be (313.107 nm)	0.0000 u	> 100.00	-20.6874
	R2407411-003	Ca (317.933 nm)	31.5906	0.29	1246215.6199
	R2407411-003	Cd (214.439 nm)	0.0000 u	> 100.00	10.2189
	R2407411-003	Co (230.786 nm)	0.0001 u	> 100.00	5.5893
	R2407411-003	Cr (267.716 nm)	0.0007	20.92	64.8936
	R2407411-003	Cu (327.395 nm)	0.0004	25.09	27.5318
	R2407411-003	Fe (234.350 nm)	0.0156	0.75	420.1609
	R2407411-003	K (766.491 nm)	2.1321	1.05	2959.4167
	R2407411-003	Mg (279.078 nm)	9.8278	0.28	42929.8262
	R2407411-003	Mn (257.610 nm)	0.0018	0.33	679.2603
	R2407411-003	Mo (202.032 nm)	0.0014	20.71	19.5216
	R2407411-003	Na (588.995 nm)	17.4732	0.25	290952.4792
	R2407411-003	Ni (230.299 nm)	0.0037	4.90	50.3602
	R2407411-003	Pb (220.353 nm)	-0.0002 u	> 100.00	0.6155
	R2407411-003	Sb (217.582 nm)	0.0043	20.03	12.0801
	R2407411-003	Se (196.026 nm)	-0.0011 u	> 100.00	-0.5544
	R2407411-003	Sn (189.925 nm)	0.0115	36.90	33.3417
	R2407411-003	Sr (216.596 nm)	0.0865	0.65	1715.8532
	R2407411-003	Ti (336.122 nm)	0.0007	39.78	165.3572
	R2407411-003	Tl (190.794 nm)	-0.0008 u	77.21	-2.6097
	R2407411-003	V (292.401 nm)	0.0002	84.25	17.8444
	R2407411-003	Y (360.074 nm)	1.03	0.15	554350.33
	R2407411-003	Y_R (360.074 nm)	1.03	0.15	555441.27
	R2407411-003	Zn (213.857 nm)	0.0014	2.45	108.3016
8/22/2024 18:57:09	R2407411-005	Ag (328.068 nm)	-0.0001 u	> 100.00	22.1292
	R2407411-005	Al (237.312 nm)	0.0233	6.43	50.9851
	R2407411-005	As (188.980 nm)	0.0020	> 100.00	0.4083
	R2407411-005	B (249.772 nm)	0.0194	1.21	881.5923
	R2407411-005	Ba (230.424 nm)	0.0245	0.35	1534.8920
	R2407411-005	Be (313.107 nm)	0.0000 u	> 100.00	-19.1481
	R2407411-005	Ca (317.933 nm)	39.6683	0.09	1564148.9823
	R2407411-005	Cd (214.439 nm)	0.0000 u	> 100.00	8.5758
	R2407411-005	Co (230.786 nm)	0.0001 u	> 100.00	6.2015
	R2407411-005	Cr (267.716 nm)	0.0007	13.58	63.0118
	R2407411-005	Cu (327.395 nm)	0.0002	54.82	20.0526

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407411-005	Fe (234.350 nm)	0.0360	0.59	900.9397
	R2407411-005	K (766.491 nm)	2.1378	1.67	2966.4786
	R2407411-005	Mg (279.078 nm)	11.9268	0.08	52100.3452
	R2407411-005	Mn (257.610 nm)	0.0023	0.34	838.7242
	R2407411-005	Mo (202.032 nm)	0.0011	17.45	17.0204
	R2407411-005	Na (588.995 nm)	28.7122	0.25	486670.6500
	R2407411-005	Ni (230.299 nm)	0.0046	2.31	62.0420
	R2407411-005	Pb (220.353 nm)	0.0002 u	> 100.00	2.8323
	R2407411-005	Sb (217.582 nm)	0.0019	57.48	6.3267
	R2407411-005	Se (196.026 nm)	0.0015	> 100.00	1.8559
	R2407411-005	Sn (189.925 nm)	0.0066	28.23	20.0622
	R2407411-005	Sr (216.596 nm)	0.1107	0.21	2193.4984
	R2407411-005	Ti (336.122 nm)	0.0005	29.82	138.3351
	R2407411-005	Tl (190.794 nm)	0.0014	> 100.00	-0.5263
	R2407411-005	V (292.401 nm)	0.0002	31.84	17.1040
	R2407411-005	Y (360.074 nm)	1.02	0.17	550273.85
	R2407411-005	Y_R (360.074 nm)	1.02	0.17	551398.95
	R2407411-005	Zn (213.857 nm)	0.0021	2.11	159.0061
8/22/2024 19:00:13	R2407454-001	Ag (328.068 nm)	0.0000 u	> 100.00	27.2479
	R2407454-001	Al (237.312 nm)	0.0007	84.53	-11.1470
	R2407454-001	As (188.980 nm)	0.0018	8.33	0.0637
	R2407454-001	B (249.772 nm)	0.0027	5.16	187.7986
	R2407454-001	Ba (230.424 nm)	0.0569	0.16	3544.6938
	R2407454-001	Be (313.107 nm)	0.0000 u	> 100.00	-15.5258
	R2407454-001	Ca (317.933 nm)	5.5619	0.20	221742.4676
	R2407454-001	Cd (214.439 nm)	0.0000 u	> 100.00	9.5756
	R2407454-001	Co (230.786 nm)	0.0005	16.38	13.8411
	R2407454-001	Cr (267.716 nm)	0.0008	8.91	72.4679
	R2407454-001	Cu (327.395 nm)	0.0006	25.70	39.5016
	R2407454-001	Fe (234.350 nm)	0.5178	0.40	12275.2430
	R2407454-001	K (766.491 nm)	0.5271	5.68	953.6337
	R2407454-001	Mg (279.078 nm)	0.7569	0.11	3299.7309
	R2407454-001	Mn (257.610 nm)	2.1589 o	0.23	782071.7584
	R2407454-001	Mo (202.032 nm)	0.0003	45.35	8.2266
	R2407454-001	Na (588.995 nm)	0.3273	0.49	-7627.5701
	R2407454-001	Ni (230.299 nm)	0.0019	11.10	26.7296
	R2407454-001	Pb (220.353 nm)	0.0008	42.83	5.7767
	R2407454-001	Sb (217.582 nm)	0.0015 u	> 100.00	5.3002
	R2407454-001	Se (196.026 nm)	0.0002 u	> 100.00	0.6673
	R2407454-001	Sn (189.925 nm)	0.0041	47.83	13.3287
	R2407454-001	Sr (216.596 nm)	0.0151	0.63	305.5137
	R2407454-001	Ti (336.122 nm)	0.0005	18.07	146.1466
	R2407454-001	Tl (190.794 nm)	0.0003	50.17	-1.5829
	R2407454-001	V (292.401 nm)	-0.0001 u	62.75	6.4189
	R2407454-001	Y (360.074 nm)	1.06	0.20	569483.63
	R2407454-001	Y_R (360.074 nm)	1.06	0.20	570579.75
	R2407454-001	Zn (213.857 nm)	0.0054	1.36	378.8877
8/22/2024 19:03:17	R2407454-003	Ag (328.068 nm)	-0.0001 u	21.11	17.4552
	R2407454-003	Al (237.312 nm)	0.0134	4.21	23.7529
	R2407454-003	As (188.980 nm)	0.0009	89.57	-1.4923
	R2407454-003	B (249.772 nm)	0.0025	1.85	179.3109
	R2407454-003	Ba (230.424 nm)	0.0151	0.36	948.6431
	R2407454-003	Be (313.107 nm)	0.0000 u	> 100.00	-16.0650
	R2407454-003	Ca (317.933 nm)	2.9140	0.18	117524.3386
	R2407454-003	Cd (214.439 nm)	0.0000 u	43.98	6.6022
	R2407454-003	Co (230.786 nm)	0.0000 u	> 100.00	4.4913
	R2407454-003	Cr (267.716 nm)	0.0003	38.38	40.4808

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407454-003	Cu (327.395 nm)	0.0002	61.55	19.4129
	R2407454-003	Fe (234.350 nm)	0.0469	0.88	1157.0550
	R2407454-003	K (766.491 nm)	0.2842	15.77	650.0633
	R2407454-003	Mg (279.078 nm)	0.5901	0.08	2571.1385
	R2407454-003	Mn (257.610 nm)	0.0501	0.25	18158.5813
	R2407454-003	Mo (202.032 nm)	0.0002	61.79	6.7541
	R2407454-003	Na (588.995 nm)	0.3081	1.86	-7962.8331
	R2407454-003	Ni (230.299 nm)	0.0014	32.24	19.7513
	R2407454-003	Pb (220.353 nm)	0.0004 u	> 100.00	3.5924
	R2407454-003	Sb (217.582 nm)	0.0016	65.00	5.5711
	R2407454-003	Se (196.026 nm)	0.0006 u	> 100.00	0.9740
	R2407454-003	Sn (189.925 nm)	0.0034	43.06	11.2599
	R2407454-003	Sr (216.596 nm)	0.0080	2.64	163.5219
	R2407454-003	Ti (336.122 nm)	0.0003	14.52	112.3598
	R2407454-003	Tl (190.794 nm)	-0.0009 u	> 100.00	-2.6930
	R2407454-003	V (292.401 nm)	-0.0001 u	> 100.00	7.7087
	R2407454-003	Y (360.074 nm)	1.06	0.24	569918.36
	R2407454-003	Y_R (360.074 nm)	1.06	0.24	570993.75
	R2407454-003	Zn (213.857 nm)	0.0036	0.72	258.6864
8/22/2024 19:06:20	R2407455-001	Ag (328.068 nm)	-0.0001 u	85.06	17.5619
	R2407455-001	Al (237.312 nm)	0.2100	0.88	565.5507
	R2407455-001	As (188.980 nm)	-0.0003 u	> 100.00	-3.6680
	R2407455-001	B (249.772 nm)	0.0070	1.63	367.3477
	R2407455-001	Ba (230.424 nm)	0.0063	1.09	398.9180
	R2407455-001	Be (313.107 nm)	0.0000	13.53	-9.0796
	R2407455-001	Ca (317.933 nm)	16.4501	0.15	650294.0683
	R2407455-001	Cd (214.439 nm)	0.0000 u	> 100.00	10.2477
	R2407455-001	Co (230.786 nm)	0.0002	49.77	7.0985
	R2407455-001	Cr (267.716 nm)	0.0007	12.04	61.6523
	R2407455-001	Cu (327.395 nm)	0.0008	10.46	51.2271
	R2407455-001	Fe (234.350 nm)	0.5181	0.49	12280.6818
	R2407455-001	K (766.491 nm)	0.9371	2.51	1466.0031
	R2407455-001	Mg (279.078 nm)	2.3944	0.20	10453.9224
	R2407455-001	Mn (257.610 nm)	0.0516	0.13	18684.9363
	R2407455-001	Mo (202.032 nm)	0.0004	28.79	8.8799
	R2407455-001	Na (588.995 nm)	3.4985	0.37	47595.6346
	R2407455-001	Ni (230.299 nm)	0.0066	2.97	88.1982
	R2407455-001	Pb (220.353 nm)	0.0014	48.13	9.0383
	R2407455-001	Sb (217.582 nm)	0.0016	50.39	5.5021
	R2407455-001	Se (196.026 nm)	0.0028	22.95	3.0005
	R2407455-001	Sn (189.925 nm)	0.0023	21.27	8.3333
	R2407455-001	Sr (216.596 nm)	0.0329	0.70	657.1499
	R2407455-001	Ti (336.122 nm)	0.0017	7.50	324.0263
	R2407455-001	Tl (190.794 nm)	0.0003 u	> 100.00	-1.6136
	R2407455-001	V (292.401 nm)	0.0003	37.52	22.3471
	R2407455-001	Y (360.074 nm)	1.05	0.06	565157.35
	R2407455-001	Y_R (360.074 nm)	1.05	0.06	566226.51
	R2407455-001	Zn (213.857 nm)	0.0037	1.27	266.7669
8/22/2024 19:09:24	R2407455-003	Ag (328.068 nm)	-0.0002 u	8.35	11.8249
	R2407455-003	Al (237.312 nm)	0.8767	0.34	2402.8105
	R2407455-003	As (188.980 nm)	0.0000 u	> 100.00	-3.0973
	R2407455-003	B (249.772 nm)	0.0084	2.11	424.6703
	R2407455-003	Ba (230.424 nm)	0.0159	0.15	998.6770
	R2407455-003	Be (313.107 nm)	0.0000	24.54	6.8626
	R2407455-003	Ca (317.933 nm)	6.6740	0.43	265513.9427
	R2407455-003	Cd (214.439 nm)	0.0000 u	> 100.00	12.5582
	R2407455-003	Co (230.786 nm)	0.0005	20.73	13.5849

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407455-003	Cr (267.716 nm)	0.0013	2.51	97.5412
	R2407455-003	Cu (327.395 nm)	0.0008	19.38	50.5614
	R2407455-003	Fe (234.350 nm)	1.3044	0.21	30842.5715
	R2407455-003	K (766.491 nm)	0.6571	6.79	1116.1229
	R2407455-003	Mg (279.078 nm)	1.3048	0.59	5693.7098
	R2407455-003	Mn (257.610 nm)	0.1201	0.34	43504.0502
	R2407455-003	Mo (202.032 nm)	0.0001 u	> 100.00	5.5644
	R2407455-003	Na (588.995 nm)	1.4743	0.31	12344.9894
	R2407455-003	Ni (230.299 nm)	0.0096	5.52	126.6879
	R2407455-003	Pb (220.353 nm)	0.0016	34.97	9.9817
	R2407455-003	Sb (217.582 nm)	0.0009	19.43	3.7790
	R2407455-003	Se (196.026 nm)	-0.0008 u	> 100.00	-0.2727
	R2407455-003	Sn (189.925 nm)	0.0025	40.98	8.9066
	R2407455-003	Sr (216.596 nm)	0.0151	0.60	303.7714
	R2407455-003	Ti (336.122 nm)	0.0075	0.75	1239.0489
	R2407455-003	Tl (190.794 nm)	0.0006 u	> 100.00	-1.2579
	R2407455-003	V (292.401 nm)	0.0013	2.97	59.1512
	R2407455-003	Y (360.074 nm)	1.06	0.31	570640.52
	R2407455-003	Y_R (360.074 nm)	1.06	0.31	571756.62
	R2407455-003	Zn (213.857 nm)	0.0070	0.74	489.8782
8/22/2024 19:12:28	R2407455-005	Ag (328.068 nm)	-0.0002 u	39.65	16.3132
	R2407455-005	Al (237.312 nm)	0.4733	0.67	1291.1864
	R2407455-005	As (188.980 nm)	0.0022	77.07	0.8825
	R2407455-005	B (249.772 nm)	0.0118	1.20	565.4497
	R2407455-005	Ba (230.424 nm)	0.0080	0.59	508.1967
	R2407455-005	Be (313.107 nm)	0.0000	37.28	-6.6379
	R2407455-005	Ca (317.933 nm)	8.3824	0.42	332756.8215
	R2407455-005	Cd (214.439 nm)	0.0000 u	> 100.00	11.1019
	R2407455-005	Co (230.786 nm)	0.0004	32.88	11.6593
	R2407455-005	Cr (267.716 nm)	0.0010	8.02	81.7275
	R2407455-005	Cu (327.395 nm)	0.0011	3.23	61.5290
	R2407455-005	Fe (234.350 nm)	0.9400	0.15	22241.2123
	R2407455-005	K (766.491 nm)	1.1335	0.66	1711.4479
	R2407455-005	Mg (279.078 nm)	1.7325	0.54	7561.9907
	R2407455-005	Mn (257.610 nm)	0.1117	0.37	40464.4110
	R2407455-005	Mo (202.032 nm)	0.0003	46.63	7.9972
	R2407455-005	Na (588.995 nm)	2.4960	0.06	30137.3730
	R2407455-005	Ni (230.299 nm)	0.0083	2.77	110.6295
	R2407455-005	Pb (220.353 nm)	0.0024	51.63	14.6818
	R2407455-005	Sb (217.582 nm)	0.0007	> 100.00	3.4008
	R2407455-005	Se (196.026 nm)	0.0013	74.55	1.6568
	R2407455-005	Sn (189.925 nm)	0.0022	35.89	8.0273
	R2407455-005	Sr (216.596 nm)	0.0210	1.56	420.8999
	R2407455-005	Ti (336.122 nm)	0.0049	3.40	824.7973
	R2407455-005	Tl (190.794 nm)	0.0013 u	> 100.00	-0.6647
	R2407455-005	V (292.401 nm)	0.0007	11.46	37.8316
	R2407455-005	Y (360.074 nm)	1.06	0.10	567932.81
	R2407455-005	Y_R (360.074 nm)	1.06	0.10	569054.27
	R2407455-005	Zn (213.857 nm)	0.0047	0.86	332.4209
8/22/2024 19:15:32	Continuing Calibration Verification1	Ag (328.068 nm)	0.4693	0.17	32038.7946
	Continuing Calibration Verification1	Al (237.312 nm)	9.6456	0.10	26567.4120
	Continuing Calibration Verification1	As (188.980 nm)	0.9820	0.59	1776.4356
	Continuing Calibration Verification1	B (249.772 nm)	2.5590	0.30	106249.5183
	Continuing Calibration Verification1	Ba (230.424 nm)	9.5415	0.40	593424.8812
	Continuing Calibration Verification1	Be (313.107 nm)	0.2464	0.27	306759.4488
	Continuing Calibration Verification1	Ca (317.933 nm)	24.6364	0.32	972503.7967
	Continuing Calibration Verification1	Cd (214.439 nm)	0.4992	0.29	32591.0565

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification1	Co (230.786 nm)	2.4536	0.18	51987.5462
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5051	0.27	28970.2093
	Continuing Calibration Verification1	Cu (327.395 nm)	1.1883	0.12	58519.4024
	Continuing Calibration Verification1	Fe (234.350 nm)	4.8399	0.32	114304.4640
	Continuing Calibration Verification1	K (766.491 nm)	23.7765	0.04	30008.2057
	Continuing Calibration Verification1	Mg (279.078 nm)	25.1456	0.32	109851.8889
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7196	0.27	260694.2289
	Continuing Calibration Verification1	Mo (202.032 nm)	2.5303	0.65	27412.4288
	Continuing Calibration Verification1	Na (588.995 nm)	24.1045	0.21	406430.7959
	Continuing Calibration Verification1	Ni (230.299 nm)	1.9751	0.31	25873.6094
	Continuing Calibration Verification1	Pb (220.353 nm)	0.4960	0.24	2656.0886
	Continuing Calibration Verification1	Sb (217.582 nm)	4.8756	0.31	11905.2046
	Continuing Calibration Verification1	Se (196.026 nm)	0.4899	0.85	453.0804
	Continuing Calibration Verification1	Sn (189.925 nm)	4.9652	0.36	13545.8249
	Continuing Calibration Verification1	Sr (216.596 nm)	2.4468	0.49	48338.2105
	Continuing Calibration Verification1	Ti (336.122 nm)	2.5017	0.25	391086.6386
	Continuing Calibration Verification1	Tl (190.794 nm)	0.9910	0.08	935.0347
	Continuing Calibration Verification1	V (292.401 nm)	2.4815	0.24	95072.7401
	Continuing Calibration Verification1	Y (360.074 nm)	1.00	0.22	538396.45
	Continuing Calibration Verification1	Y_R (360.074 nm)	1.00	0.22	539490.46
	Continuing Calibration Verification1	Zn (213.857 nm)	0.9620	0.27	65387.7684
8/22/2024 19:18:36	Continuing Calibration Blank1	Ag (328.068 nm)	-0.0002 u	18.85	15.6711
	Continuing Calibration Blank1	Al (237.312 nm)	0.0001 u	> 100.00	-12.8731
	Continuing Calibration Blank1	As (188.980 nm)	0.0024	28.44	1.2593
	Continuing Calibration Blank1	B (249.772 nm)	0.0017	12.57	147.3364
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0002	56.90	22.8253
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000 u	> 100.00	-14.2842
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0017	8.89	2897.1643
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0000 u	68.70	6.5763
	Continuing Calibration Blank1	Co (230.786 nm)	0.0000 u	> 100.00	4.1817
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0001	43.85	29.9478
	Continuing Calibration Blank1	Cu (327.395 nm)	-0.0002 u	26.04	1.3130
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0039	18.07	142.9868
	Continuing Calibration Blank1	K (766.491 nm)	0.0909	25.09	408.5871
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0019	34.68	1.5347
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0000	60.22	15.2091
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0051	12.36	60.2624
	Continuing Calibration Blank1	Na (588.995 nm)	0.0367	23.19	-12689.4845
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0001 u	> 100.00	3.2896
	Continuing Calibration Blank1	Pb (220.353 nm)	-0.0002 u	> 100.00	0.6374
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0152	15.28	38.7395
	Continuing Calibration Blank1	Se (196.026 nm)	0.0032	79.70	3.3747
	Continuing Calibration Blank1	Sn (189.925 nm)	0.0038	23.08	12.3368
	Continuing Calibration Blank1	Sr (216.596 nm)	-0.0001 u	> 100.00	5.1577
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0044	24.99	754.2301
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0000 u	> 100.00	-1.8417
	Continuing Calibration Blank1	V (292.401 nm)	0.0000 u	> 100.00	12.4210
	Continuing Calibration Blank1	Y (360.074 nm)	1.04	0.19	560327.72
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.04	0.19	561441.37
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0000 u	> 100.00	16.2444
8/22/2024 19:21:40	R2407455-005S	Ag (328.068 nm)	0.0447	0.21	3073.2612
	R2407455-005S	Al (237.312 nm)	2.3603	0.18	6491.0881
	R2407455-005S	As (188.980 nm)	0.0369	3.54	63.8116
	R2407455-005S	B (249.772 nm)	0.9846	0.22	40924.2264
	R2407455-005S	Ba (230.424 nm)	1.9090	0.30	118733.9131
	R2407455-005S	Be (313.107 nm)	0.0476	0.13	59222.4449
	R2407455-005S	Ca (317.933 nm)	10.0149	0.21	397009.8172

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407455-005S	Cd (214.439 nm)	0.0488	0.57	3195.9586
	R2407455-005S	Co (230.786 nm)	0.4842	0.12	10261.4759
	R2407455-005S	Cr (267.716 nm)	0.1965	0.17	11284.8738
	R2407455-005S	Cu (327.395 nm)	0.2394	0.08	11798.9385
	R2407455-005S	Fe (234.350 nm)	1.8421	0.25	43536.2812
	R2407455-005S	K (766.491 nm)	19.3078	0.14	24423.6615
	R2407455-005S	Mg (279.078 nm)	3.5622	0.20	15556.1288
	R2407455-005S	Mn (257.610 nm)	0.5741	0.19	207994.2886
	R2407455-005S	Mo (202.032 nm)	0.4855	1.69	5262.9880
	R2407455-005S	Na (588.995 nm)	21.1290	0.13	354614.5573
	R2407455-005S	Ni (230.299 nm)	0.4875	0.38	6387.6046
	R2407455-005S	Pb (220.353 nm)	0.4972	0.26	2662.5306
	R2407455-005S	Sb (217.582 nm)	0.4755	0.22	1162.6807
	R2407455-005S	Se (196.026 nm)	0.9465	0.38	875.0124
	R2407455-005S	Sn (189.925 nm)	4.6592	0.53	12710.9963
	R2407455-005S	Sr (216.596 nm)	1.9448	0.28	38422.6322
	R2407455-005S	Ti (336.122 nm)	0.4888	0.36	76460.9120
	R2407455-005S	Tl (190.794 nm)	1.9179	0.48	1811.3178
	R2407455-005S	V (292.401 nm)	0.4815	0.24	18458.0936
	R2407455-005S	Y (360.074 nm)	1.03	0.14	556819.27
	R2407455-005S	Y_R (360.074 nm)	1.04	0.14	557963.57
	R2407455-005S	Zn (213.857 nm)	0.4787	0.22	32545.2983
8/22/2024 19:24:44	R2407455-005SD	Ag (328.068 nm)	0.0444	0.11	3052.1220
	R2407455-005SD	Al (237.312 nm)	2.3281	0.15	6402.3287
	R2407455-005SD	As (188.980 nm)	0.0394	4.10	68.3568
	R2407455-005SD	B (249.772 nm)	0.9803	0.26	40749.5427
	R2407455-005SD	Ba (230.424 nm)	1.9004	0.18	118199.2893
	R2407455-005SD	Be (313.107 nm)	0.0473	0.18	58892.1062
	R2407455-005SD	Ca (317.933 nm)	9.9265	0.21	393532.7650
	R2407455-005SD	Cd (214.439 nm)	0.0486	0.38	3180.4329
	R2407455-005SD	Co (230.786 nm)	0.4819	0.23	10213.2086
	R2407455-005SD	Cr (267.716 nm)	0.1954	0.31	11220.9073
	R2407455-005SD	Cu (327.395 nm)	0.2383	0.12	11743.0533
	R2407455-005SD	Fe (234.350 nm)	1.8123	0.29	42832.7331
	R2407455-005SD	K (766.491 nm)	19.2286	0.05	24324.7788
	R2407455-005SD	Mg (279.078 nm)	3.5336	0.28	15430.8392
	R2407455-005SD	Mn (257.610 nm)	0.5708	0.23	206793.7564
	R2407455-005SD	Mo (202.032 nm)	0.4856	1.31	5264.6002
	R2407455-005SD	Na (588.995 nm)	21.0399	0.10	353062.9611
	R2407455-005SD	Ni (230.299 nm)	0.4842	0.19	6344.3974
	R2407455-005SD	Pb (220.353 nm)	0.4938	0.12	2644.2524
	R2407455-005SD	Sb (217.582 nm)	0.4756	0.21	1162.8565
	R2407455-005SD	Se (196.026 nm)	0.9400	0.28	868.9553
	R2407455-005SD	Sn (189.925 nm)	4.6726	0.52	12747.5799
	R2407455-005SD	Sr (216.596 nm)	1.9317	0.29	38164.0516
	R2407455-005SD	Ti (336.122 nm)	0.4879	0.29	76313.8375
	R2407455-005SD	Tl (190.794 nm)	1.9087	0.33	1802.6505
	R2407455-005SD	V (292.401 nm)	0.4788	0.18	18352.8819
	R2407455-005SD	Y (360.074 nm)	1.03	0.04	556281.10
	R2407455-005SD	Y_R (360.074 nm)	1.03	0.03	557465.50
	R2407455-005SD	Zn (213.857 nm)	0.4758	0.16	32347.6053
8/22/2024 19:27:48	R2407455-005A	Ag (328.068 nm)	0.0431	0.36	2968.3482
	R2407455-005A	Al (237.312 nm)	2.2571	0.31	6206.8564
	R2407455-005A	As (188.980 nm)	0.0367	1.51	63.4231
	R2407455-005A	B (249.772 nm)	0.9509	0.20	39527.6672
	R2407455-005A	Ba (230.424 nm)	1.8398	0.05	114430.3999
	R2407455-005A	Be (313.107 nm)	0.0459	0.18	57090.5842

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407455-005A	Ca (317.933 nm)	9.8455	0.21	390343.1837
	R2407455-005A	Cd (214.439 nm)	0.0472	0.29	3089.9190
	R2407455-005A	Co (230.786 nm)	0.4676	0.33	9911.6214
	R2407455-005A	Cr (267.716 nm)	0.1895	0.20	10882.0241
	R2407455-005A	Cu (327.395 nm)	0.2308	0.18	11373.9660
	R2407455-005A	Fe (234.350 nm)	1.8054	0.16	42669.1050
	R2407455-005A	K (766.491 nm)	18.7091	0.08	23675.5103
	R2407455-005A	Mg (279.078 nm)	3.4719	0.21	15161.5772
	R2407455-005A	Mn (257.610 nm)	0.5567	0.16	201665.5967
	R2407455-005A	Mo (202.032 nm)	0.4782	0.99	5184.2747
	R2407455-005A	Na (588.995 nm)	20.4567	0.09	342907.0392
	R2407455-005A	Ni (230.299 nm)	0.4704	0.19	6162.9153
	R2407455-005A	Pb (220.353 nm)	0.4822	0.23	2582.2360
	R2407455-005A	Sb (217.582 nm)	0.4711	0.54	1151.8767
	R2407455-005A	Se (196.026 nm)	0.9230	0.15	853.2977
	R2407455-005A	Sn (189.925 nm)	4.6279	0.48	12625.7011
	R2407455-005A	Sr (216.596 nm)	1.9002	0.21	37541.3217
	R2407455-005A	Ti (336.122 nm)	0.4829	0.21	75536.9149
	R2407455-005A	Tl (190.794 nm)	1.8545	0.11	1751.4135
	R2407455-005A	V (292.401 nm)	0.4648	0.17	17817.3757
	R2407455-005A	Y (360.074 nm)	1.04	0.19	557280.08
	R2407455-005A	Y_R (360.074 nm)	1.04	0.19	558507.68
	R2407455-005A	Zn (213.857 nm)	0.4614	0.21	31364.8336
8/22/2024 19:30:52	R2407455-005L 5X	Ag (328.068 nm)	-0.0001 u	> 100.00	21.2219
	R2407455-005L 5X	Al (237.312 nm)	0.0952	0.67	249.1047
	R2407455-005L 5X	As (188.980 nm)	0.0004 u	> 100.00	-2.4294
	R2407455-005L 5X	B (249.772 nm)	0.0036	3.42	225.0561
	R2407455-005L 5X	Ba (230.424 nm)	0.0018	0.62	119.3745
	R2407455-005L 5X	Be (313.107 nm)	0.0000	39.71	-9.9876
	R2407455-005L 5X	Ca (317.933 nm)	1.6857	0.30	69178.7187
	R2407455-005L 5X	Cd (214.439 nm)	0.0000 u	> 100.00	10.7041
	R2407455-005L 5X	Co (230.786 nm)	-0.0001 u	> 100.00	0.9512
	R2407455-005L 5X	Cr (267.716 nm)	0.0003	44.72	40.9963
	R2407455-005L 5X	Cu (327.395 nm)	-0.0001 u	51.97	3.9309
	R2407455-005L 5X	Fe (234.350 nm)	0.1944	0.39	4638.8186
	R2407455-005L 5X	K (766.491 nm)	0.3187	2.12	693.2644
	R2407455-005L 5X	Mg (279.078 nm)	0.3549	0.49	1543.6815
	R2407455-005L 5X	Mn (257.610 nm)	0.0227	0.19	8215.3165
	R2407455-005L 5X	Mo (202.032 nm)	0.0033	12.95	40.7862
	R2407455-005L 5X	Na (588.995 nm)	0.5450	0.79	-3837.3894
	R2407455-005L 5X	Ni (230.299 nm)	0.0019	4.16	25.7782
	R2407455-005L 5X	Pb (220.353 nm)	-0.0001 u	> 100.00	1.1496
	R2407455-005L 5X	Sb (217.582 nm)	0.0056	35.69	15.3411
	R2407455-005L 5X	Se (196.026 nm)	0.0032	28.55	3.3616
	R2407455-005L 5X	Sn (189.925 nm)	0.0495	32.52	136.9666
	R2407455-005L 5X	Sr (216.596 nm)	0.0042	2.10	88.6297
	R2407455-005L 5X	Ti (336.122 nm)	0.0031	20.02	541.7990
	R2407455-005L 5X	Tl (190.794 nm)	0.0018	44.82	-0.1293
	R2407455-005L 5X	V (292.401 nm)	0.0003	5.37	22.1780
	R2407455-005L 5X	Y (360.074 nm)	1.05	0.11	565335.92
	R2407455-005L 5X	Y_R (360.074 nm)	1.05	0.11	566477.55
	R2407455-005L 5X	Zn (213.857 nm)	0.0011	3.51	84.9709
8/22/2024 19:33:55	R2407455-007	Ag (328.068 nm)	-0.0001 u	60.87	17.6117
	R2407455-007	Al (237.312 nm)	0.0028	39.28	-5.5640
	R2407455-007	As (188.980 nm)	-0.0005 u	60.91	-4.0674
	R2407455-007	B (249.772 nm)	0.0000 u	> 100.00	74.3598
	R2407455-007	Ba (230.424 nm)	0.0001	44.08	15.7982

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407455-007	Be (313.107 nm)	0.0000 u	> 100.00	-16.8455
	R2407455-007	Ca (317.933 nm)	0.0058	2.04	3060.7299
	R2407455-007	Cd (214.439 nm)	0.0000 u	> 100.00	9.5157
	R2407455-007	Co (230.786 nm)	-0.0001 u	> 100.00	2.4306
	R2407455-007	Cr (267.716 nm)	0.0002	19.20	36.4294
	R2407455-007	Cu (327.395 nm)	-0.0002 u	23.72	-0.3905
	R2407455-007	Fe (234.350 nm)	0.0014	12.52	84.9497
	R2407455-007	K (766.491 nm)	0.0907	18.00	408.2683
	R2407455-007	Mg (279.078 nm)	0.0016	17.97	-0.1728
	R2407455-007	Mn (257.610 nm)	0.0001	11.78	46.9470
	R2407455-007	Mo (202.032 nm)	0.0010	54.42	15.5420
	R2407455-007	Na (588.995 nm)	0.0329	14.43	-12754.6064
	R2407455-007	Ni (230.299 nm)	0.0005	24.40	7.9024
	R2407455-007	Pb (220.353 nm)	-0.0001 u	> 100.00	1.1375
	R2407455-007	Sb (217.582 nm)	0.0026	43.15	8.1048
	R2407455-007	Se (196.026 nm)	-0.0004 u	> 100.00	0.0375
	R2407455-007	Sn (189.925 nm)	0.0157	39.25	44.7750
	R2407455-007	Sr (216.596 nm)	0.0000 u	> 100.00	7.0430
	R2407455-007	Ti (336.122 nm)	0.0008	35.60	188.7767
	R2407455-007	Tl (190.794 nm)	0.0016 u	> 100.00	-0.3823
	R2407455-007	V (292.401 nm)	-0.0001 u	> 100.00	8.5088
	R2407455-007	Y (360.074 nm)	1.06	0.29	571465.19
	R2407455-007	Y_R (360.074 nm)	1.06	0.29	572589.24
	R2407455-007	Zn (213.857 nm)	0.0017	2.64	131.5359
8/22/2024 19:36:59	R2407479-001	Ag (328.068 nm)	-0.0002 u	71.70	16.7164
	R2407479-001	Al (237.312 nm)	0.0400	3.92	97.0909
	R2407479-001	As (188.980 nm)	0.0013	42.91	-0.8599
	R2407479-001	B (249.772 nm)	0.0030	3.69	198.1127
	R2407479-001	Ba (230.424 nm)	0.0052	1.27	334.7428
	R2407479-001	Be (313.107 nm)	0.0000 u	> 100.00	-21.0063
	R2407479-001	Ca (317.933 nm)	3.4332	0.44	137961.5628
	R2407479-001	Cd (214.439 nm)	0.0000 u	> 100.00	10.4576
	R2407479-001	Co (230.786 nm)	0.0000 u	> 100.00	3.4306
	R2407479-001	Cr (267.716 nm)	0.0004	18.49	45.6967
	R2407479-001	Cu (327.395 nm)	0.0000 u	> 100.00	12.1106
	R2407479-001	Fe (234.350 nm)	0.0556	0.32	1362.6831
	R2407479-001	K (766.491 nm)	0.2177	10.28	566.9516
	R2407479-001	Mg (279.078 nm)	0.4639	0.69	2019.6113
	R2407479-001	Mn (257.610 nm)	0.0498	0.45	18052.4033
	R2407479-001	Mo (202.032 nm)	0.0004	78.35	9.4162
	R2407479-001	Na (588.995 nm)	0.7343	0.66	-540.2591
	R2407479-001	Ni (230.299 nm)	0.0054	1.98	71.6829
	R2407479-001	Pb (220.353 nm)	0.0001 u	> 100.00	2.1270
	R2407479-001	Sb (217.582 nm)	0.0020 u	> 100.00	6.6159
	R2407479-001	Se (196.026 nm)	-0.0017 u	> 100.00	-1.1112
	R2407479-001	Sn (189.925 nm)	0.0086	44.46	25.6306
	R2407479-001	Sr (216.596 nm)	0.0188	0.50	378.0855
	R2407479-001	Ti (336.122 nm)	0.0006	30.76	162.6653
	R2407479-001	Tl (190.794 nm)	0.0005	> 100.00	-1.3850
	R2407479-001	V (292.401 nm)	-0.0001 u	> 100.00	6.6203
	R2407479-001	Y (360.074 nm)	1.06	0.29	571180.32
	R2407479-001	Y_R (360.074 nm)	1.06	0.29	572350.94
	R2407479-001	Zn (213.857 nm)	0.0036	0.89	257.4634
8/22/2024 19:40:02	R2407479-003	Ag (328.068 nm)	-0.0001 u	68.43	17.3470
	R2407479-003	Al (237.312 nm)	0.0366	5.38	87.8280
	R2407479-003	As (188.980 nm)	0.0002 u	> 100.00	-2.8554
	R2407479-003	B (249.772 nm)	0.0033	2.10	213.5105

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407479-003	Ba (230.424 nm)	0.0046	1.42	292.7311
	R2407479-003	Be (313.107 nm)	0.0000	50.87	-8.1058
	R2407479-003	Ca (317.933 nm)	3.3448	0.38	134480.2512
	R2407479-003	Cd (214.439 nm)	0.0000 u	> 100.00	10.4071
	R2407479-003	Co (230.786 nm)	0.0000 u	> 100.00	3.4361
	R2407479-003	Cr (267.716 nm)	0.0004	13.96	46.4224
	R2407479-003	Cu (327.395 nm)	0.0000 u	> 100.00	7.9024
	R2407479-003	Fe (234.350 nm)	0.0290	0.79	736.4681
	R2407479-003	K (766.491 nm)	0.2119	24.71	559.8140
	R2407479-003	Mg (279.078 nm)	0.4455	0.69	1939.5485
	R2407479-003	Mn (257.610 nm)	0.0059	0.44	2159.7983
	R2407479-003	Mo (202.032 nm)	0.0004	26.30	9.1287
	R2407479-003	Na (588.995 nm)	0.7143	1.11	-889.2220
	R2407479-003	Ni (230.299 nm)	0.0030	2.25	41.2150
	R2407479-003	Pb (220.353 nm)	-0.0007 u	36.81	-2.3166
	R2407479-003	Sb (217.582 nm)	0.0017	57.35	5.9219
	R2407479-003	Se (196.026 nm)	-0.0010 u	> 100.00	-0.4712
	R2407479-003	Sn (189.925 nm)	0.0053	45.59	16.5502
	R2407479-003	Sr (216.596 nm)	0.0184	0.75	368.9350
	R2407479-003	Ti (336.122 nm)	0.0005	37.85	145.9180
	R2407479-003	Tl (190.794 nm)	-0.0001 u	> 100.00	-1.9780
	R2407479-003	V (292.401 nm)	0.0001	45.76	15.7153
	R2407479-003	Y (360.074 nm)	1.06	0.36	570088.92
	R2407479-003	Y_R (360.074 nm)	1.06	0.36	571278.74
	R2407479-003	Zn (213.857 nm)	0.0036	0.15	260.3597
8/22/2024 19:43:06	R2407529-001	Ag (328.068 nm)	0.0000 u	> 100.00	26.6765
	R2407529-001	Al (237.312 nm)	0.0642	1.60	163.8434
	R2407529-001	As (188.980 nm)	0.0004 u	> 100.00	-2.4929
	R2407529-001	B (249.772 nm)	0.0406	0.61	1758.3073
	R2407529-001	Ba (230.424 nm)	0.0540	0.26	3364.4262
	R2407529-001	Be (313.107 nm)	0.0000 u	> 100.00	-23.3144
	R2407529-001	Ca (317.933 nm)	101.7134 o	0.19	4006200.7017
	R2407529-001	Cd (214.439 nm)	0.0000	38.91	12.8367
	R2407529-001	Co (230.786 nm)	0.0000 u	> 100.00	4.3943
	R2407529-001	Cr (267.716 nm)	0.0006	24.27	56.4803
	R2407529-001	Cu (327.395 nm)	0.0001	91.14	15.3651
	R2407529-001	Fe (234.350 nm)	0.0940	0.62	2269.1418
	R2407529-001	K (766.491 nm)	2.1702	0.69	3007.0642
	R2407529-001	Mg (279.078 nm)	20.6048	0.20	90013.7581
	R2407529-001	Mn (257.610 nm)	0.0138	0.21	4999.4424
	R2407529-001	Mo (202.032 nm)	0.0005	15.35	10.3279
	R2407529-001	Na (588.995 nm)	16.2106	0.36	268965.4706
	R2407529-001	Ni (230.299 nm)	0.0144	2.09	190.6493
	R2407529-001	Pb (220.353 nm)	-0.0001 u	> 100.00	0.9976
	R2407529-001	Sb (217.582 nm)	0.0016 u	> 100.00	5.5442
	R2407529-001	Se (196.026 nm)	-0.0009 u	> 100.00	-0.3405
	R2407529-001	Sn (189.925 nm)	0.0043	31.39	13.8900
	R2407529-001	Sr (216.596 nm)	0.1714	0.13	3392.2632
	R2407529-001	Ti (336.122 nm)	0.0005	24.57	148.1663
	R2407529-001	Tl (190.794 nm)	0.0007 u	> 100.00	-1.2426
	R2407529-001	V (292.401 nm)	0.0006	21.33	32.5409
	R2407529-001	Y (360.074 nm)	1.01	0.17	544643.28
	R2407529-001	Y_R (360.074 nm)	1.01	0.17	545815.08
	R2407529-001	Zn (213.857 nm)	0.0018	2.33	137.7127
8/22/2024 19:46:09	R2407529-003	Ag (328.068 nm)	-0.0001 u	78.74	20.8221
	R2407529-003	Al (237.312 nm)	0.0307	1.08	71.3528
	R2407529-003	As (188.980 nm)	0.0020	60.92	0.5831

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407529-003	B (249.772 nm)	0.0272	0.25	1202.7108
	R2407529-003	Ba (230.424 nm)	0.0903	0.06	5622.6394
	R2407529-003	Be (313.107 nm)	0.0000 u	> 100.00	-19.4143
	R2407529-003	Ca (317.933 nm)	83.9716 o	0.17	3307895.3664
	R2407529-003	Cd (214.439 nm)	0.0000	45.90	11.0397
	R2407529-003	Co (230.786 nm)	0.0001 u	> 100.00	6.0511
	R2407529-003	Cr (267.716 nm)	0.0005	24.15	54.7155
	R2407529-003	Cu (327.395 nm)	0.0001 u	> 100.00	16.7574
	R2407529-003	Fe (234.350 nm)	0.3209	0.42	7626.9887
	R2407529-003	K (766.491 nm)	2.4954	0.64	3413.3773
	R2407529-003	Mg (279.078 nm)	27.9178	0.18	121963.6550
	R2407529-003	Mn (257.610 nm)	0.0331	0.12	11999.6597
	R2407529-003	Mo (202.032 nm)	0.0011	34.87	17.1121
	R2407529-003	Na (588.995 nm)	59.8509 o	0.25	1028924.3746
	R2407529-003	Ni (230.299 nm)	0.0181	2.45	238.9147
	R2407529-003	Pb (220.353 nm)	-0.0001 u	> 100.00	1.0210
	R2407529-003	Sb (217.582 nm)	0.0000 u	> 100.00	1.6155
	R2407529-003	Se (196.026 nm)	0.0002 u	> 100.00	0.6644
	R2407529-003	Sn (189.925 nm)	0.0033	48.85	11.0170
	R2407529-003	Sr (216.596 nm)	0.3507	0.22	6933.3234
	R2407529-003	Ti (336.122 nm)	0.0007	11.11	175.3974
	R2407529-003	Tl (190.794 nm)	0.0022	90.16	0.2566
	R2407529-003	V (292.401 nm)	0.0005	15.28	31.6094
	R2407529-003	Y (360.074 nm)	1.00	0.26	538966.75
	R2407529-003	Y_R (360.074 nm)	1.00	0.26	540114.99
	R2407529-003	Zn (213.857 nm)	0.0047	1.37	332.3417
8/22/2024 19:49:13	R2407529-005	Ag (328.068 nm)	-0.0001 u	90.33	22.1461
	R2407529-005	Al (237.312 nm)	0.0311	0.55	72.5957
	R2407529-005	As (188.980 nm)	0.0019	34.77	0.2871
	R2407529-005	B (249.772 nm)	0.0113	0.88	544.1543
	R2407529-005	Ba (230.424 nm)	0.0125	1.01	787.1992
	R2407529-005	Be (313.107 nm)	0.0000 u	> 100.00	-14.2354
	R2407529-005	Ca (317.933 nm)	17.7044	0.18	699663.5618
	R2407529-005	Cd (214.439 nm)	0.0000	89.56	12.0092
	R2407529-005	Co (230.786 nm)	0.0000 u	> 100.00	3.4064
	R2407529-005	Cr (267.716 nm)	0.0004	42.18	48.0103
	R2407529-005	Cu (327.395 nm)	0.0000 u	> 100.00	10.4851
	R2407529-005	Fe (234.350 nm)	0.2093	0.43	4992.2677
	R2407529-005	K (766.491 nm)	0.5755	2.19	1014.1625
	R2407529-005	Mg (279.078 nm)	2.4032	0.23	10492.5538
	R2407529-005	Mn (257.610 nm)	0.0919	0.16	33311.9005
	R2407529-005	Mo (202.032 nm)	0.0005	34.54	10.1331
	R2407529-005	Na (588.995 nm)	2.1233	0.37	23647.2470
	R2407529-005	Ni (230.299 nm)	0.0076	2.46	100.5296
	R2407529-005	Pb (220.353 nm)	-0.0004 u	50.09	-0.7156
	R2407529-005	Sb (217.582 nm)	0.0004 u	> 100.00	2.6762
	R2407529-005	Se (196.026 nm)	-0.0008 u	56.56	-0.3203
	R2407529-005	Sn (189.925 nm)	0.0031	52.73	10.5553
	R2407529-005	Sr (216.596 nm)	0.0518	0.16	1028.9707
	R2407529-005	Ti (336.122 nm)	0.0004	16.09	117.9809
	R2407529-005	Tl (190.794 nm)	0.0012 u	> 100.00	-0.6972
	R2407529-005	V (292.401 nm)	-0.0001 u	73.20	7.5333
	R2407529-005	Y (360.074 nm)	1.05	0.07	565847.58
	R2407529-005	Y_R (360.074 nm)	1.05	0.07	567037.87
	R2407529-005	Zn (213.857 nm)	0.0030	2.12	219.8114
8/22/2024 19:52:17	Continuing Calibration Verification1	Ag (328.068 nm)	0.4694	0.08	32040.2890
	Continuing Calibration Verification1	Al (237.312 nm)	9.6466	0.11	26570.2984

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification1	As (188.980 nm)	0.9810	0.08	1774.6575
	Continuing Calibration Verification1	B (249.772 nm)	2.5593	0.32	106261.4165
	Continuing Calibration Verification1	Ba (230.424 nm)	9.5065	0.44	591248.3653
	Continuing Calibration Verification1	Be (313.107 nm)	0.2466	0.33	307041.0415
	Continuing Calibration Verification1	Ca (317.933 nm)	24.6506	0.36	973062.9832
	Continuing Calibration Verification1	Cd (214.439 nm)	0.4991	0.42	32584.8606
	Continuing Calibration Verification1	Co (230.786 nm)	2.4592	0.42	52108.1501
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5055	0.31	28992.4045
	Continuing Calibration Verification1	Cu (327.395 nm)	1.1891	0.15	58559.1293
	Continuing Calibration Verification1	Fe (234.350 nm)	4.8365	0.40	114224.9737
	Continuing Calibration Verification1	K (766.491 nm)	23.7464	0.02	29970.5799
	Continuing Calibration Verification1	Mg (279.078 nm)	25.1596	0.30	109913.0299
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7192	0.29	260544.3562
	Continuing Calibration Verification1	Mo (202.032 nm)	2.5270	0.56	27375.7711
	Continuing Calibration Verification1	Na (588.995 nm)	24.0720	0.32	405864.7615
	Continuing Calibration Verification1	Ni (230.299 nm)	1.9739	0.30	25857.6312
	Continuing Calibration Verification1	Pb (220.353 nm)	0.4956	0.05	2654.0054
	Continuing Calibration Verification1	Sb (217.582 nm)	4.8711	0.42	11894.1683
	Continuing Calibration Verification1	Se (196.026 nm)	0.4956	0.16	458.3564
	Continuing Calibration Verification1	Sn (189.925 nm)	4.9669	0.34	13550.2748
	Continuing Calibration Verification1	Sr (216.596 nm)	2.4547	0.47	48495.0431
	Continuing Calibration Verification1	Ti (336.122 nm)	2.5045	0.24	391510.9841
	Continuing Calibration Verification1	Tl (190.794 nm)	0.9910	0.26	935.0473
	Continuing Calibration Verification1	V (292.401 nm)	2.4826	0.30	95116.9672
	Continuing Calibration Verification1	Y (360.074 nm)	1.00	0.25	538427.34
	Continuing Calibration Verification1	Y_R (360.074 nm)	1.00	0.24	539583.53
	Continuing Calibration Verification1	Zn (213.857 nm)	0.9639	0.28	65512.8443
8/22/2024 19:55:21	Continuing Calibration Blank1	Ag (328.068 nm)	-0.0002 u	35.34	15.5730
	Continuing Calibration Blank1	Al (237.312 nm)	0.0012	52.98	-9.9338
	Continuing Calibration Blank1	As (188.980 nm)	0.0013	72.24	-0.7817
	Continuing Calibration Blank1	B (249.772 nm)	0.0019	12.26	154.0832
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0002	67.21	20.2850
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000 u	> 100.00	-14.8607
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0024	6.71	2927.7086
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0000 u	> 100.00	10.6293
	Continuing Calibration Blank1	Co (230.786 nm)	0.0000 u	> 100.00	4.1361
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0001	66.17	27.2350
	Continuing Calibration Blank1	Cu (327.395 nm)	-0.0002 u	32.18	0.3791
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0036	20.56	136.2717
	Continuing Calibration Blank1	K (766.491 nm)	0.1139	12.43	437.3047
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0029	19.72	5.8654
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0000	91.42	20.6423
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0047	17.55	55.8994
	Continuing Calibration Blank1	Na (588.995 nm)	0.0336	12.10	-12743.3964
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0003	> 100.00	5.2605
	Continuing Calibration Blank1	Pb (220.353 nm)	-0.0002 u	> 100.00	0.5371
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0151	1.51	38.5989
	Continuing Calibration Blank1	Se (196.026 nm)	0.0015 u	> 100.00	1.8190
	Continuing Calibration Blank1	Sn (189.925 nm)	0.0055	34.55	17.0095
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0001 u	> 100.00	8.7251
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0044	23.98	746.0307
	Continuing Calibration Blank1	Tl (190.794 nm)	-0.0003 u	> 100.00	-2.1336
	Continuing Calibration Blank1	V (292.401 nm)	0.0001 u	> 100.00	14.0971
	Continuing Calibration Blank1	Y (360.074 nm)	1.04	0.18	561217.22
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.04	0.19	562392.64
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0000 u	> 100.00	13.5926
8/22/2024 19:58:25	R2407547-001	Ag (328.068 nm)	-0.0001 u	> 100.00	22.3923

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407547-001	Al (237.312 nm)	0.0102	11.22	14.9814
	R2407547-001	As (188.980 nm)	0.0025	27.05	1.4854
	R2407547-001	B (249.772 nm)	0.0116	0.66	557.3233
	R2407547-001	Ba (230.424 nm)	0.0317	0.10	1982.0142
	R2407547-001	Be (313.107 nm)	0.0000 u	> 100.00	-20.3830
	R2407547-001	Ca (317.933 nm)	21.2251	0.24	838238.4273
	R2407547-001	Cd (214.439 nm)	0.0000 u	> 100.00	9.2681
	R2407547-001	Co (230.786 nm)	-0.0001 u	38.65	0.9708
	R2407547-001	Cr (267.716 nm)	0.0002	31.80	37.6919
	R2407547-001	Cu (327.395 nm)	0.0559	0.25	2759.8266
	R2407547-001	Fe (234.350 nm)	0.0856	0.39	2072.7472
	R2407547-001	K (766.491 nm)	1.4015	2.09	2046.3484
	R2407547-001	Mg (279.078 nm)	4.3286	0.18	18904.1628
	R2407547-001	Mn (257.610 nm)	0.0139	0.22	5062.1383
	R2407547-001	Mo (202.032 nm)	0.0016	23.35	22.1405
	R2407547-001	Na (588.995 nm)	5.4743	0.07	82002.6282
	R2407547-001	Ni (230.299 nm)	0.0027	11.66	37.0131
	R2407547-001	Pb (220.353 nm)	-0.0005 u	72.92	-0.9473
	R2407547-001	Sb (217.582 nm)	0.0032	51.67	9.4531
	R2407547-001	Se (196.026 nm)	0.0007 u	> 100.00	1.0595
	R2407547-001	Sn (189.925 nm)	0.0027	27.14	9.4189
	R2407547-001	Sr (216.596 nm)	0.0465	0.48	924.8020
	R2407547-001	Ti (336.122 nm)	0.0008	41.71	191.3026
	R2407547-001	Tl (190.794 nm)	0.0016	56.35	-0.3503
	R2407547-001	V (292.401 nm)	0.0001	49.73	13.6504
	R2407547-001	Y (360.074 nm)	1.05	0.06	563357.74
	R2407547-001	Y_R (360.074 nm)	1.05	0.07	564538.72
	R2407547-001	Zn (213.857 nm)	0.0012	1.69	93.5065
8/22/2024 20:01:29	R2407547-003	Ag (328.068 nm)	-0.0002 u	13.50	14.8223
	R2407547-003	Al (237.312 nm)	0.0088	15.10	11.0450
	R2407547-003	As (188.980 nm)	0.0010	> 100.00	-1.3513
	R2407547-003	B (249.772 nm)	0.0138	1.19	647.4764
	R2407547-003	Ba (230.424 nm)	0.0375	0.07	2343.7323
	R2407547-003	Be (313.107 nm)	0.0000	> 100.00	-13.3230
	R2407547-003	Ca (317.933 nm)	23.3170	0.24	920573.9653
	R2407547-003	Cd (214.439 nm)	0.0000	50.87	10.5417
	R2407547-003	Co (230.786 nm)	-0.0002 u	17.05	-1.1000
	R2407547-003	Cr (267.716 nm)	0.0002	48.65	33.6631
	R2407547-003	Cu (327.395 nm)	0.0428	1.00	2118.7311
	R2407547-003	Fe (234.350 nm)	0.0616	1.62	1505.1066
	R2407547-003	K (766.491 nm)	1.6454	1.92	2351.2070
	R2407547-003	Mg (279.078 nm)	4.8222	0.21	21060.8320
	R2407547-003	Mn (257.610 nm)	0.0114	0.39	4128.7861
	R2407547-003	Mo (202.032 nm)	0.0011	26.98	16.1738
	R2407547-003	Na (588.995 nm)	5.8364	0.06	88308.4203
	R2407547-003	Ni (230.299 nm)	0.0036	5.27	48.8311
	R2407547-003	Pb (220.353 nm)	-0.0001 u	62.61	1.1788
	R2407547-003	Sb (217.582 nm)	0.0036	25.36	10.5783
	R2407547-003	Se (196.026 nm)	0.0018	30.73	2.0744
	R2407547-003	Sn (189.925 nm)	0.0022	54.15	8.1617
	R2407547-003	Sr (216.596 nm)	0.0529	0.17	1051.3129
	R2407547-003	Ti (336.122 nm)	0.0004	42.20	129.2041
	R2407547-003	Tl (190.794 nm)	0.0005 u	> 100.00	-1.3996
	R2407547-003	V (292.401 nm)	0.0001	47.61	14.2662
	R2407547-003	Y (360.074 nm)	1.04	0.22	561578.80
	R2407547-003	Y_R (360.074 nm)	1.04	0.22	562780.75
	R2407547-003	Zn (213.857 nm)	0.0012	5.43	96.5955

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
8/22/2024 20:04:33	R2407552-001	Ag (328.068 nm)	-0.0001 u	28.93	18.1131
	R2407552-001	Al (237.312 nm)	0.3231	0.57	877.2342
	R2407552-001	As (188.980 nm)	0.0008 u	> 100.00	-1.7529
	R2407552-001	B (249.772 nm)	0.0116	0.60	554.4433
	R2407552-001	Ba (230.424 nm)	0.0200	0.58	1254.3555
	R2407552-001	Be (313.107 nm)	0.0000	2.77	-6.0255
	R2407552-001	Ca (317.933 nm)	19.8853	0.13	785503.8568
	R2407552-001	Cd (214.439 nm)	0.0000 u	> 100.00	9.1476
	R2407552-001	Co (230.786 nm)	0.0003	77.08	9.3714
	R2407552-001	Cr (267.716 nm)	0.0009	11.93	74.8139
	R2407552-001	Cu (327.395 nm)	0.0010	19.05	59.0677
	R2407552-001	Fe (234.350 nm)	0.6484	0.81	15356.2386
	R2407552-001	K (766.491 nm)	1.2480	2.03	1854.5468
	R2407552-001	Mg (279.078 nm)	3.8664	0.16	16884.9032
	R2407552-001	Mn (257.610 nm)	0.0462	0.12	16736.9865
	R2407552-001	Mo (202.032 nm)	0.0006	25.59	11.5458
	R2407552-001	Na (588.995 nm)	11.4796	0.28	186579.8029
	R2407552-001	Ni (230.299 nm)	0.0087	4.03	115.6077
	R2407552-001	Pb (220.353 nm)	0.0006 u	> 100.00	4.6238
	R2407552-001	Sb (217.582 nm)	0.0014	32.18	5.2270
	R2407552-001	Se (196.026 nm)	-0.0017 u	31.26	-1.1033
	R2407552-001	Sn (189.925 nm)	0.0018	74.15	6.8600
	R2407552-001	Sr (216.596 nm)	0.1267	0.22	2509.1873
	R2407552-001	Ti (336.122 nm)	0.0056	3.43	935.7059
	R2407552-001	Tl (190.794 nm)	0.0019	44.75	-0.0364
	R2407552-001	V (292.401 nm)	0.0009	14.31	44.3498
	R2407552-001	Y (360.074 nm)	1.04	0.02	562006.87
	R2407552-001	Y_R (360.074 nm)	1.05	0.01	563284.74
	R2407552-001	Zn (213.857 nm)	0.0042	0.61	295.6000
8/22/2024 20:07:37	R2407552-003	Ag (328.068 nm)	-0.0001 u	82.35	19.4882
	R2407552-003	Al (237.312 nm)	0.4741	0.09	1293.2444
	R2407552-003	As (188.980 nm)	0.0010 u	> 100.00	-1.3215
	R2407552-003	B (249.772 nm)	0.0149	0.95	694.7056
	R2407552-003	Ba (230.424 nm)	0.0253	0.36	1581.6880
	R2407552-003	Be (313.107 nm)	0.0000	49.45	-7.5081
	R2407552-003	Ca (317.933 nm)	25.4030	0.33	1002674.6234
	R2407552-003	Cd (214.439 nm)	0.0000 u	> 100.00	9.9585
	R2407552-003	Co (230.786 nm)	0.0005	4.66	14.1739
	R2407552-003	Cr (267.716 nm)	0.0010	5.47	82.4315
	R2407552-003	Cu (327.395 nm)	0.0015	19.90	83.9090
	R2407552-003	Fe (234.350 nm)	0.9263	0.23	21917.8609
	R2407552-003	K (766.491 nm)	1.6001	1.39	2294.6211
	R2407552-003	Mg (279.078 nm)	4.7112	0.29	20575.8890
	R2407552-003	Mn (257.610 nm)	0.0579	0.24	20990.5961
	R2407552-003	Mo (202.032 nm)	0.0005	98.55	9.6412
	R2407552-003	Na (588.995 nm)	13.0958	0.13	214723.5200
	R2407552-003	Ni (230.299 nm)	0.0100	1.86	133.1037
	R2407552-003	Pb (220.353 nm)	0.0010	45.99	7.2223
	R2407552-003	Sb (217.582 nm)	0.0013	48.62	4.9607
	R2407552-003	Se (196.026 nm)	0.0012 u	> 100.00	1.5454
	R2407552-003	Sn (189.925 nm)	0.0018	42.10	6.8465
	R2407552-003	Sr (216.596 nm)	0.1827	0.34	3615.7973
	R2407552-003	Ti (336.122 nm)	0.0075	3.05	1234.8551
	R2407552-003	Tl (190.794 nm)	-0.0007 u	> 100.00	-2.5357
	R2407552-003	V (292.401 nm)	0.0012	8.90	54.6646
	R2407552-003	Y (360.074 nm)	1.04	0.17	560308.87
	R2407552-003	Y_R (360.074 nm)	1.04	0.17	561747.12

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407552-003	Zn (213.857 nm)	0.0068	0.16	476.4064
8/22/2024 20:10:41	R2407552-005	Ag (328.068 nm)	-0.0002 u	20.93	13.9079
	R2407552-005	Al (237.312 nm)	0.9392	0.11	2575.1190
	R2407552-005	As (188.980 nm)	0.0016 u	> 100.00	-0.2337
	R2407552-005	B (249.772 nm)	0.0144	0.79	670.6358
	R2407552-005	Ba (230.424 nm)	0.0278	0.71	1737.2289
	R2407552-005	Be (313.107 nm)	0.0000	23.62	7.5284
	R2407552-005	Ca (317.933 nm)	22.7001	0.25	896291.3066
	R2407552-005	Cd (214.439 nm)	0.0001	36.75	14.3975
	R2407552-005	Co (230.786 nm)	0.0008	14.89	20.6379
	R2407552-005	Cr (267.716 nm)	0.0017	3.65	119.4808
	R2407552-005	Cu (327.395 nm)	0.0024	7.86	127.0914
	R2407552-005	Fe (234.350 nm)	1.7624	0.20	41656.0339
	R2407552-005	K (766.491 nm)	1.5580	2.46	2242.0083
	R2407552-005	Mg (279.078 nm)	4.5605	0.24	19917.4995
	R2407552-005	Mn (257.610 nm)	0.1202	0.31	43553.9771
	R2407552-005	Mo (202.032 nm)	0.0004	76.79	9.1714
	R2407552-005	Na (588.995 nm)	12.3324	0.16	201429.2730
	R2407552-005	Ni (230.299 nm)	0.0123	0.57	162.9633
	R2407552-005	Pb (220.353 nm)	0.0019	45.41	11.6241
	R2407552-005	Sb (217.582 nm)	0.0009	38.30	3.9102
	R2407552-005	Se (196.026 nm)	-0.0001 u	> 100.00	0.3553
	R2407552-005	Sn (189.925 nm)	0.0017	43.20	6.6912
	R2407552-005	Sr (216.596 nm)	0.1521	0.15	3010.2620
	R2407552-005	Ti (336.122 nm)	0.0156	0.77	2496.6396
	R2407552-005	Tl (190.794 nm)	0.0024	86.32	0.4125
	R2407552-005	V (292.401 nm)	0.0019	6.68	84.8166
	R2407552-005	Y (360.074 nm)	1.04	0.13	561250.15
	R2407552-005	Y_R (360.074 nm)	1.04	0.13	562658.48
	R2407552-005	Zn (213.857 nm)	0.0083	0.50	576.8696
8/22/2024 20:13:44	R2407552-005S	Ag (328.068 nm)	0.0458	0.40	3153.1626
	R2407552-005S	Al (237.312 nm)	2.7937	0.18	7685.4623
	R2407552-005S	As (188.980 nm)	0.0378	3.64	65.3977
	R2407552-005S	B (249.772 nm)	1.0154	0.31	42204.3331
	R2407552-005S	Ba (230.424 nm)	1.9503	0.14	121302.6101
	R2407552-005S	Be (313.107 nm)	0.0488	0.23	60783.1049
	R2407552-005S	Ca (317.933 nm)	23.9747	0.33	946457.8741
	R2407552-005S	Cd (214.439 nm)	0.0496	0.30	3247.6635
	R2407552-005S	Co (230.786 nm)	0.4949	0.38	10489.4216
	R2407552-005S	Cr (267.716 nm)	0.2017	0.21	11579.2558
	R2407552-005S	Cu (327.395 nm)	0.2452	0.11	12081.6300
	R2407552-005S	Fe (234.350 nm)	2.6089	0.33	61638.8585
	R2407552-005S	K (766.491 nm)	20.3193	0.14	25687.8280
	R2407552-005S	Mg (279.078 nm)	6.3265	0.33	27632.8822
	R2407552-005S	Mn (257.610 nm)	0.5935	0.25	215007.2117
	R2407552-005S	Mo (202.032 nm)	0.4956	2.06	5373.1530
	R2407552-005S	Na (588.995 nm)	30.7203	0.11	521640.2284
	R2407552-005S	Ni (230.299 nm)	0.4986	0.45	6532.3891
	R2407552-005S	Pb (220.353 nm)	0.5013	0.18	2684.7449
	R2407552-005S	Sb (217.582 nm)	0.4869	0.82	1190.4534
	R2407552-005S	Se (196.026 nm)	0.9669	0.60	893.7979
	R2407552-005S	Sn (189.925 nm)	4.7596	0.51	12985.0444
	R2407552-005S	Sr (216.596 nm)	2.0844	0.19	41179.4682
	R2407552-005S	Ti (336.122 nm)	0.5099	0.30	79764.3340
	R2407552-005S	Tl (190.794 nm)	1.9389	0.43	1831.1874
	R2407552-005S	V (292.401 nm)	0.4951	0.23	18978.4278
	R2407552-005S	Y (360.074 nm)	1.03	0.11	552553.78

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407552-005S	Y_R (360.074 nm)	1.03	0.11	553886.45
	R2407552-005S	Zn (213.857 nm)	0.4892	0.24	33253.4870
8/22/2024 20:16:47	R2407552-005SD	Ag (328.068 nm)	0.0437	0.13	3010.0256
	R2407552-005SD	Al (237.312 nm)	2.6523	0.29	7295.7254
	R2407552-005SD	As (188.980 nm)	0.0365	4.84	63.0718
	R2407552-005SD	B (249.772 nm)	0.9764	0.16	40584.2749
	R2407552-005SD	Ba (230.424 nm)	1.8804	0.26	116958.1658
	R2407552-005SD	Be (313.107 nm)	0.0471	0.15	58578.9002
	R2407552-005SD	Ca (317.933 nm)	23.4467	0.19	925677.6186
	R2407552-005SD	Cd (214.439 nm)	0.0479	0.20	3137.6365
	R2407552-005SD	Co (230.786 nm)	0.4765	0.22	10098.8680
	R2407552-005SD	Cr (267.716 nm)	0.1940	0.19	11141.0637
	R2407552-005SD	Cu (327.395 nm)	0.2361	0.19	11636.3238
	R2407552-005SD	Fe (234.350 nm)	2.4482	0.06	57844.7324
	R2407552-005SD	K (766.491 nm)	19.5254	0.26	24695.6570
	R2407552-005SD	Mg (279.078 nm)	6.1577	0.15	26895.6776
	R2407552-005SD	Mn (257.610 nm)	0.5732	0.14	207645.8020
	R2407552-005SD	Mo (202.032 nm)	0.4796	1.23	5199.4882
	R2407552-005SD	Na (588.995 nm)	29.7002	0.15	503876.0394
	R2407552-005SD	Ni (230.299 nm)	0.4813	0.29	6306.1274
	R2407552-005SD	Pb (220.353 nm)	0.4861	0.23	2603.0287
	R2407552-005SD	Sb (217.582 nm)	0.4719	0.58	1153.9341
	R2407552-005SD	Se (196.026 nm)	0.9380	0.61	867.0893
	R2407552-005SD	Sn (189.925 nm)	4.6375	0.48	12651.8596
	R2407552-005SD	Sr (216.596 nm)	2.0131	0.22	39772.1694
	R2407552-005SD	Ti (336.122 nm)	0.4927	0.20	77076.9088
	R2407552-005SD	Tl (190.794 nm)	1.8736	0.22	1769.4838
	R2407552-005SD	V (292.401 nm)	0.4764	0.17	18260.6781
	R2407552-005SD	Y (360.074 nm)	1.03	0.16	552362.73
	R2407552-005SD	Y_R (360.074 nm)	1.03	0.16	553624.77
	R2407552-005SD	Zn (213.857 nm)	0.4721	0.13	32094.5777
8/22/2024 20:19:51	R2407552-005A	Ag (328.068 nm)	0.0438	0.61	3014.0097
	R2407552-005A	Al (237.312 nm)	2.7417	0.25	7542.2772
	R2407552-005A	As (188.980 nm)	0.0379	1.11	65.5811
	R2407552-005A	B (249.772 nm)	0.9761	0.21	40573.3928
	R2407552-005A	Ba (230.424 nm)	1.8790	0.08	116867.4333
	R2407552-005A	Be (313.107 nm)	0.0468	0.23	58291.8441
	R2407552-005A	Ca (317.933 nm)	23.8849	0.21	942924.7269
	R2407552-005A	Cd (214.439 nm)	0.0477	0.12	3122.9182
	R2407552-005A	Co (230.786 nm)	0.4743	0.24	10051.8169
	R2407552-005A	Cr (267.716 nm)	0.1930	0.29	11085.9504
	R2407552-005A	Cu (327.395 nm)	0.2353	0.12	11593.1480
	R2407552-005A	Fe (234.350 nm)	2.5830	0.12	61026.3948
	R2407552-005A	K (766.491 nm)	19.6128	0.29	24804.8082
	R2407552-005A	Mg (279.078 nm)	6.2549	0.22	27320.2794
	R2407552-005A	Mn (257.610 nm)	0.5738	0.21	207884.7355
	R2407552-005A	Mo (202.032 nm)	0.4889	1.34	5300.2554
	R2407552-005A	Na (588.995 nm)	29.9510	0.22	508242.6381
	R2407552-005A	Ni (230.299 nm)	0.4794	0.26	6281.3049
	R2407552-005A	Pb (220.353 nm)	0.4835	0.52	2589.5483
	R2407552-005A	Sb (217.582 nm)	0.4852	0.28	1186.3934
	R2407552-005A	Se (196.026 nm)	0.9464	0.30	874.8690
	R2407552-005A	Sn (189.925 nm)	4.7182	0.44	12872.0591
	R2407552-005A	Sr (216.596 nm)	2.0342	0.13	40188.8972
	R2407552-005A	Ti (336.122 nm)	0.5021	0.32	78538.5916
	R2407552-005A	Tl (190.794 nm)	1.8709	0.23	1766.9465
	R2407552-005A	V (292.401 nm)	0.4750	0.23	18207.9619

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407552-005A	Y (360.074 nm)	1.03	0.15	552600.90
	R2407552-005A	Y_R (360.074 nm)	1.03	0.15	553880.37
	R2407552-005A	Zn (213.857 nm)	0.4700	0.23	31952.1207
8/22/2024 20:22:54	R2407552-005L 5X	Ag (328.068 nm)	-0.0001 u	81.11	18.7382
	R2407552-005L 5X	Al (237.312 nm)	0.1902	0.64	511.0550
	R2407552-005L 5X	As (188.980 nm)	0.0019	25.59	0.2835
	R2407552-005L 5X	B (249.772 nm)	0.0038	4.22	233.1369
	R2407552-005L 5X	Ba (230.424 nm)	0.0057	2.60	364.6975
	R2407552-005L 5X	Be (313.107 nm)	0.0000 u	> 100.00	-17.2067
	R2407552-005L 5X	Ca (317.933 nm)	4.6085	0.25	184218.9776
	R2407552-005L 5X	Cd (214.439 nm)	0.0000 u	> 100.00	12.1971
	R2407552-005L 5X	Co (230.786 nm)	0.0001 u	> 100.00	4.8571
	R2407552-005L 5X	Cr (267.716 nm)	0.0004	24.72	45.9541
	R2407552-005L 5X	Cu (327.395 nm)	0.0001	50.00	16.3521
	R2407552-005L 5X	Fe (234.350 nm)	0.3653	0.50	8673.2311
	R2407552-005L 5X	K (766.491 nm)	0.3799	5.28	769.7294
	R2407552-005L 5X	Mg (279.078 nm)	0.9228	0.19	4024.7505
	R2407552-005L 5X	Mn (257.610 nm)	0.0246	0.28	8908.2063
	R2407552-005L 5X	Mo (202.032 nm)	0.0033	17.70	40.0975
	R2407552-005L 5X	Na (588.995 nm)	2.4829	0.36	29910.3158
	R2407552-005L 5X	Ni (230.299 nm)	0.0024	8.56	33.3213
	R2407552-005L 5X	Pb (220.353 nm)	0.0003 u	> 100.00	3.0171
	R2407552-005L 5X	Sb (217.582 nm)	0.0042	5.14	11.9674
	R2407552-005L 5X	Se (196.026 nm)	0.0027	> 100.00	2.8992
	R2407552-005L 5X	Sn (189.925 nm)	0.0470	31.88	130.1415
	R2407552-005L 5X	Sr (216.596 nm)	0.0307	1.53	611.8978
	R2407552-005L 5X	Ti (336.122 nm)	0.0050	11.19	836.3851
	R2407552-005L 5X	Tl (190.794 nm)	0.0016	24.69	-0.3450
	R2407552-005L 5X	V (292.401 nm)	0.0004	41.03	24.2364
	R2407552-005L 5X	Y (360.074 nm)	1.05	0.11	563511.97
	R2407552-005L 5X	Y_R (360.074 nm)	1.05	0.11	564900.60
	R2407552-005L 5X	Zn (213.857 nm)	0.0018	1.86	132.2236
8/22/2024 20:25:58	Continuing Calibration Verification1	Ag (328.068 nm)	0.4683	0.21	31968.2211
	Continuing Calibration Verification1	Al (237.312 nm)	9.6331	0.09	26532.9018
	Continuing Calibration Verification1	As (188.980 nm)	0.9785	0.18	1770.0502
	Continuing Calibration Verification1	B (249.772 nm)	2.5565	0.26	106143.6094
	Continuing Calibration Verification1	Ba (230.424 nm)	9.4943	0.55	590488.3671
	Continuing Calibration Verification1	Be (313.107 nm)	0.2459	0.16	306145.4039
	Continuing Calibration Verification1	Ca (317.933 nm)	24.5793	0.28	970255.2523
	Continuing Calibration Verification1	Cd (214.439 nm)	0.4989	0.36	32572.6380
	Continuing Calibration Verification1	Co (230.786 nm)	2.4468	0.44	51844.5954
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5048	0.24	28948.9745
	Continuing Calibration Verification1	Cu (327.395 nm)	1.1859	0.17	58402.2068
	Continuing Calibration Verification1	Fe (234.350 nm)	4.8307	0.33	114086.7881
	Continuing Calibration Verification1	K (766.491 nm)	23.6936	0.18	29904.5830
	Continuing Calibration Verification1	Mg (279.078 nm)	25.1094	0.28	109693.9701
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7179	0.25	260055.3889
	Continuing Calibration Verification1	Mo (202.032 nm)	2.5203	0.52	27303.4620
	Continuing Calibration Verification1	Na (588.995 nm)	24.0399	0.17	405306.5111
	Continuing Calibration Verification1	Ni (230.299 nm)	1.9670	0.26	25767.2441
	Continuing Calibration Verification1	Pb (220.353 nm)	0.4943	0.31	2647.0656
	Continuing Calibration Verification1	Sb (217.582 nm)	4.8613	0.29	11870.3851
	Continuing Calibration Verification1	Se (196.026 nm)	0.4902	0.20	453.3685
	Continuing Calibration Verification1	Sn (189.925 nm)	4.9788	0.36	13582.8835
	Continuing Calibration Verification1	Sr (216.596 nm)	2.4422	0.35	48249.1221
	Continuing Calibration Verification1	Ti (336.122 nm)	2.5020	0.19	391135.2489
	Continuing Calibration Verification1	Tl (190.794 nm)	0.9835	0.32	927.9271

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification1	V (292.401 nm)	2.4776	0.28	94924.9803
	Continuing Calibration Verification1	Y (360.074 nm)	1.00	0.16	539789.27
	Continuing Calibration Verification1	Y_R (360.074 nm)	1.00	0.16	541134.73
	Continuing Calibration Verification1	Zn (213.857 nm)	0.9600	0.15	65246.8212
8/22/2024 20:29:02	Continuing Calibration Blank1	Ag (328.068 nm)	-0.0002 u	14.25	12.7198
	Continuing Calibration Blank1	Al (237.312 nm)	0.0006 u	> 100.00	-11.4481
	Continuing Calibration Blank1	As (188.980 nm)	-0.0001 u	> 100.00	-3.3728
	Continuing Calibration Blank1	B (249.772 nm)	0.0022	5.78	164.7020
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0004	26.62	33.2380
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000	81.77	-11.7359
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0029	7.90	2943.8374
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0000 u	> 100.00	10.4779
	Continuing Calibration Blank1	Co (230.786 nm)	0.0000	45.90	3.9627
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0001	70.34	27.4126
	Continuing Calibration Blank1	Cu (327.395 nm)	-0.0001 u	63.95	2.6016
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0035	17.06	132.9271
	Continuing Calibration Blank1	K (766.491 nm)	0.0878	9.22	404.6961
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0028	2.48	5.4400
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0000	27.33	22.9391
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0050	18.40	58.6230
	Continuing Calibration Blank1	Na (588.995 nm)	0.0327	7.67	-12759.5027
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0003 u	98.43	5.9164
	Continuing Calibration Blank1	Pb (220.353 nm)	-0.0009 u	58.60	-3.4520
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0156	8.17	39.7166
	Continuing Calibration Blank1	Se (196.026 nm)	0.0001 u	99.30	0.5597
	Continuing Calibration Blank1	Sn (189.925 nm)	0.0106	33.30	30.8662
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0001 u	> 100.00	8.1122
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0041	23.66	702.7924
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0011 u	> 100.00	-0.8031
	Continuing Calibration Blank1	V (292.401 nm)	0.0000 u	> 100.00	11.5401
	Continuing Calibration Blank1	Y (360.074 nm)	1.04	0.14	561238.53
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.04	0.14	562508.81
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0001	19.08	17.3771
8/22/2024 20:32:05	PBW-443497	Ag (328.068 nm)	-0.0002 u	15.29	11.9636
	PBW-443497	Al (237.312 nm)	0.0013 u	92.44	-9.5010
	PBW-443497	As (188.980 nm)	0.0001 u	> 100.00	-2.9500
	PBW-443497	B (249.772 nm)	0.0001	63.80	80.4918
	PBW-443497	Ba (230.424 nm)	0.0001	31.91	14.4976
	PBW-443497	Be (313.107 nm)	0.0000	78.41	-11.2146
	PBW-443497	Ca (317.933 nm)	0.0025	10.46	2929.0488
	PBW-443497	Cd (214.439 nm)	0.0000 u	77.50	8.5189
	PBW-443497	Co (230.786 nm)	-0.0001 u	32.53	0.8308
	PBW-443497	Cr (267.716 nm)	0.0000 u	> 100.00	22.5412
	PBW-443497	Cu (327.395 nm)	-0.0001 u	30.67	3.5320
	PBW-443497	Fe (234.350 nm)	0.0009	22.32	71.0774
	PBW-443497	K (766.491 nm)	0.0700	25.81	382.3931
	PBW-443497	Mg (279.078 nm)	0.0018	19.52	1.0797
	PBW-443497	Mn (257.610 nm)	0.0000	56.85	15.0032
	PBW-443497	Mo (202.032 nm)	0.0015	29.78	20.4834
	PBW-443497	Na (588.995 nm)	0.0323	12.44	-12765.8049
	PBW-443497	Ni (230.299 nm)	0.0004	16.90	6.3084
	PBW-443497	Pb (220.353 nm)	-0.0001 u	92.58	1.2487
	PBW-443497	Sb (217.582 nm)	0.0027	60.56	8.3248
	PBW-443497	Se (196.026 nm)	0.0023 u	> 100.00	2.5259
	PBW-443497	Sn (189.925 nm)	0.0064	38.32	19.5309
	PBW-443497	Sr (216.596 nm)	0.0000 u	> 100.00	6.1677
	PBW-443497	Ti (336.122 nm)	0.0008	38.99	195.0225

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	PBW-443497	Tl (190.794 nm)	-0.0001 u	> 100.00	-1.9685
	PBW-443497	V (292.401 nm)	-0.0001 u	> 100.00	8.1337
	PBW-443497	Y (360.074 nm)	1.06	0.12	571444.74
	PBW-443497	Y_R (360.074 nm)	1.06	0.12	572675.53
	PBW-443497	Zn (213.857 nm)	0.0001	38.81	18.8309
8/22/2024 20:35:09	LCSW-443497	Ag (328.068 nm)	0.0448	0.04	3081.7914
	LCSW-443497	Al (237.312 nm)	1.9157	0.17	5265.9903
	LCSW-443497	As (188.980 nm)	0.0368	2.87	63.5329
	LCSW-443497	B (249.772 nm)	0.9693	0.11	40289.5135
	LCSW-443497	Ba (230.424 nm)	1.9082	0.02	118688.6848
	LCSW-443497	Be (313.107 nm)	0.0476	0.17	59263.7250
	LCSW-443497	Ca (317.933 nm)	1.9240	0.14	78559.7683
	LCSW-443497	Cd (214.439 nm)	0.0498	0.25	3260.9328
	LCSW-443497	Co (230.786 nm)	0.4879	0.29	10340.1905
	LCSW-443497	Cr (267.716 nm)	0.1970	0.20	11313.8711
	LCSW-443497	Cu (327.395 nm)	0.2379	0.29	11724.7720
	LCSW-443497	Fe (234.350 nm)	0.9660	0.06	22855.8310
	LCSW-443497	K (766.491 nm)	18.1584	0.20	22987.2896
	LCSW-443497	Mg (279.078 nm)	1.9036	0.13	8309.6445
	LCSW-443497	Mn (257.610 nm)	0.4680	0.19	169555.9608
	LCSW-443497	Mo (202.032 nm)	0.4859	1.44	5268.1907
	LCSW-443497	Na (588.995 nm)	18.7013	0.25	312338.8383
	LCSW-443497	Ni (230.299 nm)	0.4826	0.25	6323.5170
	LCSW-443497	Pb (220.353 nm)	0.5000	0.28	2677.5346
	LCSW-443497	Sb (217.582 nm)	0.4790	0.39	1171.2160
	LCSW-443497	Se (196.026 nm)	0.9515	0.32	879.6302
	LCSW-443497	Sn (189.925 nm)	4.6752	0.47	12754.5648
	LCSW-443497	Sr (216.596 nm)	1.9454	0.22	38434.8842
	LCSW-443497	Ti (336.122 nm)	0.4887	0.18	76453.4229
	LCSW-443497	Tl (190.794 nm)	1.9225	0.30	1815.6998
	LCSW-443497	V (292.401 nm)	0.4813	0.14	18447.4058
	LCSW-443497	Y (360.074 nm)	1.04	0.24	558049.68
	LCSW-443497	Y_R (360.074 nm)	1.04	0.24	559364.70
	LCSW-443497	Zn (213.857 nm)	0.4794	0.18	32587.7097
8/22/2024 20:38:13	R2407554-001	Ag (328.068 nm)	-0.0001 u	42.98	18.5336
	R2407554-001	Al (237.312 nm)	0.5809	0.88	1587.5913
	R2407554-001	As (188.980 nm)	0.0016	53.28	-0.1843
	R2407554-001	B (249.772 nm)	0.0162	0.57	745.2285
	R2407554-001	Ba (230.424 nm)	0.0256	0.16	1603.3102
	R2407554-001	Be (313.107 nm)	0.0000	74.96	-5.4789
	R2407554-001	Ca (317.933 nm)	24.6500	0.19	973036.8334
	R2407554-001	Cd (214.439 nm)	0.0000 u	> 100.00	10.9468
	R2407554-001	Co (230.786 nm)	0.0005	37.10	14.8393
	R2407554-001	Cr (267.716 nm)	0.0012	6.50	92.3611
	R2407554-001	Cu (327.395 nm)	0.0015	26.78	81.5715
	R2407554-001	Fe (234.350 nm)	1.0822	0.24	25596.9068
	R2407554-001	K (766.491 nm)	1.7015	1.02	2421.2817
	R2407554-001	Mg (279.078 nm)	4.8422	0.20	21148.0333
	R2407554-001	Mn (257.610 nm)	0.0645	0.17	23386.7642
	R2407554-001	Mo (202.032 nm)	0.0038	14.70	46.0211
	R2407554-001	Na (588.995 nm)	13.6261	0.35	223959.1853
	R2407554-001	Ni (230.299 nm)	0.0108	1.61	143.4198
	R2407554-001	Pb (220.353 nm)	0.0011	57.10	7.4218
	R2407554-001	Sb (217.582 nm)	0.0032	45.41	9.5236
	R2407554-001	Se (196.026 nm)	0.0012	79.87	1.5437
	R2407554-001	Sn (189.925 nm)	0.0462	26.80	128.0175
	R2407554-001	Sr (216.596 nm)	0.1679	0.07	3323.6682

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407554-001	Ti (336.122 nm)	0.0117	4.47	1885.7476
	R2407554-001	Tl (190.794 nm)	0.0008 u	> 100.00	-1.0737
	R2407554-001	V (292.401 nm)	0.0013	2.43	61.4785
	R2407554-001	Y (360.074 nm)	1.04	0.13	560166.30
	R2407554-001	Y_R (360.074 nm)	1.04	0.13	561477.52
	R2407554-001	Zn (213.857 nm)	0.0060	0.27	418.5513
8/22/2024 20:41:16	R2407554-003	Ag (328.068 nm)	-0.0001 u	> 100.00	22.2796
	R2407554-003	Al (237.312 nm)	0.8075	0.37	2212.1367
	R2407554-003	As (188.980 nm)	0.0027	50.14	1.6919
	R2407554-003	B (249.772 nm)	0.0165	0.50	760.7152
	R2407554-003	Ba (230.424 nm)	0.0283	0.57	1770.2702
	R2407554-003	Be (313.107 nm)	0.0000 u	> 100.00	-7.4322
	R2407554-003	Ca (317.933 nm)	25.4534	0.17	1004660.9815
	R2407554-003	Cd (214.439 nm)	0.0001 u	> 100.00	13.7223
	R2407554-003	Co (230.786 nm)	0.0006	17.37	16.9552
	R2407554-003	Cr (267.716 nm)	0.0014	2.21	105.9534
	R2407554-003	Cu (327.395 nm)	0.0024	13.83	128.5665
	R2407554-003	Fe (234.350 nm)	1.4921	0.43	35274.5025
	R2407554-003	K (766.491 nm)	1.8100	1.08	2556.8723
	R2407554-003	Mg (279.078 nm)	5.1345	0.10	22425.2485
	R2407554-003	Mn (257.610 nm)	0.0884	0.09	32041.8154
	R2407554-003	Mo (202.032 nm)	0.0014	33.21	19.7064
	R2407554-003	Na (588.995 nm)	13.7665	0.19	226403.7095
	R2407554-003	Ni (230.299 nm)	0.0122	3.08	161.8406
	R2407554-003	Pb (220.353 nm)	0.0006 u	95.18	4.8721
	R2407554-003	Sb (217.582 nm)	0.0023	21.54	7.3787
	R2407554-003	Se (196.026 nm)	-0.0017 u	> 100.00	-1.1396
	R2407554-003	Sn (189.925 nm)	0.0124	35.45	35.9258
	R2407554-003	Sr (216.596 nm)	0.1745	0.31	3453.6728
	R2407554-003	Ti (336.122 nm)	0.0142	1.29	2281.4534
	R2407554-003	Tl (190.794 nm)	0.0017	63.69	-0.2353
	R2407554-003	V (292.401 nm)	0.0018	9.70	81.3731
	R2407554-003	Y (360.074 nm)	1.04	0.11	559230.93
	R2407554-003	Y_R (360.074 nm)	1.04	0.11	560542.52
	R2407554-003	Zn (213.857 nm)	0.0086	0.80	594.4412
8/22/2024 20:44:20	R2407557-001	Ag (328.068 nm)	-0.0001 u	65.37	18.6022
	R2407557-001	Al (237.312 nm)	0.0018	47.30	-8.0897
	R2407557-001	As (188.980 nm)	0.0012	78.05	-0.8857
	R2407557-001	B (249.772 nm)	-0.0002 u	22.49	66.1414
	R2407557-001	Ba (230.424 nm)	0.0001	60.02	14.0969
	R2407557-001	Be (313.107 nm)	0.0000 u	> 100.00	-18.8049
	R2407557-001	Ca (317.933 nm)	0.0066	5.53	3092.1306
	R2407557-001	Cd (214.439 nm)	0.0000 u	> 100.00	10.7731
	R2407557-001	Co (230.786 nm)	0.0001 u	> 100.00	4.6919
	R2407557-001	Cr (267.716 nm)	0.0003	41.01	41.1244
	R2407557-001	Cu (327.395 nm)	-0.0002 u	35.77	2.0998
	R2407557-001	Fe (234.350 nm)	0.0025	7.30	109.8597
	R2407557-001	K (766.491 nm)	0.0455	62.78	351.7938
	R2407557-001	Mg (279.078 nm)	0.0033	14.17	7.3256
	R2407557-001	Mn (257.610 nm)	0.0003	4.08	130.3278
	R2407557-001	Mo (202.032 nm)	0.0005	13.77	10.2647
	R2407557-001	Na (588.995 nm)	0.0345	20.37	-12727.9144
	R2407557-001	Ni (230.299 nm)	0.0003	81.47	5.9491
	R2407557-001	Pb (220.353 nm)	0.0005	99.48	4.4348
	R2407557-001	Sb (217.582 nm)	0.0030	11.77	9.0058
	R2407557-001	Se (196.026 nm)	0.0000 u	> 100.00	0.4873
	R2407557-001	Sn (189.925 nm)	0.0071	27.19	21.4631

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407557-001	Sr (216.596 nm)	0.0000 u	> 100.00	6.1618
	R2407557-001	Ti (336.122 nm)	0.0005	47.12	136.4975
	R2407557-001	Tl (190.794 nm)	0.0003 u	> 100.00	-1.5320
	R2407557-001	V (292.401 nm)	-0.0001 u	> 100.00	6.8331
	R2407557-001	Y (360.074 nm)	1.06	0.12	571371.41
	R2407557-001	Y_R (360.074 nm)	1.06	0.12	572716.70
	R2407557-001	Zn (213.857 nm)	0.0023	1.38	171.5080
8/22/2024 20:47:24	R2407557-003	Ag (328.068 nm)	-0.0001 u	50.79	18.3125
	R2407557-003	Al (237.312 nm)	0.1713	0.38	458.7898
	R2407557-003	As (188.980 nm)	0.0008 u	> 100.00	-1.6510
	R2407557-003	B (249.772 nm)	0.6084	0.20	25316.9094
	R2407557-003	Ba (230.424 nm)	0.0309	0.31	1932.3410
	R2407557-003	Be (313.107 nm)	0.0000 u	> 100.00	-14.3980
	R2407557-003	Ca (317.933 nm)	66.3079 o	0.29	2612664.9281
	R2407557-003	Cd (214.439 nm)	0.0001	70.13	14.6366
	R2407557-003	Co (230.786 nm)	0.0000 u	> 100.00	4.2520
	R2407557-003	Cr (267.716 nm)	0.0010	8.23	79.2217
	R2407557-003	Cu (327.395 nm)	0.0022	12.17	119.0634
	R2407557-003	Fe (234.350 nm)	0.3176	0.41	7549.3844
	R2407557-003	K (766.491 nm)	66.1437 o	0.28	82953.9870
	R2407557-003	Mg (279.078 nm)	164.0393 o	0.30	716666.3906
	R2407557-003	Mn (257.610 nm)	0.0446	0.15	16173.7688
	R2407557-003	Mo (202.032 nm)	0.0020	7.42	26.2868
	R2407557-003	Na (588.995 nm)	875.4482 o LR	1.60	15231855.4887
	R2407557-003	Ni (230.299 nm)	0.0036	6.03	48.2735
	R2407557-003	Pb (220.353 nm)	-0.0006 u	> 100.00	-1.8621
	R2407557-003	Sb (217.582 nm)	0.0021	79.56	6.7287
	R2407557-003	Se (196.026 nm)	-0.0015 u	> 100.00	-0.9828
	R2407557-003	Sn (189.925 nm)	0.0045	66.27	14.3831
	R2407557-003	Sr (216.596 nm)	1.0041	0.26	19841.1524
	R2407557-003	Ti (336.122 nm)	0.0035	5.74	603.1608
	R2407557-003	Tl (190.794 nm)	0.0010	68.76	-0.9250
	R2407557-003	V (292.401 nm)	0.0012	11.57	55.4065
	R2407557-003	Y (360.074 nm)	0.86	0.18	465101.58
	R2407557-003	Y_R (360.074 nm)	0.87	0.18	466328.97
	R2407557-003	Zn (213.857 nm)	0.0041	0.83	288.6863
8/22/2024 20:50:28	R2407557-005	Ag (328.068 nm)	-0.0001 u	> 100.00	21.0279
	R2407557-005	Al (237.312 nm)	0.3613	0.59	982.4505
	R2407557-005	As (188.980 nm)	0.0013	76.48	-0.7577
	R2407557-005	B (249.772 nm)	1.0189	0.13	42349.0895
	R2407557-005	Ba (230.424 nm)	0.0288	0.52	1803.0170
	R2407557-005	Be (313.107 nm)	0.0000 u	> 100.00	-18.2239
	R2407557-005	Ca (317.933 nm)	92.7874 o	0.16	3654878.7037
	R2407557-005	Cd (214.439 nm)	0.0000 u	43.41	7.4017
	R2407557-005	Co (230.786 nm)	0.0001 u	> 100.00	4.7397
	R2407557-005	Cr (267.716 nm)	0.0015	4.47	112.5203
	R2407557-005	Cu (327.395 nm)	0.0025	6.58	132.6229
	R2407557-005	Fe (234.350 nm)	0.6841	0.68	16199.6954
	R2407557-005	K (766.491 nm)	117.1015 o LR	0.26	146635.4654
	R2407557-005	Mg (279.078 nm)	268.7720 o	0.17	1174234.5909
	R2407557-005	Mn (257.610 nm)	0.0768	0.26	27818.3766
	R2407557-005	Mo (202.032 nm)	0.0031	8.82	38.4012
	R2407557-005	Na (588.995 nm)	1082.6237 o LR	1.29	18839639.0824
	R2407557-005	Ni (230.299 nm)	0.0053	4.37	70.9530
	R2407557-005	Pb (220.353 nm)	0.0015	63.90	9.7117
	R2407557-005	Sb (217.582 nm)	0.0023	67.74	7.3075
	R2407557-005	Se (196.026 nm)	-0.0010 u	62.79	-0.4627

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407557-005	Sn (189.925 nm)	0.0030	55.19	10.3785
	R2407557-005	Sr (216.596 nm)	1.5648	0.24	30917.1514
	R2407557-005	Ti (336.122 nm)	0.0073	0.97	1208.8816
	R2407557-005	Tl (190.794 nm)	0.0035	68.18	1.4319
	R2407557-005	V (292.401 nm)	0.0017	7.54	75.4770
	R2407557-005	Y (360.074 nm)	0.82	0.22	439855.09
	R2407557-005	Y_R (360.074 nm)	0.82	0.22	441048.12
	R2407557-005	Zn (213.857 nm)	0.0061	1.15	427.1181
8/22/2024 20:53:32	R2407557-007	Ag (328.068 nm)	-0.0001 u	25.29	17.5230
	R2407557-007	Al (237.312 nm)	0.1383	0.52	367.9264
	R2407557-007	As (188.980 nm)	-0.0002 u	> 100.00	-3.5520
	R2407557-007	B (249.772 nm)	0.4380	0.25	18247.4264
	R2407557-007	Ba (230.424 nm)	0.0293	0.31	1831.5350
	R2407557-007	Be (313.107 nm)	0.0000 u	> 100.00	-22.0404
	R2407557-007	Ca (317.933 nm)	54.5602	0.24	2150281.8381
	R2407557-007	Cd (214.439 nm)	0.0000	59.23	12.4966
	R2407557-007	Co (230.786 nm)	0.0000 u	> 100.00	4.3552
	R2407557-007	Cr (267.716 nm)	0.0009	11.23	78.0635
	R2407557-007	Cu (327.395 nm)	0.0015	10.08	85.2646
	R2407557-007	Fe (234.350 nm)	0.2669	0.41	6350.7058
	R2407557-007	K (766.491 nm)	46.5816	0.16	58507.4282
	R2407557-007	Mg (279.078 nm)	119.9944 o	0.22	524238.1466
	R2407557-007	Mn (257.610 nm)	0.0392	0.20	14211.9836
	R2407557-007	Mo (202.032 nm)	0.0016	12.10	22.0756
	R2407557-007	Na (588.995 nm)	684.8746 o LR	0.39	11913178.9470
	R2407557-007	Ni (230.299 nm)	0.0035	8.75	47.2388
	R2407557-007	Pb (220.353 nm)	0.0007	74.50	5.4796
	R2407557-007	Sb (217.582 nm)	0.0014	93.87	5.1773
	R2407557-007	Se (196.026 nm)	0.0008 u	> 100.00	1.2039
	R2407557-007	Sn (189.925 nm)	0.0029	72.99	10.0222
	R2407557-007	Sr (216.596 nm)	0.7619	0.24	15055.5832
	R2407557-007	Ti (336.122 nm)	0.0026	7.25	464.2167
	R2407557-007	Tl (190.794 nm)	0.0012	53.85	-0.7168
	R2407557-007	V (292.401 nm)	0.0011	17.44	52.1001
	R2407557-007	Y (360.074 nm)	0.89	0.16	479236.42
	R2407557-007	Y_R (360.074 nm)	0.89	0.16	480503.59
	R2407557-007	Zn (213.857 nm)	0.0038	1.17	268.2006
8/22/2024 20:56:35	R2407557-009	Ag (328.068 nm)	-0.0002 u	10.44	14.6451
	R2407557-009	Al (237.312 nm)	0.2929	0.62	794.0492
	R2407557-009	As (188.980 nm)	0.0020	68.21	0.4994
	R2407557-009	B (249.772 nm)	0.3662	0.11	15270.7070
	R2407557-009	Ba (230.424 nm)	0.0289	0.16	1808.1136
	R2407557-009	Be (313.107 nm)	0.0000	17.93	-9.6019
	R2407557-009	Ca (317.933 nm)	49.9399	0.06	1968433.0291
	R2407557-009	Cd (214.439 nm)	0.0000	31.90	12.3289
	R2407557-009	Co (230.786 nm)	0.0002 u	> 100.00	7.2405
	R2407557-009	Cr (267.716 nm)	0.0011	4.40	84.8641
	R2407557-009	Cu (327.395 nm)	0.0015	12.74	83.9134
	R2407557-009	Fe (234.350 nm)	0.5788	0.66	13715.2304
	R2407557-009	K (766.491 nm)	38.2547	0.11	48101.4627
	R2407557-009	Mg (279.078 nm)	100.7602 o	0.06	440205.5164
	R2407557-009	Mn (257.610 nm)	0.0652	0.01	23637.8041
	R2407557-009	Mo (202.032 nm)	0.0016	6.91	22.0331
	R2407557-009	Na (588.995 nm)	602.8665 o LR	0.44	10485077.9797
	R2407557-009	Ni (230.299 nm)	0.0038	3.29	51.7632
	R2407557-009	Pb (220.353 nm)	0.0010	93.33	6.8818
	R2407557-009	Sb (217.582 nm)	0.0019	28.35	6.4005

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407557-009	Se (196.026 nm)	-0.0004 u	> 100.00	0.0907
	R2407557-009	Sn (189.925 nm)	0.0027	45.45	9.5164
	R2407557-009	Sr (216.596 nm)	0.6612	0.10	13066.8930
	R2407557-009	Ti (336.122 nm)	0.0054	2.64	901.2251
	R2407557-009	Tl (190.794 nm)	0.0018	29.69	-0.1758
	R2407557-009	V (292.401 nm)	0.0013	1.46	58.8489
	R2407557-009	Y (360.074 nm)	0.91	0.32	487362.98
	R2407557-009	Y_R (360.074 nm)	0.91	0.32	488660.62
	R2407557-009	Zn (213.857 nm)	0.0051	0.08	358.9583
8/22/2024 20:59:39	R2407634-003	Ag (328.068 nm)	-0.0002 u	23.94	13.9933
	R2407634-003	Al (237.312 nm)	0.0305	4.26	70.9803
	R2407634-003	As (188.980 nm)	0.0017	22.73	-0.1036
	R2407634-003	B (249.772 nm)	0.0087	0.88	434.4926
	R2407634-003	Ba (230.424 nm)	0.0510	0.44	3180.8280
	R2407634-003	Be (313.107 nm)	0.0000	48.57	-8.6665
	R2407634-003	Ca (317.933 nm)	5.7505	0.35	229168.8168
	R2407634-003	Cd (214.439 nm)	0.0000 u	62.16	7.4461
	R2407634-003	Co (230.786 nm)	0.0000 u	> 100.00	2.7527
	R2407634-003	Cr (267.716 nm)	0.0012	1.29	90.6420
	R2407634-003	Cu (327.395 nm)	0.0002	39.94	20.9642
	R2407634-003	Fe (234.350 nm)	0.5115	0.38	12125.7885
	R2407634-003	K (766.491 nm)	1.1307	2.37	1707.9239
	R2407634-003	Mg (279.078 nm)	1.0035	0.26	4377.1369
	R2407634-003	Mn (257.610 nm)	0.2439	0.35	88359.0632
	R2407634-003	Mo (202.032 nm)	0.0003	58.95	8.2452
	R2407634-003	Na (588.995 nm)	1.4072	2.24	11177.5982
	R2407634-003	Ni (230.299 nm)	0.0048	1.56	64.1308
	R2407634-003	Pb (220.353 nm)	-0.0004 u	> 100.00	-0.4085
	R2407634-003	Sb (217.582 nm)	0.0008	20.29	3.5468
	R2407634-003	Se (196.026 nm)	0.0016	35.91	1.9598
	R2407634-003	Sn (189.925 nm)	0.0020	72.26	7.6302
	R2407634-003	Sr (216.596 nm)	0.0220	1.27	441.9040
	R2407634-003	Ti (336.122 nm)	0.0006	11.79	155.5970
	R2407634-003	Tl (190.794 nm)	-0.0008 u	92.47	-2.6439
	R2407634-003	V (292.401 nm)	0.0001	51.11	14.9429
	R2407634-003	Y (360.074 nm)	1.07	0.33	573897.29
	R2407634-003	Y_R (360.074 nm)	1.07	0.33	575318.55
	R2407634-003	Zn (213.857 nm)	0.0049	0.38	345.0721
8/22/2024 21:02:42	Continuing Calibration Verification1	Ag (328.068 nm)	0.4681	0.12	31955.7536
	Continuing Calibration Verification1	Al (237.312 nm)	9.6882	0.13	26684.9022
	Continuing Calibration Verification1	As (188.980 nm)	0.9771	0.20	1767.5927
	Continuing Calibration Verification1	B (249.772 nm)	2.5560	0.30	106123.4127
	Continuing Calibration Verification1	Ba (230.424 nm)	9.4785	0.83	589507.6451
	Continuing Calibration Verification1	Be (313.107 nm)	0.2458	0.29	305994.5542
	Continuing Calibration Verification1	Ca (317.933 nm)	24.5305	0.36	968334.8087
	Continuing Calibration Verification1	Cd (214.439 nm)	0.4970	0.35	32447.3582
	Continuing Calibration Verification1	Co (230.786 nm)	2.4538	0.45	51993.1704
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5043	0.44	28919.5880
	Continuing Calibration Verification1	Cu (327.395 nm)	1.1899	0.21	58596.5401
	Continuing Calibration Verification1	Fe (234.350 nm)	4.8256	0.44	113965.9255
	Continuing Calibration Verification1	K (766.491 nm)	24.0863	0.04	30395.3310
	Continuing Calibration Verification1	Mg (279.078 nm)	25.0642	0.37	109496.4299
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7176	0.37	259948.8005
	Continuing Calibration Verification1	Mo (202.032 nm)	2.5143	0.71	27238.3494
	Continuing Calibration Verification1	Na (588.995 nm)	24.1283	0.23	406845.1244
	Continuing Calibration Verification1	Ni (230.299 nm)	1.9606	0.24	25682.9024
	Continuing Calibration Verification1	Pb (220.353 nm)	0.4898	0.13	2622.9488

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification1	Sb (217.582 nm)	4.8682	0.39	11887.1467
	Continuing Calibration Verification1	Se (196.026 nm)	0.4884	1.09	451.6916
	Continuing Calibration Verification1	Sn (189.925 nm)	4.9426	0.40	13484.0251
	Continuing Calibration Verification1	Sr (216.596 nm)	2.4340	0.22	48087.0996
	Continuing Calibration Verification1	Ti (336.122 nm)	2.5013	0.32	391021.6586
	Continuing Calibration Verification1	Tl (190.794 nm)	0.9770	0.71	921.8580
	Continuing Calibration Verification1	V (292.401 nm)	2.4783	0.33	94950.5796
	Continuing Calibration Verification1	Y (360.074 nm)	1.01	0.21	543683.81
	Continuing Calibration Verification1	Y_R (360.074 nm)	1.01	0.21	545096.75
	Continuing Calibration Verification1	Zn (213.857 nm)	0.9558	0.35	64962.2295
8/22/2024 21:05:46	Continuing Calibration Blank1	Ag (328.068 nm)	-0.0001 u	> 100.00	22.0141
	Continuing Calibration Blank1	Al (237.312 nm)	0.0003 u	> 100.00	-12.2256
	Continuing Calibration Blank1	As (188.980 nm)	0.0025	47.10	1.3977
	Continuing Calibration Blank1	B (249.772 nm)	0.0022	12.57	165.7063
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0005	13.38	41.6969
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000 u	> 100.00	-15.1692
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0037	9.30	2978.1114
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0000 u	> 100.00	9.3471
	Continuing Calibration Blank1	Co (230.786 nm)	-0.0001 u	26.07	1.6175
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0000 u	> 100.00	22.9144
	Continuing Calibration Blank1	Cu (327.395 nm)	-0.0001 u	> 100.00	4.4074
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0040	16.12	145.2362
	Continuing Calibration Blank1	K (766.491 nm)	0.2186	21.87	568.1243
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0036	34.45	8.8572
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0000	5.68	22.1188
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0051	19.39	59.9417
	Continuing Calibration Blank1	Na (588.995 nm)	0.2954	4.70	-8184.0133
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0003	58.18	5.6860
	Continuing Calibration Blank1	Pb (220.353 nm)	-0.0003 u	> 100.00	0.1909
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0165	15.63	42.0705
	Continuing Calibration Blank1	Se (196.026 nm)	-0.0002 u	> 100.00	0.2174
	Continuing Calibration Blank1	Sn (189.925 nm)	0.0052	20.77	16.1971
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0002	32.97	10.2480
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0045	23.20	762.7296
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0007 u	> 100.00	-1.1636
	Continuing Calibration Blank1	V (292.401 nm)	-0.0002 u	33.73	4.7482
	Continuing Calibration Blank1	Y (360.074 nm)	1.05	0.33	565435.77
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.05	0.33	566810.37
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0001 u	> 100.00	16.6862
8/22/2024 21:08:50	R2407634-005	Ag (328.068 nm)	-0.0001 u	77.74	19.3137
	R2407634-005	Al (237.312 nm)	0.0512	2.62	128.0606
	R2407634-005	As (188.980 nm)	0.0024	38.37	1.2639
	R2407634-005	B (249.772 nm)	0.0074	3.43	380.8725
	R2407634-005	Ba (230.424 nm)	0.0227	0.27	1419.8395
	R2407634-005	Be (313.107 nm)	0.0000 u	> 100.00	-15.9324
	R2407634-005	Ca (317.933 nm)	11.0821	0.09	439014.3965
	R2407634-005	Cd (214.439 nm)	-0.0001 u	> 100.00	5.6048
	R2407634-005	Co (230.786 nm)	0.0000 u	> 100.00	2.7213
	R2407634-005	Cr (267.716 nm)	0.0005	14.97	54.2449
	R2407634-005	Cu (327.395 nm)	0.0007	29.08	42.7780
	R2407634-005	Fe (234.350 nm)	0.2795	0.80	6648.2906
	R2407634-005	K (766.491 nm)	0.5616	3.18	996.8349
	R2407634-005	Mg (279.078 nm)	2.9828	0.16	13024.4115
	R2407634-005	Mn (257.610 nm)	0.1104	0.09	39999.7645
	R2407634-005	Mo (202.032 nm)	0.0011	31.20	16.8613
	R2407634-005	Na (588.995 nm)	3.3050	0.53	44225.7440
	R2407634-005	Ni (230.299 nm)	0.0037	5.42	50.1779

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407634-005	Pb (220.353 nm)	0.0001 u	> 100.00	2.0178
	R2407634-005	Sb (217.582 nm)	0.0025	57.85	7.7144
	R2407634-005	Se (196.026 nm)	0.0005 u	> 100.00	0.8840
	R2407634-005	Sn (189.925 nm)	0.0025	33.64	8.8172
	R2407634-005	Sr (216.596 nm)	0.0284	0.35	566.5195
	R2407634-005	Ti (336.122 nm)	0.0014	27.35	284.3462
	R2407634-005	Tl (190.794 nm)	0.0010	60.95	-0.9387
	R2407634-005	V (292.401 nm)	0.0002	84.02	18.0753
	R2407634-005	Y (360.074 nm)	1.06	0.13	570336.31
	R2407634-005	Y_R (360.074 nm)	1.06	0.13	571743.72
	R2407634-005	Zn (213.857 nm)	0.0035	3.13	254.2265
8/22/2024 21:11:53	R2407634-005S	Ag (328.068 nm)	0.0443	0.27	3051.7673
	R2407634-005S	Al (237.312 nm)	1.9523	0.07	5366.8288
	R2407634-005S	As (188.980 nm)	0.0386	2.45	66.8913
	R2407634-005S	B (249.772 nm)	0.9732	0.13	40454.3180
	R2407634-005S	Ba (230.424 nm)	1.9020	0.18	118301.3026
	R2407634-005S	Be (313.107 nm)	0.0474	0.18	59018.5546
	R2407634-005S	Ca (317.933 nm)	12.6063	0.26	499008.3649
	R2407634-005S	Cd (214.439 nm)	0.0486	0.07	3179.2392
	R2407634-005S	Co (230.786 nm)	0.4803	0.24	10180.7869
	R2407634-005S	Cr (267.716 nm)	0.1960	0.29	11254.8577
	R2407634-005S	Cu (327.395 nm)	0.2377	0.12	11713.7087
	R2407634-005S	Fe (234.350 nm)	1.2276	0.24	29029.4731
	R2407634-005S	K (766.491 nm)	18.8393	0.22	23838.1917
	R2407634-005S	Mg (279.078 nm)	4.7488	0.25	20740.3415
	R2407634-005S	Mn (257.610 nm)	0.5696	0.18	206346.1161
	R2407634-005S	Mo (202.032 nm)	0.4837	1.62	5244.1106
	R2407634-005S	Na (588.995 nm)	21.8352	0.29	366912.5928
	R2407634-005S	Ni (230.299 nm)	0.4781	0.27	6263.4896
	R2407634-005S	Pb (220.353 nm)	0.4901	0.20	2624.8716
	R2407634-005S	Sb (217.582 nm)	0.4774	0.27	1167.1953
	R2407634-005S	Se (196.026 nm)	0.9444	1.12	873.0254
	R2407634-005S	Sn (189.925 nm)	4.6162	0.51	12593.6685
	R2407634-005S	Sr (216.596 nm)	1.9320	0.17	38169.2350
	R2407634-005S	Ti (336.122 nm)	0.4873	0.31	76225.4118
	R2407634-005S	Tl (190.794 nm)	1.8928	0.18	1787.6427
	R2407634-005S	V (292.401 nm)	0.4806	0.22	18423.4933
	R2407634-005S	Y (360.074 nm)	1.04	0.15	561102.15
	R2407634-005S	Y_R (360.074 nm)	1.04	0.15	562525.53
	R2407634-005S	Zn (213.857 nm)	0.4730	0.22	32156.8415
8/22/2024 21:14:57	R2407634-005SD	Ag (328.068 nm)	0.0439	0.06	3023.6443
	R2407634-005SD	Al (237.312 nm)	1.9395	0.23	5331.5781
	R2407634-005SD	As (188.980 nm)	0.0376	2.75	65.0598
	R2407634-005SD	B (249.772 nm)	0.9685	0.19	40259.4559
	R2407634-005SD	Ba (230.424 nm)	1.8825	0.41	117086.5361
	R2407634-005SD	Be (313.107 nm)	0.0470	0.17	58541.1553
	R2407634-005SD	Ca (317.933 nm)	12.4634	0.21	493380.2573
	R2407634-005SD	Cd (214.439 nm)	0.0481	0.04	3151.6733
	R2407634-005SD	Co (230.786 nm)	0.4771	0.26	10111.8297
	R2407634-005SD	Cr (267.716 nm)	0.1940	0.26	11141.7762
	R2407634-005SD	Cu (327.395 nm)	0.2355	0.14	11606.4211
	R2407634-005SD	Fe (234.350 nm)	1.3126	0.10	31037.2354
	R2407634-005SD	K (766.491 nm)	18.7337	0.45	23706.2466
	R2407634-005SD	Mg (279.078 nm)	4.6968	0.22	20512.8473
	R2407634-005SD	Mn (257.610 nm)	0.5650	0.19	204681.7866
	R2407634-005SD	Mo (202.032 nm)	0.4829	1.01	5234.8296
	R2407634-005SD	Na (588.995 nm)	21.6836	0.47	364273.0551

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407634-005SD	Ni (230.299 nm)	0.4739	0.35	6209.2819
	R2407634-005SD	Pb (220.353 nm)	0.4887	0.13	2617.2234
	R2407634-005SD	Sb (217.582 nm)	0.4749	0.85	1161.1098
	R2407634-005SD	Se (196.026 nm)	0.9386	0.21	867.7089
	R2407634-005SD	Sn (189.925 nm)	4.6379	0.18	12653.0145
	R2407634-005SD	Sr (216.596 nm)	1.9147	0.28	37829.1362
	R2407634-005SD	Ti (336.122 nm)	0.4858	0.08	75988.0131
	R2407634-005SD	Tl (190.794 nm)	1.8812	0.28	1776.6566
	R2407634-005SD	V (292.401 nm)	0.4765	0.10	18266.4715
	R2407634-005SD	Y (360.074 nm)	1.04	0.24	560993.00
	R2407634-005SD	Y_R (360.074 nm)	1.04	0.24	562439.18
	R2407634-005SD	Zn (213.857 nm)	0.4701	0.22	31961.1436
8/22/2024 21:18:01	R2407634-005A	Ag (328.068 nm)	0.0430	0.25	2957.3695
	R2407634-005A	Al (237.312 nm)	1.8812	0.25	5170.8459
	R2407634-005A	As (188.980 nm)	0.0359	6.11	61.9349
	R2407634-005A	B (249.772 nm)	0.9428	0.30	39190.3837
	R2407634-005A	Ba (230.424 nm)	1.8351	0.27	114137.9035
	R2407634-005A	Be (313.107 nm)	0.0456	0.23	56781.0947
	R2407634-005A	Ca (317.933 nm)	12.2452	0.28	484795.1814
	R2407634-005A	Cd (214.439 nm)	0.0468	0.60	3066.9466
	R2407634-005A	Co (230.786 nm)	0.4629	0.26	9812.0818
	R2407634-005A	Cr (267.716 nm)	0.1883	0.24	10815.1862
	R2407634-005A	Cu (327.395 nm)	0.2287	0.26	11270.9400
	R2407634-005A	Fe (234.350 nm)	1.1848	0.15	28019.3206
	R2407634-005A	K (766.491 nm)	18.1494	0.21	22976.1235
	R2407634-005A	Mg (279.078 nm)	4.5997	0.23	20088.7453
	R2407634-005A	Mn (257.610 nm)	0.5500	0.27	199239.6679
	R2407634-005A	Mo (202.032 nm)	0.4788	1.51	5190.8284
	R2407634-005A	Na (588.995 nm)	21.0506	0.11	353249.6605
	R2407634-005A	Ni (230.299 nm)	0.4617	0.25	6048.8752
	R2407634-005A	Pb (220.353 nm)	0.4767	0.23	2552.7397
	R2407634-005A	Sb (217.582 nm)	0.4708	0.21	1151.0795
	R2407634-005A	Se (196.026 nm)	0.9242	0.43	854.3796
	R2407634-005A	Sn (189.925 nm)	4.5592	0.80	12438.1795
	R2407634-005A	Sr (216.596 nm)	1.8910	0.28	37359.3601
	R2407634-005A	Ti (336.122 nm)	0.4796	0.35	75019.5449
	R2407634-005A	Tl (190.794 nm)	1.8375	0.42	1735.3854
	R2407634-005A	V (292.401 nm)	0.4626	0.18	17732.0798
	R2407634-005A	Y (360.074 nm)	1.04	0.08	561882.39
	R2407634-005A	Y_R (360.074 nm)	1.04	0.09	563112.91
	R2407634-005A	Zn (213.857 nm)	0.4567	0.30	31049.7625
8/22/2024 21:21:04	R2407634-005L 5X	Ag (328.068 nm)	-0.0001 u	> 100.00	19.7766
	R2407634-005L 5X	Al (237.312 nm)	0.0110	3.84	17.1014
	R2407634-005L 5X	As (188.980 nm)	0.0006 u	> 100.00	-1.9755
	R2407634-005L 5X	B (249.772 nm)	0.0024	1.30	175.5833
	R2407634-005L 5X	Ba (230.424 nm)	0.0046	0.45	295.0643
	R2407634-005L 5X	Be (313.107 nm)	0.0000	47.09	-8.3484
	R2407634-005L 5X	Ca (317.933 nm)	2.1836	0.50	88777.8524
	R2407634-005L 5X	Cd (214.439 nm)	0.0000 u	> 100.00	8.6884
	R2407634-005L 5X	Co (230.786 nm)	-0.0002 u	23.77	-1.4601
	R2407634-005L 5X	Cr (267.716 nm)	0.0002	41.59	35.4193
	R2407634-005L 5X	Cu (327.395 nm)	-0.0002 u	13.81	1.3027
	R2407634-005L 5X	Fe (234.350 nm)	0.0599	1.29	1464.1495
	R2407634-005L 5X	K (766.491 nm)	0.2439	4.26	599.7168
	R2407634-005L 5X	Mg (279.078 nm)	0.5900	0.66	2570.4813
	R2407634-005L 5X	Mn (257.610 nm)	0.0221	0.51	8022.4324
	R2407634-005L 5X	Mo (202.032 nm)	0.0032	17.54	39.6122

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407634-005L 5X	Na (588.995 nm)	0.7831	1.25	308.1126
	R2407634-005L 5X	Ni (230.299 nm)	0.0008	28.77	12.5128
	R2407634-005L 5X	Pb (220.353 nm)	-0.0007 u	> 100.00	-1.8885
	R2407634-005L 5X	Sb (217.582 nm)	0.0044	30.51	12.4976
	R2407634-005L 5X	Se (196.026 nm)	0.0050	23.96	5.0316
	R2407634-005L 5X	Sn (189.925 nm)	0.0574	32.19	158.7215
	R2407634-005L 5X	Sr (216.596 nm)	0.0054	5.39	113.4605
	R2407634-005L 5X	Ti (336.122 nm)	0.0021	27.69	387.2022
	R2407634-005L 5X	Tl (190.794 nm)	-0.0001 u	> 100.00	-1.9152
	R2407634-005L 5X	V (292.401 nm)	0.0000 u	> 100.00	10.0904
	R2407634-005L 5X	Y (360.074 nm)	1.06	0.08	569502.67
	R2407634-005L 5X	Y_R (360.074 nm)	1.06	0.07	570747.47
	R2407634-005L 5X	Zn (213.857 nm)	0.0007	6.18	63.7162
8/22/2024 21:24:08	R2407634-007	Ag (328.068 nm)	-0.0002 u	> 100.00	16.4009
	R2407634-007	Al (237.312 nm)	0.0268	4.51	60.6577
	R2407634-007	As (188.980 nm)	0.0022	59.51	0.8566
	R2407634-007	B (249.772 nm)	0.0071	0.19	370.1710
	R2407634-007	Ba (230.424 nm)	0.0125	1.04	788.4748
	R2407634-007	Be (313.107 nm)	0.0000 u	> 100.00	-11.4784
	R2407634-007	Ca (317.933 nm)	11.4149	0.17	452114.9026
	R2407634-007	Cd (214.439 nm)	0.0000 u	> 100.00	8.1433
	R2407634-007	Co (230.786 nm)	0.0000 u	> 100.00	4.0821
	R2407634-007	Cr (267.716 nm)	0.0004	32.44	45.0498
	R2407634-007	Cu (327.395 nm)	0.0000 u	> 100.00	8.6089
	R2407634-007	Fe (234.350 nm)	0.1629	0.30	3895.7829
	R2407634-007	K (766.491 nm)	0.5307	1.25	958.1240
	R2407634-007	Mg (279.078 nm)	3.1131	0.17	13593.9281
	R2407634-007	Mn (257.610 nm)	0.0609	0.17	22083.0203
	R2407634-007	Mo (202.032 nm)	0.0010	17.87	15.1439
	R2407634-007	Na (588.995 nm)	3.4036	0.45	45942.3440
	R2407634-007	Ni (230.299 nm)	0.0032	1.80	43.8246
	R2407634-007	Pb (220.353 nm)	-0.0003 u	> 100.00	0.1090
	R2407634-007	Sb (217.582 nm)	0.0032	61.84	9.4715
	R2407634-007	Se (196.026 nm)	-0.0013 u	89.84	-0.7464
	R2407634-007	Sn (189.925 nm)	0.0187	39.36	52.9500
	R2407634-007	Sr (216.596 nm)	0.0293	0.43	584.8694
	R2407634-007	Ti (336.122 nm)	0.0008	36.51	182.3408
	R2407634-007	Tl (190.794 nm)	0.0012 u	> 100.00	-0.7306
	R2407634-007	V (292.401 nm)	0.0000 u	> 100.00	10.3067
	R2407634-007	Y (360.074 nm)	1.06	0.04	572228.42
	R2407634-007	Y_R (360.074 nm)	1.06	0.04	573552.35
	R2407634-007	Zn (213.857 nm)	0.0028	0.97	204.6919
8/22/2024 21:27:12	R2407634-007S	Ag (328.068 nm)	0.0434	0.45	2989.4364
	R2407634-007S	Al (237.312 nm)	1.8921	0.22	5201.0073
	R2407634-007S	As (188.980 nm)	0.0378	1.18	65.3133
	R2407634-007S	B (249.772 nm)	0.9563	0.15	39750.1100
	R2407634-007S	Ba (230.424 nm)	1.8513	0.34	115149.8553
	R2407634-007S	Be (313.107 nm)	0.0465	0.14	57904.7418
	R2407634-007S	Ca (317.933 nm)	12.7248	0.14	503672.1549
	R2407634-007S	Cd (214.439 nm)	0.0477	0.23	3120.2699
	R2407634-007S	Co (230.786 nm)	0.4701	0.25	9962.9693
	R2407634-007S	Cr (267.716 nm)	0.1918	0.13	11014.5804
	R2407634-007S	Cu (327.395 nm)	0.2324	0.06	11450.8966
	R2407634-007S	Fe (234.350 nm)	1.0955	0.17	25911.1222
	R2407634-007S	K (766.491 nm)	18.3982	0.09	23286.9699
	R2407634-007S	Mg (279.078 nm)	4.7967	0.16	20949.1951
	R2407634-007S	Mn (257.610 nm)	0.5124	0.13	185644.2693

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407634-007S	Mo (202.032 nm)	0.4770	1.45	5171.0176
	R2407634-007S	Na (588.995 nm)	21.5915	0.18	362669.4027
	R2407634-007S	Ni (230.299 nm)	0.4687	0.04	6141.3232
	R2407634-007S	Pb (220.353 nm)	0.4827	0.14	2585.1366
	R2407634-007S	Sb (217.582 nm)	0.4692	0.49	1147.2356
	R2407634-007S	Se (196.026 nm)	1.8478 o	0.06	1707.6981
	R2407634-007S	Sn (189.925 nm)	9.1574	0.50	24980.8043
	R2407634-007S	Sr (216.596 nm)	3.7458	0.42	73999.4245
	R2407634-007S	Ti (336.122 nm)	0.4795	0.23	75006.2855
	R2407634-007S	Tl (190.794 nm)	1.8612	0.21	1757.7443
	R2407634-007S	V (292.401 nm)	0.4714	0.14	18069.9506
	R2407634-007S	Y (360.074 nm)	1.04	0.04	561602.92
	R2407634-007S	Y_R (360.074 nm)	1.04	0.04	562917.97
	R2407634-007S	Zn (213.857 nm)	0.4623	0.12	31429.5792
8/22/2024 21:30:15	R2407634-007SD	Ag (328.068 nm)	0.0438	0.09	3012.9505
	R2407634-007SD	Al (237.312 nm)	1.8982	0.41	5217.6862
	R2407634-007SD	As (188.980 nm)	0.0368	4.20	63.6282
	R2407634-007SD	B (249.772 nm)	0.9624	0.21	40005.3225
	R2407634-007SD	Ba (230.424 nm)	1.8589	0.09	115620.9767
	R2407634-007SD	Be (313.107 nm)	0.0468	0.28	58220.0128
	R2407634-007SD	Ca (317.933 nm)	12.7064	0.22	502946.7054
	R2407634-007SD	Cd (214.439 nm)	0.0479	0.25	3137.2154
	R2407634-007SD	Co (230.786 nm)	0.4728	0.18	10021.5265
	R2407634-007SD	Cr (267.716 nm)	0.1927	0.20	11067.3270
	R2407634-007SD	Cu (327.395 nm)	0.2336	0.16	11510.0972
	R2407634-007SD	Fe (234.350 nm)	1.0973	0.36	25954.3978
	R2407634-007SD	K (766.491 nm)	18.5619	0.45	23491.5714
	R2407634-007SD	Mg (279.078 nm)	4.7949	0.30	20941.5942
	R2407634-007SD	Mn (257.610 nm)	0.5146	0.24	186428.4893
	R2407634-007SD	Mo (202.032 nm)	0.4794	0.77	5197.6294
	R2407634-007SD	Na (588.995 nm)	21.7335	0.38	365141.8230
	R2407634-007SD	Ni (230.299 nm)	0.4710	0.12	6171.1377
	R2407634-007SD	Pb (220.353 nm)	0.4859	0.47	2602.4041
	R2407634-007SD	Sb (217.582 nm)	0.4704	0.54	1150.1519
	R2407634-007SD	Se (196.026 nm)	0.9314	0.29	861.0303
	R2407634-007SD	Sn (189.925 nm)	4.6442	0.22	12670.0205
	R2407634-007SD	Sr (216.596 nm)	1.9025	0.31	37587.0565
	R2407634-007SD	Ti (336.122 nm)	0.4820	0.09	75400.3805
	R2407634-007SD	Tl (190.794 nm)	1.8762	0.36	1771.9078
	R2407634-007SD	V (292.401 nm)	0.4743	0.27	18182.1793
	R2407634-007SD	Y (360.074 nm)	1.04	0.25	561922.11
	R2407634-007SD	Y_R (360.074 nm)	1.05	0.25	563267.42
	R2407634-007SD	Zn (213.857 nm)	0.4659	0.27	31675.5226
8/22/2024 21:33:19	R2407634-007A	Ag (328.068 nm)	0.0429	0.29	2951.3594
	R2407634-007A	Al (237.312 nm)	1.8526	0.19	5092.0175
	R2407634-007A	As (188.980 nm)	0.0355	2.20	61.1426
	R2407634-007A	B (249.772 nm)	0.9403	0.29	39088.2464
	R2407634-007A	Ba (230.424 nm)	1.8168	0.30	113003.5590
	R2407634-007A	Be (313.107 nm)	0.0456	0.34	56759.2821
	R2407634-007A	Ca (317.933 nm)	12.5426	0.34	496498.4681
	R2407634-007A	Cd (214.439 nm)	0.0468	0.37	3063.1310
	R2407634-007A	Co (230.786 nm)	0.4613	0.46	9777.2094
	R2407634-007A	Cr (267.716 nm)	0.1877	0.23	10779.2154
	R2407634-007A	Cu (327.395 nm)	0.2279	0.25	11232.4348
	R2407634-007A	Fe (234.350 nm)	1.0718	0.14	25351.6532
	R2407634-007A	K (766.491 nm)	18.1135	0.35	22931.2132
	R2407634-007A	Mg (279.078 nm)	4.7226	0.38	20625.5855

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407634-007A	Mn (257.610 nm)	0.5026	0.25	182078.5156
	R2407634-007A	Mo (202.032 nm)	0.4780	1.44	5181.8376
	R2407634-007A	Na (588.995 nm)	21.2554	0.31	356817.3658
	R2407634-007A	Ni (230.299 nm)	0.4587	0.30	6010.0730
	R2407634-007A	Pb (220.353 nm)	0.4732	0.22	2534.1373
	R2407634-007A	Sb (217.582 nm)	0.4697	0.47	1148.5004
	R2407634-007A	Se (196.026 nm)	0.9130	0.80	844.0385
	R2407634-007A	Sn (189.925 nm)	4.5333	0.58	12367.6051
	R2407634-007A	Sr (216.596 nm)	1.8642	0.38	36830.3790
	R2407634-007A	Ti (336.122 nm)	0.4800	0.29	75087.3308
	R2407634-007A	Tl (190.794 nm)	1.8319	0.45	1730.0356
	R2407634-007A	V (292.401 nm)	0.4622	0.29	17717.3071
	R2407634-007A	Y (360.074 nm)	1.05	0.15	562680.50
	R2407634-007A	Y_R (360.074 nm)	1.05	0.15	564040.96
	R2407634-007A	Zn (213.857 nm)	0.4542	0.25	30880.4929
8/22/2024 21:36:23	R2407634-007L 5X	Ag (328.068 nm)	-0.0002 u	30.61	14.4320
	R2407634-007L 5X	Al (237.312 nm)	0.0071	3.68	6.3711
	R2407634-007L 5X	As (188.980 nm)	0.0009	33.31	-1.4456
	R2407634-007L 5X	B (249.772 nm)	0.0027	1.39	186.2317
	R2407634-007L 5X	Ba (230.424 nm)	0.0026	1.87	172.6995
	R2407634-007L 5X	Be (313.107 nm)	0.0000 u	> 100.00	-11.0050
	R2407634-007L 5X	Ca (317.933 nm)	2.2494	0.22	91364.7355
	R2407634-007L 5X	Cd (214.439 nm)	0.0000 u	> 100.00	8.6159
	R2407634-007L 5X	Co (230.786 nm)	-0.0001 u	52.16	1.8536
	R2407634-007L 5X	Cr (267.716 nm)	0.0001	49.79	29.1447
	R2407634-007L 5X	Cu (327.395 nm)	-0.0001 u	23.91	3.4196
	R2407634-007L 5X	Fe (234.350 nm)	0.0357	0.82	893.6890
	R2407634-007L 5X	K (766.491 nm)	0.2184	5.96	567.9409
	R2407634-007L 5X	Mg (279.078 nm)	0.6175	0.44	2690.9078
	R2407634-007L 5X	Mn (257.610 nm)	0.0122	0.43	4414.6454
	R2407634-007L 5X	Mo (202.032 nm)	0.0035	23.52	42.1542
	R2407634-007L 5X	Na (588.995 nm)	0.7740	1.07	150.9990
	R2407634-007L 5X	Ni (230.299 nm)	0.0007	45.63	10.8905
	R2407634-007L 5X	Pb (220.353 nm)	0.0003 u	> 100.00	3.4035
	R2407634-007L 5X	Sb (217.582 nm)	0.0039	22.80	11.3027
	R2407634-007L 5X	Se (196.026 nm)	0.0016 u	> 100.00	1.9673
	R2407634-007L 5X	Sn (189.925 nm)	0.0533	31.04	147.3933
	R2407634-007L 5X	Sr (216.596 nm)	0.0057	4.08	119.4995
	R2407634-007L 5X	Ti (336.122 nm)	0.0019	27.53	365.5173
	R2407634-007L 5X	Tl (190.794 nm)	0.0012 u	> 100.00	-0.7118
	R2407634-007L 5X	V (292.401 nm)	-0.0001 u	> 100.00	8.5507
	R2407634-007L 5X	Y (360.074 nm)	1.06	0.19	568776.71
	R2407634-007L 5X	Y_R (360.074 nm)	1.06	0.19	570110.38
	R2407634-007L 5X	Zn (213.857 nm)	0.0007	4.68	58.5688
8/22/2024 21:39:26	Continuing Calibration Verification1	Ag (328.068 nm)	0.4675	0.21	31910.7050
	Continuing Calibration Verification1	Al (237.312 nm)	9.6317	0.16	26529.2543
	Continuing Calibration Verification1	As (188.980 nm)	0.9721	0.45	1758.4149
	Continuing Calibration Verification1	B (249.772 nm)	2.5479	0.33	105788.4560
	Continuing Calibration Verification1	Ba (230.424 nm)	9.4269	0.18	586296.0595
	Continuing Calibration Verification1	Be (313.107 nm)	0.2450	0.36	305049.8365
	Continuing Calibration Verification1	Ca (317.933 nm)	24.4591	0.43	965525.5841
	Continuing Calibration Verification1	Cd (214.439 nm)	0.4954	0.37	32346.5470
	Continuing Calibration Verification1	Co (230.786 nm)	2.4352	0.41	51597.7033
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5026	0.39	28825.9475
	Continuing Calibration Verification1	Cu (327.395 nm)	1.1856	0.24	58385.9266
	Continuing Calibration Verification1	Fe (234.350 nm)	4.8087	0.43	113566.7186
	Continuing Calibration Verification1	K (766.491 nm)	23.8169	0.08	30058.6844

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification1	Mg (279.078 nm)	24.9781	0.39	109120.2223
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7152	0.34	259096.6867
	Continuing Calibration Verification1	Mo (202.032 nm)	2.5066	0.55	27155.4423
	Continuing Calibration Verification1	Na (588.995 nm)	24.1654	0.05	407490.9627
	Continuing Calibration Verification1	Ni (230.299 nm)	1.9547	0.36	25605.5260
	Continuing Calibration Verification1	Pb (220.353 nm)	0.4907	0.33	2627.7107
	Continuing Calibration Verification1	Sb (217.582 nm)	4.8334	0.27	11802.2012
	Continuing Calibration Verification1	Se (196.026 nm)	0.4911	1.25	454.1993
	Continuing Calibration Verification1	Sn (189.925 nm)	4.9447	0.68	13489.7577
	Continuing Calibration Verification1	Sr (216.596 nm)	2.4311	0.58	48029.5457
	Continuing Calibration Verification1	Ti (336.122 nm)	2.4988	0.35	390632.4408
	Continuing Calibration Verification1	Tl (190.794 nm)	0.9731	0.45	918.1313
	Continuing Calibration Verification1	V (292.401 nm)	2.4730	0.34	94748.2995
	Continuing Calibration Verification1	Y (360.074 nm)	1.01	0.13	544901.64
	Continuing Calibration Verification1	Y_R (360.074 nm)	1.01	0.13	546271.86
	Continuing Calibration Verification1	Zn (213.857 nm)	0.9536	0.44	64812.9886
8/22/2024 21:42:31	Continuing Calibration Blank1	Ag (328.068 nm)	-0.0002 u	35.68	16.1630
	Continuing Calibration Blank1	Al (237.312 nm)	0.0002 u	> 100.00	-12.5804
	Continuing Calibration Blank1	As (188.980 nm)	0.0029	73.35	2.0995
	Continuing Calibration Blank1	B (249.772 nm)	0.0023	10.81	171.5440
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0007	10.17	49.5385
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000	22.62	-7.8583
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0039	3.37	2982.8457
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0001	60.71	13.4186
	Continuing Calibration Blank1	Co (230.786 nm)	0.0001 u	> 100.00	5.7283
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0000 u	> 100.00	26.4126
	Continuing Calibration Blank1	Cu (327.395 nm)	-0.0001 u	16.59	3.0339
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0032	15.61	127.2302
	Continuing Calibration Blank1	K (766.491 nm)	0.1560	13.14	489.9597
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0040	24.73	10.6737
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0001	44.84	27.9729
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0049	10.62	58.2581
	Continuing Calibration Blank1	Na (588.995 nm)	0.1137	5.89	-11348.0222
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0004	61.73	6.5231
	Continuing Calibration Blank1	Pb (220.353 nm)	-0.0001 u	> 100.00	1.0329
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0184	5.82	46.6909
	Continuing Calibration Blank1	Se (196.026 nm)	0.0017	95.32	2.0152
	Continuing Calibration Blank1	Sn (189.925 nm)	0.0124	37.42	35.7701
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0002	21.60	9.9680
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0040	23.45	683.8010
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0016 u	> 100.00	-0.3807
	Continuing Calibration Blank1	V (292.401 nm)	0.0002 u	> 100.00	16.7101
	Continuing Calibration Blank1	Y (360.074 nm)	1.05	0.12	566960.41
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.05	0.12	568330.52
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0001	47.93	17.2875
8/22/2024 21:45:34	R2407637-001	Ag (328.068 nm)	0.0000 u	> 100.00	28.8278
	R2407637-001	Al (237.312 nm)	0.0062	24.11	3.9970
	R2407637-001	As (188.980 nm)	0.0013	59.01	-0.8587
	R2407637-001	B (249.772 nm)	0.2801	0.37	11696.8187
	R2407637-001	Ba (230.424 nm)	0.0338	0.35	2112.0844
	R2407637-001	Be (313.107 nm)	0.0000 u	> 100.00	-19.3763
	R2407637-001	Ca (317.933 nm)	117.6038 o	0.42	4631635.0532
	R2407637-001	Cd (214.439 nm)	0.0000 u	> 100.00	9.1351
	R2407637-001	Co (230.786 nm)	-0.0001 u	26.75	0.4660
	R2407637-001	Cr (267.716 nm)	0.0007	11.34	65.3632
	R2407637-001	Cu (327.395 nm)	0.0000 u	> 100.00	10.1291
	R2407637-001	Fe (234.350 nm)	0.0899	0.52	2173.0221

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407637-001	K (766.491 nm)	8.0487	0.28	10353.3062
	R2407637-001	Mg (279.078 nm)	60.2632 o	0.37	263277.5832
	R2407637-001	Mn (257.610 nm)	0.1567	0.30	56776.6144
	R2407637-001	Mo (202.032 nm)	0.0016	23.29	22.5420
	R2407637-001	Na (588.995 nm)	69.1383 o	0.24	1190656.1889
	R2407637-001	Ni (230.299 nm)	0.0205	1.28	270.4444
	R2407637-001	Pb (220.353 nm)	-0.0007 u	> 100.00	-2.0299
	R2407637-001	Sb (217.582 nm)	0.0054	17.23	14.8064
	R2407637-001	Se (196.026 nm)	-0.0017 u	43.49	-1.0798
	R2407637-001	Sn (189.925 nm)	0.0078	35.49	23.3561
	R2407637-001	Sr (216.596 nm)	2.4667	0.77	48731.5249
	R2407637-001	Ti (336.122 nm)	0.0008	48.89	182.2711
	R2407637-001	Tl (190.794 nm)	0.0020	45.19	-0.0092
	R2407637-001	V (292.401 nm)	0.0001 u	> 100.00	16.2503
	R2407637-001	Y (360.074 nm)	1.00	0.10	539541.39
	R2407637-001	Y_R (360.074 nm)	1.00	0.10	540942.84
	R2407637-001	Zn (213.857 nm)	0.0022	2.76	161.1614
8/22/2024 21:48:37	R2407640-001	Ag (328.068 nm)	-0.0002 u	16.76	14.6148
	R2407640-001	Al (237.312 nm)	0.1328	0.61	352.7080
	R2407640-001	As (188.980 nm)	0.0013	82.92	-0.7929
	R2407640-001	B (249.772 nm)	0.0048	1.78	272.7688
	R2407640-001	Ba (230.424 nm)	0.0061	0.61	386.3877
	R2407640-001	Be (313.107 nm)	0.0000 u	> 100.00	-12.2611
	R2407640-001	Ca (317.933 nm)	5.8490	0.44	233043.3967
	R2407640-001	Cd (214.439 nm)	0.0000	52.77	11.5507
	R2407640-001	Co (230.786 nm)	0.0001	65.87	6.1863
	R2407640-001	Cr (267.716 nm)	0.0005	7.51	54.7294
	R2407640-001	Cu (327.395 nm)	0.0003	41.34	25.8964
	R2407640-001	Fe (234.350 nm)	0.3087	0.17	7337.9945
	R2407640-001	K (766.491 nm)	0.4113	9.21	808.9612
	R2407640-001	Mg (279.078 nm)	0.8873	0.33	3869.5892
	R2407640-001	Mn (257.610 nm)	0.0304	0.39	11030.7996
	R2407640-001	Mo (202.032 nm)	0.0007	9.16	12.1670
	R2407640-001	Na (588.995 nm)	4.1913	0.15	59660.5570
	R2407640-001	Ni (230.299 nm)	0.0071	4.32	94.0600
	R2407640-001	Pb (220.353 nm)	-0.0005 u	> 100.00	-1.1199
	R2407640-001	Sb (217.582 nm)	0.0027	26.22	8.3919
	R2407640-001	Se (196.026 nm)	0.0002 u	> 100.00	0.6600
	R2407640-001	Sn (189.925 nm)	0.0054	41.59	16.8769
	R2407640-001	Sr (216.596 nm)	0.0223	0.15	446.7450
	R2407640-001	Ti (336.122 nm)	0.0025	9.66	458.1024
	R2407640-001	Tl (190.794 nm)	0.0018	9.40	-0.1120
	R2407640-001	V (292.401 nm)	0.0003	16.40	22.3780
	R2407640-001	Y (360.074 nm)	1.06	0.26	571772.41
	R2407640-001	Y_R (360.074 nm)	1.06	0.26	573201.18
	R2407640-001	Zn (213.857 nm)	0.0143	0.14	987.2914
8/22/2024 21:51:41	R2407640-003	Ag (328.068 nm)	-0.0001 u	> 100.00	20.9833
	R2407640-003	Al (237.312 nm)	0.2380	0.52	642.7655
	R2407640-003	As (188.980 nm)	0.0008	> 100.00	-1.6350
	R2407640-003	B (249.772 nm)	0.0169	0.52	778.2566
	R2407640-003	Ba (230.424 nm)	0.0250	0.29	1562.0312
	R2407640-003	Be (313.107 nm)	0.0000	63.56	-7.6242
	R2407640-003	Ca (317.933 nm)	29.1008	0.39	1148218.8421
	R2407640-003	Cd (214.439 nm)	0.0000 u	> 100.00	7.9256
	R2407640-003	Co (230.786 nm)	0.0001 u	> 100.00	6.0462
	R2407640-003	Cr (267.716 nm)	0.0009	16.31	75.7170
	R2407640-003	Cu (327.395 nm)	0.0018	8.68	98.3416

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407640-003	Fe (234.350 nm)	0.5200	0.30	12327.3168
	R2407640-003	K (766.491 nm)	1.7260	1.07	2451.9193
	R2407640-003	Mg (279.078 nm)	4.9167	0.33	21473.8752
	R2407640-003	Mn (257.610 nm)	0.0384	0.35	13931.8652
	R2407640-003	Mo (202.032 nm)	0.0009	25.17	14.0499
	R2407640-003	Na (588.995 nm)	13.3018	0.07	218311.7177
	R2407640-003	Ni (230.299 nm)	0.0083	4.34	110.6849
	R2407640-003	Pb (220.353 nm)	0.0006 u	> 100.00	4.7618
	R2407640-003	Sb (217.582 nm)	0.0010	64.89	4.2125
	R2407640-003	Se (196.026 nm)	0.0034	69.44	3.5963
	R2407640-003	Sn (189.925 nm)	0.0042	45.85	13.5116
	R2407640-003	Sr (216.596 nm)	0.2141	0.29	4234.7282
	R2407640-003	Ti (336.122 nm)	0.0055	2.60	927.4881
	R2407640-003	Tl (190.794 nm)	0.0000 u	> 100.00	-1.8486
	R2407640-003	V (292.401 nm)	0.0008	7.09	43.0663
	R2407640-003	Y (360.074 nm)	1.05	0.13	567057.05
	R2407640-003	Y_R (360.074 nm)	1.05	0.13	568515.02
	R2407640-003	Zn (213.857 nm)	0.0155	0.36	1069.5038
8/22/2024 21:54:44	R2407685-001	Ag (328.068 nm)	-0.0001 u	> 100.00	21.3753
	R2407685-001	Al (237.312 nm)	0.2919	0.58	791.1842
	R2407685-001	As (188.980 nm)	0.0017	58.05	-0.0316
	R2407685-001	B (249.772 nm)	0.0363	0.51	1582.2719
	R2407685-001	Ba (230.424 nm)	0.0180	0.89	1131.0319
	R2407685-001	Be (313.107 nm)	0.0000	57.17	-12.4734
	R2407685-001	Ca (317.933 nm)	27.3580	0.40	1079625.1533
	R2407685-001	Cd (214.439 nm)	0.0000 u	> 100.00	9.0960
	R2407685-001	Co (230.786 nm)	0.0003	66.99	8.9360
	R2407685-001	Cr (267.716 nm)	0.0007	21.32	63.9233
	R2407685-001	Cu (327.395 nm)	0.0017	7.32	92.9469
	R2407685-001	Fe (234.350 nm)	1.0489	0.17	24812.5377
	R2407685-001	K (766.491 nm)	2.1020	0.73	2921.7816
	R2407685-001	Mg (279.078 nm)	6.4820	0.40	28312.1853
	R2407685-001	Mn (257.610 nm)	0.0780	0.41	28271.6516
	R2407685-001	Mo (202.032 nm)	0.0006	51.19	11.0800
	R2407685-001	Na (588.995 nm)	18.2003	0.24	303615.2903
	R2407685-001	Ni (230.299 nm)	0.0151	2.08	199.1076
	R2407685-001	Pb (220.353 nm)	0.0006 u	> 100.00	4.7240
	R2407685-001	Sb (217.582 nm)	0.0021	50.63	6.7748
	R2407685-001	Se (196.026 nm)	0.0000 u	> 100.00	0.4205
	R2407685-001	Sn (189.925 nm)	0.0035	40.85	11.6713
	R2407685-001	Sr (216.596 nm)	0.1611	0.49	3189.5304
	R2407685-001	Ti (336.122 nm)	0.0055	4.64	923.7283
	R2407685-001	Tl (190.794 nm)	0.0009 u	> 100.00	-0.9984
	R2407685-001	V (292.401 nm)	0.0008	5.48	40.2589
	R2407685-001	Y (360.074 nm)	1.05	0.09	564423.18
	R2407685-001	Y_R (360.074 nm)	1.05	0.09	565903.61
	R2407685-001	Zn (213.857 nm)	0.0032	3.75	228.5769
8/22/2024 21:57:47	R2407685-003	Ag (328.068 nm)	-0.0001 u	60.98	20.3004
	R2407685-003	Al (237.312 nm)	1.4182	0.27	3895.0819
	R2407685-003	As (188.980 nm)	0.0022	10.42	0.9123
	R2407685-003	B (249.772 nm)	0.0296	1.12	1302.5984
	R2407685-003	Ba (230.424 nm)	0.0464	0.48	2894.3250
	R2407685-003	Be (313.107 nm)	0.0001	11.07	50.6417
	R2407685-003	Ca (317.933 nm)	55.6566 o	0.38	2193436.9508
	R2407685-003	Cd (214.439 nm)	0.0001	55.57	13.3106
	R2407685-003	Co (230.786 nm)	0.0019	4.00	43.5412
	R2407685-003	Cr (267.716 nm)	0.0021	0.81	144.3928

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407685-003	Cu (327.395 nm)	0.0033	7.04	172.2694
	R2407685-003	Fe (234.350 nm)	2.4892	0.25	58812.2678
	R2407685-003	K (766.491 nm)	2.6449	1.54	3600.2746
	R2407685-003	Mg (279.078 nm)	23.5738	0.35	102985.0492
	R2407685-003	Mn (257.610 nm)	0.2919	0.37	105764.6508
	R2407685-003	Mo (202.032 nm)	0.0006	15.97	11.0658
	R2407685-003	Na (588.995 nm)	21.3161	0.20	357873.1878
	R2407685-003	Ni (230.299 nm)	0.0190	2.40	250.4602
	R2407685-003	Pb (220.353 nm)	0.0021	34.09	12.9332
	R2407685-003	Sb (217.582 nm)	0.0014	70.66	5.0359
	R2407685-003	Se (196.026 nm)	-0.0007 u	> 100.00	-0.1660
	R2407685-003	Sn (189.925 nm)	0.0035	47.26	11.7238
	R2407685-003	Sr (216.596 nm)	0.4603	0.38	9099.2254
	R2407685-003	Ti (336.122 nm)	0.0199	0.52	3173.3704
	R2407685-003	Tl (190.794 nm)	0.0023	41.79	0.3173
	R2407685-003	V (292.401 nm)	0.0029	6.87	123.2921
	R2407685-003	Y (360.074 nm)	1.03	0.12	554979.87
	R2407685-003	Y_R (360.074 nm)	1.03	0.12	556418.17
	R2407685-003	Zn (213.857 nm)	0.0087	0.60	603.3400
8/22/2024 22:00:51	R2407685-005	Ag (328.068 nm)	0.0000 u	> 100.00	29.5399
	R2407685-005	Al (237.312 nm)	0.6772	0.19	1852.9995
	R2407685-005	As (188.980 nm)	0.0013 u	> 100.00	-0.7976
	R2407685-005	B (249.772 nm)	0.0302	0.28	1328.9559
	R2407685-005	Ba (230.424 nm)	0.0309	0.16	1932.2934
	R2407685-005	Be (313.107 nm)	0.0000	21.19	-1.1743
	R2407685-005	Ca (317.933 nm)	38.5880	0.41	1521627.9858
	R2407685-005	Cd (214.439 nm)	0.0000 u	> 100.00	11.3695
	R2407685-005	Co (230.786 nm)	0.0007	20.52	17.5034
	R2407685-005	Cr (267.716 nm)	0.0013	6.70	96.9547
	R2407685-005	Cu (327.395 nm)	0.0018	22.61	99.1707
	R2407685-005	Fe (234.350 nm)	1.5170	0.24	35861.5068
	R2407685-005	K (766.491 nm)	4.1484	0.20	5479.1723
	R2407685-005	Mg (279.078 nm)	8.2053	0.44	35841.4120
	R2407685-005	Mn (257.610 nm)	0.2059	0.33	74597.3738
	R2407685-005	Mo (202.032 nm)	0.0009	22.89	14.8552
	R2407685-005	Na (588.995 nm)	17.1561	0.08	285431.1375
	R2407685-005	Ni (230.299 nm)	0.0248	0.60	325.9942
	R2407685-005	Pb (220.353 nm)	0.0009	85.06	6.5547
	R2407685-005	Sb (217.582 nm)	0.0010 u	> 100.00	4.2020
	R2407685-005	Se (196.026 nm)	0.0016 u	> 100.00	1.8862
	R2407685-005	Sn (189.925 nm)	0.0029	38.96	9.9606
	R2407685-005	Sr (216.596 nm)	0.2096	0.43	4146.2792
	R2407685-005	Ti (336.122 nm)	0.0103	0.33	1671.5830
	R2407685-005	Tl (190.794 nm)	0.0007 u	> 100.00	-1.2118
	R2407685-005	V (292.401 nm)	0.0018	5.42	80.8552
	R2407685-005	Y (360.074 nm)	1.04	0.13	561416.65
	R2407685-005	Y_R (360.074 nm)	1.04	0.14	562886.39
	R2407685-005	Zn (213.857 nm)	0.0050	2.06	356.1286
8/22/2024 22:03:54	R2407729-001	Ag (328.068 nm)	-0.0001 u	52.46	19.0329
	R2407729-001	Al (237.312 nm)	0.2260	0.77	609.6865
	R2407729-001	As (188.980 nm)	0.0037	50.04	3.4974
	R2407729-001	B (249.772 nm)	0.0181	0.94	824.7678
	R2407729-001	Ba (230.424 nm)	0.0192	0.17	1200.5730
	R2407729-001	Be (313.107 nm)	0.0000	75.60	-9.2646
	R2407729-001	Ca (317.933 nm)	8.9692	0.55	355851.9088
	R2407729-001	Cd (214.439 nm)	0.0000 u	> 100.00	8.5733
	R2407729-001	Co (230.786 nm)	0.0001	> 100.00	5.8819

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407729-001	Cr (267.716 nm)	0.0007	32.36	66.4483
	R2407729-001	Cu (327.395 nm)	0.0011	17.40	66.1566
	R2407729-001	Fe (234.350 nm)	1.4618	0.20	34558.2602
	R2407729-001	K (766.491 nm)	1.8518	0.61	2609.1860
	R2407729-001	Mg (279.078 nm)	2.0892	0.45	9120.6206
	R2407729-001	Mn (257.610 nm)	0.2295	0.48	83152.4064
	R2407729-001	Mo (202.032 nm)	0.0004	50.23	9.3351
	R2407729-001	Na (588.995 nm)	9.8518	0.22	158232.2660
	R2407729-001	Ni (230.299 nm)	0.0011	38.88	15.7443
	R2407729-001	Pb (220.353 nm)	0.0001 u	> 100.00	2.1562
	R2407729-001	Sb (217.582 nm)	0.0010	70.10	4.2026
	R2407729-001	Se (196.026 nm)	0.0028 u	> 100.00	2.9874
	R2407729-001	Sn (189.925 nm)	0.0029	23.95	9.9758
	R2407729-001	Sr (216.596 nm)	0.0304	0.81	607.4448
	R2407729-001	Ti (336.122 nm)	0.0022	7.20	400.7511
	R2407729-001	Tl (190.794 nm)	0.0010	56.78	-0.9449
	R2407729-001	V (292.401 nm)	0.0009	5.94	44.8471
	R2407729-001	Y (360.074 nm)	1.05	0.34	567153.20
	R2407729-001	Y_R (360.074 nm)	1.05	0.34	568614.99
	R2407729-001	Zn (213.857 nm)	0.0053	0.39	372.6434
8/22/2024 22:06:58	Continuing Calibration Verification1	Ag (328.068 nm)	0.4658	0.22	31799.5776
	Continuing Calibration Verification1	Al (237.312 nm)	9.5903	0.08	26415.1575
	Continuing Calibration Verification1	As (188.980 nm)	0.9682	0.26	1751.2873
	Continuing Calibration Verification1	B (249.772 nm)	2.5414	0.31	105518.5107
	Continuing Calibration Verification1	Ba (230.424 nm)	9.3831	0.40	583571.2866
	Continuing Calibration Verification1	Be (313.107 nm)	0.2444	0.34	304224.3177
	Continuing Calibration Verification1	Ca (317.933 nm)	24.4092	0.42	963559.4067
	Continuing Calibration Verification1	Cd (214.439 nm)	0.4944	0.42	32282.2199
	Continuing Calibration Verification1	Co (230.786 nm)	2.4275	0.38	51434.6866
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5016	0.39	28768.4481
	Continuing Calibration Verification1	Cu (327.395 nm)	1.1806	0.17	58141.5963
	Continuing Calibration Verification1	Fe (234.350 nm)	4.7975	0.47	113303.8722
	Continuing Calibration Verification1	K (766.491 nm)	23.7449	0.16	29968.6609
	Continuing Calibration Verification1	Mg (279.078 nm)	24.9360	0.39	108936.1525
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7128	0.36	258222.3894
	Continuing Calibration Verification1	Mo (202.032 nm)	2.4937	0.64	27015.9110
	Continuing Calibration Verification1	Na (588.995 nm)	24.1103	0.26	406532.1941
	Continuing Calibration Verification1	Ni (230.299 nm)	1.9480	0.45	25517.8654
	Continuing Calibration Verification1	Pb (220.353 nm)	0.4896	0.17	2622.1651
	Continuing Calibration Verification1	Sb (217.582 nm)	4.8216	0.42	11773.4136
	Continuing Calibration Verification1	Se (196.026 nm)	0.4891	0.22	452.3962
	Continuing Calibration Verification1	Sn (189.925 nm)	4.9077	0.36	13388.8607
	Continuing Calibration Verification1	Sr (216.596 nm)	2.4191	0.46	47792.2729
	Continuing Calibration Verification1	Ti (336.122 nm)	2.4875	0.34	388864.0973
	Continuing Calibration Verification1	Tl (190.794 nm)	0.9737	0.14	918.6505
	Continuing Calibration Verification1	V (292.401 nm)	2.4657	0.37	94469.5947
	Continuing Calibration Verification1	Y (360.074 nm)	1.01	0.17	544712.64
	Continuing Calibration Verification1	Y_R (360.074 nm)	1.01	0.17	546168.86
	Continuing Calibration Verification1	Zn (213.857 nm)	0.9503	0.39	64590.5336
8/22/2024 22:10:02	Continuing Calibration Blank1	Ag (328.068 nm)	-0.0002 u	12.33	16.3243
	Continuing Calibration Blank1	Al (237.312 nm)	0.0028	29.04	-5.4485
	Continuing Calibration Blank1	As (188.980 nm)	0.0020	8.83	0.5154
	Continuing Calibration Blank1	B (249.772 nm)	0.0020	7.20	156.7331
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0008	3.95	59.4779
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000	44.06	-8.3576
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0047	4.16	3017.1735
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0001	67.98	13.5408

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank1	Co (230.786 nm)	0.0001 u	> 100.00	4.7565
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0000 u	> 100.00	22.7688
	Continuing Calibration Blank1	Cu (327.395 nm)	-0.0001 u	7.64	4.0162
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0044	20.42	155.4298
	Continuing Calibration Blank1	K (766.491 nm)	0.1421	5.56	472.5024
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0028	20.64	5.4146
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0001	14.57	31.5235
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0050	8.21	59.2807
	Continuing Calibration Blank1	Na (588.995 nm)	0.0840	2.47	-11864.7085
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0005	31.50	7.6075
	Continuing Calibration Blank1	Pb (220.353 nm)	0.0007 u	> 100.00	5.2181
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0170	7.47	43.2809
	Continuing Calibration Blank1	Se (196.026 nm)	0.0000 u	> 100.00	0.4354
	Continuing Calibration Blank1	Sn (189.925 nm)	0.0056	27.39	17.3164
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0002	44.60	10.2742
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0045	23.58	764.2470
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0015 u	> 100.00	-0.4384
	Continuing Calibration Blank1	V (292.401 nm)	0.0000 u	> 100.00	9.4585
	Continuing Calibration Blank1	Y (360.074 nm)	1.05	0.11	566158.09
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.05	0.11	567621.66
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0001	68.19	19.3804
8/22/2024 22:13:07	PBW-443496	Ag (328.068 nm)	-0.0002 u	16.14	13.7005
	PBW-443496	Al (237.312 nm)	0.0000 u	> 100.00	-13.2777
	PBW-443496	As (188.980 nm)	0.0013	80.50	-0.8416
	PBW-443496	B (249.772 nm)	0.0000 u	> 100.00	75.5196
	PBW-443496	Ba (230.424 nm)	0.0001 u	87.83	16.1642
	PBW-443496	Be (313.107 nm)	0.0000	31.27	-9.9819
	PBW-443496	Ca (317.933 nm)	0.0025	2.91	2930.3203
	PBW-443496	Cd (214.439 nm)	0.0000 u	29.67	8.4909
	PBW-443496	Co (230.786 nm)	0.0000 u	> 100.00	2.8782
	PBW-443496	Cr (267.716 nm)	0.0000 u	> 100.00	25.0626
	PBW-443496	Cu (327.395 nm)	-0.0001 u	> 100.00	4.5272
	PBW-443496	Fe (234.350 nm)	0.0007	26.31	67.2038
	PBW-443496	K (766.491 nm)	0.0768	7.53	390.9106
	PBW-443496	Mg (279.078 nm)	0.0027	12.99	4.9417
	PBW-443496	Mn (257.610 nm)	0.0000	60.69	15.8406
	PBW-443496	Mo (202.032 nm)	0.0010	31.41	15.3583
	PBW-443496	Na (588.995 nm)	0.0694	4.46	-12118.8472
	PBW-443496	Ni (230.299 nm)	0.0002 u	> 100.00	3.6440
	PBW-443496	Pb (220.353 nm)	0.0002 u	> 100.00	2.7894
	PBW-443496	Sb (217.582 nm)	0.0040	28.27	11.4436
	PBW-443496	Se (196.026 nm)	0.0008	> 100.00	1.1749
	PBW-443496	Sn (189.925 nm)	0.0027	20.59	9.3358
	PBW-443496	Sr (216.596 nm)	-0.0001 u	49.60	3.9747
	PBW-443496	Ti (336.122 nm)	0.0009	44.07	202.8196
	PBW-443496	Tl (190.794 nm)	0.0003 u	> 100.00	-1.5386
	PBW-443496	V (292.401 nm)	0.0001	21.84	13.0731
	PBW-443496	Y (360.074 nm)	1.07	0.23	575840.27
	PBW-443496	Y_R (360.074 nm)	1.07	0.23	577291.88
	PBW-443496	Zn (213.857 nm)	0.0001	38.70	17.6942
8/22/2024 22:16:12	LCSW-443496	Ag (328.068 nm)	0.0449	0.40	3088.2816
	LCSW-443496	Al (237.312 nm)	1.9229	0.31	5285.7290
	LCSW-443496	As (188.980 nm)	0.0380	1.75	65.6494
	LCSW-443496	B (249.772 nm)	0.9729	0.10	40439.4842
	LCSW-443496	Ba (230.424 nm)	1.9110	0.15	118857.8144
	LCSW-443496	Be (313.107 nm)	0.0477	0.06	59419.8580
	LCSW-443496	Ca (317.933 nm)	1.9320	0.14	78875.3267

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	LCSW-443496	Cd (214.439 nm)	0.0498	0.21	3259.8513
	LCSW-443496	Co (230.786 nm)	0.4886	0.20	10356.6567
	LCSW-443496	Cr (267.716 nm)	0.1974	0.10	11336.5506
	LCSW-443496	Cu (327.395 nm)	0.2393	0.17	11790.5899
	LCSW-443496	Fe (234.350 nm)	0.9641	0.12	22809.0612
	LCSW-443496	K (766.491 nm)	18.3428	0.22	23217.7918
	LCSW-443496	Mg (279.078 nm)	1.9105	0.32	8339.8428
	LCSW-443496	Mn (257.610 nm)	0.4692	0.14	169989.0513
	LCSW-443496	Mo (202.032 nm)	0.4859	1.60	5267.3950
	LCSW-443496	Na (588.995 nm)	18.8970	0.32	315746.3672
	LCSW-443496	Ni (230.299 nm)	0.4832	0.15	6330.6911
	LCSW-443496	Pb (220.353 nm)	0.4989	0.18	2671.9311
	LCSW-443496	Sb (217.582 nm)	0.4811	0.74	1176.2943
	LCSW-443496	Se (196.026 nm)	0.9554	0.88	883.1784
	LCSW-443496	Sn (189.925 nm)	4.6539	0.69	12696.5931
	LCSW-443496	Sr (216.596 nm)	1.9323	0.28	38175.5223
	LCSW-443496	Ti (336.122 nm)	0.4903	0.18	76690.6988
	LCSW-443496	Tl (190.794 nm)	1.9210	0.16	1814.3252
	LCSW-443496	V (292.401 nm)	0.4839	0.15	18547.8107
	LCSW-443496	Y (360.074 nm)	1.05	0.05	564352.02
	LCSW-443496	Y_R (360.074 nm)	1.05	0.05	565811.94
	LCSW-443496	Zn (213.857 nm)	0.4787	0.12	32544.2364
8/22/2024 22:19:18	R2407411-002	Ag (328.068 nm)	-0.0001 u	53.50	19.5169
	R2407411-002	Al (237.312 nm)	0.0020	> 100.00	-7.6506
	R2407411-002	As (188.980 nm)	0.0021	48.33	0.7461
	R2407411-002	B (249.772 nm)	0.0173	0.51	792.8241
	R2407411-002	Ba (230.424 nm)	0.0152	0.35	952.2174
	R2407411-002	Be (313.107 nm)	0.0000	51.19	-10.4001
	R2407411-002	Ca (317.933 nm)	31.0056	0.29	1223189.7407
	R2407411-002	Cd (214.439 nm)	0.0000 u	> 100.00	8.4408
	R2407411-002	Co (230.786 nm)	0.0000 u	> 100.00	4.3357
	R2407411-002	Cr (267.716 nm)	0.0005	31.19	53.0479
	R2407411-002	Cu (327.395 nm)	0.0000 u	> 100.00	11.4308
	R2407411-002	Fe (234.350 nm)	0.0036	3.17	135.6708
	R2407411-002	K (766.491 nm)	2.0650	2.16	2875.5154
	R2407411-002	Mg (279.078 nm)	9.5083	0.31	41534.0405
	R2407411-002	Mn (257.610 nm)	0.0003	1.31	118.7282
	R2407411-002	Mo (202.032 nm)	0.0038	15.22	46.0332
	R2407411-002	Na (588.995 nm)	17.0431	0.45	283463.1504
	R2407411-002	Ni (230.299 nm)	0.0047	2.21	63.5045
	R2407411-002	Pb (220.353 nm)	-0.0002 u	> 100.00	0.4570
	R2407411-002	Sb (217.582 nm)	0.0039	53.49	11.2462
	R2407411-002	Se (196.026 nm)	0.0012	40.05	1.5576
	R2407411-002	Sn (189.925 nm)	0.0432	26.34	119.8174
	R2407411-002	Sr (216.596 nm)	0.0841	0.55	1668.3175
	R2407411-002	Ti (336.122 nm)	0.0016	30.71	318.9563
	R2407411-002	Tl (190.794 nm)	0.0012	54.55	-0.7588
	R2407411-002	V (292.401 nm)	0.0000 u	> 100.00	10.4269
	R2407411-002	Y (360.074 nm)	1.04	0.23	561827.03
	R2407411-002	Y_R (360.074 nm)	1.05	0.23	563309.82
	R2407411-002	Zn (213.857 nm)	0.0028	2.20	206.2415
8/22/2024 22:22:23	R2407411-004	Ag (328.068 nm)	0.0000 u	> 100.00	24.7322
	R2407411-004	Al (237.312 nm)	0.0038	29.97	-2.6873
	R2407411-004	As (188.980 nm)	0.0015	6.21	-0.4599
	R2407411-004	B (249.772 nm)	0.0176	0.52	805.3378
	R2407411-004	Ba (230.424 nm)	0.0153	0.35	960.5813
	R2407411-004	Be (313.107 nm)	0.0000 u	> 100.00	-13.7691

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407411-004	Ca (317.933 nm)	30.7334	0.25	1212477.3660
	R2407411-004	Cd (214.439 nm)	0.0000 u	> 100.00	9.7234
	R2407411-004	Co (230.786 nm)	-0.0001 u	45.44	1.5681
	R2407411-004	Cr (267.716 nm)	0.0008	15.17	69.2568
	R2407411-004	Cu (327.395 nm)	0.0003	46.26	25.0936
	R2407411-004	Fe (234.350 nm)	0.0062	5.85	196.8404
	R2407411-004	K (766.491 nm)	2.0687	0.32	2880.1384
	R2407411-004	Mg (279.078 nm)	9.5681	0.19	41795.2574
	R2407411-004	Mn (257.610 nm)	0.0006	1.14	214.5846
	R2407411-004	Mo (202.032 nm)	0.0013	18.64	18.6334
	R2407411-004	Na (588.995 nm)	17.2083	0.32	286338.9617
	R2407411-004	Ni (230.299 nm)	0.0037	2.79	49.3741
	R2407411-004	Pb (220.353 nm)	-0.0001 u	> 100.00	1.1201
	R2407411-004	Sb (217.582 nm)	0.0020	40.73	6.5046
	R2407411-004	Se (196.026 nm)	-0.0036 u	40.17	-2.8598
	R2407411-004	Sn (189.925 nm)	0.0103	39.14	30.0518
	R2407411-004	Sr (216.596 nm)	0.0839	0.06	1664.6442
	R2407411-004	Ti (336.122 nm)	0.0006	33.50	156.1892
	R2407411-004	Tl (190.794 nm)	0.0003 u	> 100.00	-1.5455
	R2407411-004	V (292.401 nm)	0.0000 u	> 100.00	12.3557
	R2407411-004	Y (360.074 nm)	1.05	0.17	562411.10
	R2407411-004	Y_R (360.074 nm)	1.05	0.16	563895.83
	R2407411-004	Zn (213.857 nm)	0.0023	2.17	168.1321
8/22/2024 22:25:28	R2407411-006	Ag (328.068 nm)	-0.0001 u	> 100.00	19.7882
	R2407411-006	Al (237.312 nm)	0.0025	80.08	-6.2256
	R2407411-006	As (188.980 nm)	0.0006 u	> 100.00	-2.1159
	R2407411-006	B (249.772 nm)	0.0186	0.17	846.7869
	R2407411-006	Ba (230.424 nm)	0.0232	0.69	1453.7194
	R2407411-006	Be (313.107 nm)	0.0000 u	> 100.00	-15.8350
	R2407411-006	Ca (317.933 nm)	37.9352	0.30	1495936.7010
	R2407411-006	Cd (214.439 nm)	0.0000 u	65.57	8.0000
	R2407411-006	Co (230.786 nm)	0.0001	> 100.00	6.0058
	R2407411-006	Cr (267.716 nm)	0.0006	11.00	60.6397
	R2407411-006	Cu (327.395 nm)	0.0001	91.05	14.5075
	R2407411-006	Fe (234.350 nm)	0.0059	1.00	190.9538
	R2407411-006	K (766.491 nm)	2.0776	1.00	2891.2997
	R2407411-006	Mg (279.078 nm)	11.4145	0.33	49861.8942
	R2407411-006	Mn (257.610 nm)	0.0005	1.66	197.8335
	R2407411-006	Mo (202.032 nm)	0.0012	30.61	17.5088
	R2407411-006	Na (588.995 nm)	27.8277	0.49	471266.9732
	R2407411-006	Ni (230.299 nm)	0.0049	8.51	65.9505
	R2407411-006	Pb (220.353 nm)	-0.0005 u	> 100.00	-1.0636
	R2407411-006	Sb (217.582 nm)	0.0017	31.17	5.7787
	R2407411-006	Se (196.026 nm)	0.0021 u	> 100.00	2.3746
	R2407411-006	Sn (189.925 nm)	0.0061	31.49	18.7391
	R2407411-006	Sr (216.596 nm)	0.1055	0.24	2090.5755
	R2407411-006	Ti (336.122 nm)	0.0003	34.01	110.0836
	R2407411-006	Tl (190.794 nm)	0.0002 u	> 100.00	-1.6804
	R2407411-006	V (292.401 nm)	0.0002	58.91	17.5998
	R2407411-006	Y (360.074 nm)	1.04	0.20	558027.40
	R2407411-006	Y_R (360.074 nm)	1.04	0.20	559536.69
	R2407411-006	Zn (213.857 nm)	0.0029	0.62	207.6366
8/22/2024 22:28:33	R2407411-008	Ag (328.068 nm)	0.0000 u	> 100.00	25.7835
	R2407411-008	Al (237.312 nm)	0.0033	26.98	-4.0101
	R2407411-008	As (188.980 nm)	0.0008 u	> 100.00	-1.6326
	R2407411-008	B (249.772 nm)	0.0190	0.61	862.0435
	R2407411-008	Ba (230.424 nm)	0.0219	0.45	1369.5133

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407411-008	Be (313.107 nm)	0.0000 u	> 100.00	-16.6659
	R2407411-008	Ca (317.933 nm)	34.3740	0.27	1355770.1284
	R2407411-008	Cd (214.439 nm)	0.0000 u	> 100.00	10.5380
	R2407411-008	Co (230.786 nm)	0.0001 u	> 100.00	5.0920
	R2407411-008	Cr (267.716 nm)	0.0006	6.65	59.0423
	R2407411-008	Cu (327.395 nm)	0.0000 u	> 100.00	10.3068
	R2407411-008	Fe (234.350 nm)	0.0035	1.48	133.0259
	R2407411-008	K (766.491 nm)	1.9919	0.27	2784.2326
	R2407411-008	Mg (279.078 nm)	11.1733	0.27	48808.1556
	R2407411-008	Mn (257.610 nm)	0.0004	2.93	141.4400
	R2407411-008	Mo (202.032 nm)	0.0011	9.45	16.2707
	R2407411-008	Na (588.995 nm)	27.3973	0.42	463771.9455
	R2407411-008	Ni (230.299 nm)	0.0028	11.00	37.6464
	R2407411-008	Pb (220.353 nm)	0.0005	> 100.00	4.0889
	R2407411-008	Sb (217.582 nm)	0.0029	22.75	8.8034
	R2407411-008	Se (196.026 nm)	0.0016	72.94	1.9344
	R2407411-008	Sn (189.925 nm)	0.0043	35.80	13.7044
	R2407411-008	Sr (216.596 nm)	0.1014	0.25	2009.7188
	R2407411-008	Ti (336.122 nm)	0.0003	24.64	110.2785
	R2407411-008	Tl (190.794 nm)	0.0014	78.00	-0.5506
	R2407411-008	V (292.401 nm)	0.0002	47.62	19.6575
	R2407411-008	Y (360.074 nm)	1.04	0.13	559952.47
	R2407411-008	Y_R (360.074 nm)	1.04	0.13	561454.68
	R2407411-008	Zn (213.857 nm)	0.1832	0.17	12462.1722
8/22/2024 22:31:38	R2407454-002	Ag (328.068 nm)	0.0001 u	> 100.00	32.5677
	R2407454-002	Al (237.312 nm)	-0.0033 u	30.13	-22.1337
	R2407454-002	As (188.980 nm)	0.0009 u	> 100.00	-1.4497
	R2407454-002	B (249.772 nm)	0.0028	5.09	190.7543
	R2407454-002	Ba (230.424 nm)	0.0435	0.30	2712.3226
	R2407454-002	Be (313.107 nm)	0.0000 u	> 100.00	-17.0076
	R2407454-002	Ca (317.933 nm)	5.3206	0.21	212244.7560
	R2407454-002	Cd (214.439 nm)	0.0000 u	> 100.00	9.1985
	R2407454-002	Co (230.786 nm)	0.0004	51.89	11.9251
	R2407454-002	Cr (267.716 nm)	0.0005	12.70	55.4029
	R2407454-002	Cu (327.395 nm)	0.0001 u	> 100.00	12.1838
	R2407454-002	Fe (234.350 nm)	0.0698	0.50	1699.4829
	R2407454-002	K (766.491 nm)	0.4811	10.36	896.1275
	R2407454-002	Mg (279.078 nm)	0.7364	0.28	3210.4598
	R2407454-002	Mn (257.610 nm)	2.1331 o	0.12	772742.9250
	R2407454-002	Mo (202.032 nm)	0.0003	30.01	7.6067
	R2407454-002	Na (588.995 nm)	0.3805	0.91	-6702.7348
	R2407454-002	Ni (230.299 nm)	0.0022	9.84	30.9293
	R2407454-002	Pb (220.353 nm)	-0.0002 u	> 100.00	0.7080
	R2407454-002	Sb (217.582 nm)	0.0016	87.92	5.6329
	R2407454-002	Se (196.026 nm)	0.0035	59.15	3.6557
	R2407454-002	Sn (189.925 nm)	0.0034	53.46	11.3748
	R2407454-002	Sr (216.596 nm)	0.0146	0.90	293.8922
	R2407454-002	Ti (336.122 nm)	0.0003	26.76	103.5533
	R2407454-002	Tl (190.794 nm)	0.0006 u	> 100.00	-1.3325
	R2407454-002	V (292.401 nm)	0.0001 u	> 100.00	15.1141
	R2407454-002	Y (360.074 nm)	1.07	0.18	573214.76
	R2407454-002	Y_R (360.074 nm)	1.07	0.18	574677.17
	R2407454-002	Zn (213.857 nm)	0.0048	1.33	340.6898
8/22/2024 22:34:44	R2407454-004	Ag (328.068 nm)	-0.0002 u	9.31	13.5598
	R2407454-004	Al (237.312 nm)	0.0090	4.08	11.6370
	R2407454-004	As (188.980 nm)	0.0017	71.68	0.0070
	R2407454-004	B (249.772 nm)	0.0026	3.91	184.0165

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407454-004	Ba (230.424 nm)	0.0136	0.47	855.5527
	R2407454-004	Be (313.107 nm)	0.0000 u	90.43	-14.8459
	R2407454-004	Ca (317.933 nm)	2.8809	0.14	116220.4437
	R2407454-004	Cd (214.439 nm)	0.0000 u	> 100.00	9.5132
	R2407454-004	Co (230.786 nm)	0.0001	37.53	5.3634
	R2407454-004	Cr (267.716 nm)	0.0011	8.92	88.8862
	R2407454-004	Cu (327.395 nm)	0.0004	59.16	30.5597
	R2407454-004	Fe (234.350 nm)	0.0164	0.62	436.9185
	R2407454-004	K (766.491 nm)	0.2587	11.84	618.2014
	R2407454-004	Mg (279.078 nm)	0.5800	0.21	2527.0727
	R2407454-004	Mn (257.610 nm)	0.0012	0.35	456.7149
	R2407454-004	Mo (202.032 nm)	0.0001 u	> 100.00	6.2315
	R2407454-004	Na (588.995 nm)	0.3698	0.85	-6888.2283
	R2407454-004	Ni (230.299 nm)	0.0012	43.31	17.7241
	R2407454-004	Pb (220.353 nm)	0.0006 u	> 100.00	4.5561
	R2407454-004	Sb (217.582 nm)	0.0011	62.86	4.3968
	R2407454-004	Se (196.026 nm)	-0.0008 u	> 100.00	-0.3299
	R2407454-004	Sn (189.925 nm)	0.0027	61.13	9.5544
	R2407454-004	Sr (216.596 nm)	0.0079	1.67	163.2979
	R2407454-004	Ti (336.122 nm)	0.0004	11.48	130.5359
	R2407454-004	Tl (190.794 nm)	0.0001 u	> 100.00	-1.7314
	R2407454-004	V (292.401 nm)	0.0001 u	98.72	15.0962
	R2407454-004	Y (360.074 nm)	1.07	0.01	575632.78
	R2407454-004	Y_R (360.074 nm)	1.07	0.01	577083.01
	R2407454-004	Zn (213.857 nm)	0.0043	0.55	302.9281
8/22/2024 22:37:49	R2407479-002	Ag (328.068 nm)	-0.0001 u	> 100.00	17.6892
	R2407479-002	Al (237.312 nm)	0.0316	3.00	73.9184
	R2407479-002	As (188.980 nm)	-0.0001 u	> 100.00	-3.2432
	R2407479-002	B (249.772 nm)	0.0028	5.70	189.8724
	R2407479-002	Ba (230.424 nm)	0.0064	0.29	406.4807
	R2407479-002	Be (313.107 nm)	0.0000	65.63	-12.6992
	R2407479-002	Ca (317.933 nm)	3.4225	0.36	137539.7219
	R2407479-002	Cd (214.439 nm)	0.0000 u	> 100.00	11.4981
	R2407479-002	Co (230.786 nm)	0.0000 u	> 100.00	3.3726
	R2407479-002	Cr (267.716 nm)	0.0003	26.75	43.2888
	R2407479-002	Cu (327.395 nm)	0.0009	26.26	52.2578
	R2407479-002	Fe (234.350 nm)	0.0553	0.52	1356.2198
	R2407479-002	K (766.491 nm)	0.2394	12.53	594.1204
	R2407479-002	Mg (279.078 nm)	0.4599	0.48	2002.2824
	R2407479-002	Mn (257.610 nm)	0.0776	0.38	28106.9101
	R2407479-002	Mo (202.032 nm)	0.0001	98.07	5.7892
	R2407479-002	Na (588.995 nm)	0.7587	0.69	-115.5695
	R2407479-002	Ni (230.299 nm)	0.0054	6.58	72.5883
	R2407479-002	Pb (220.353 nm)	0.0003	> 100.00	3.4139
	R2407479-002	Sb (217.582 nm)	0.0021	23.05	6.8466
	R2407479-002	Se (196.026 nm)	0.0017	75.86	2.0331
	R2407479-002	Sn (189.925 nm)	0.0020	23.12	7.6466
	R2407479-002	Sr (216.596 nm)	0.0186	0.44	372.9696
	R2407479-002	Ti (336.122 nm)	0.0003	6.85	107.7395
	R2407479-002	Tl (190.794 nm)	0.0014 u	96.64	-0.5493
	R2407479-002	V (292.401 nm)	0.0002	47.27	17.3255
	R2407479-002	Y (360.074 nm)	1.07	0.18	576509.95
	R2407479-002	Y_R (360.074 nm)	1.07	0.18	577975.06
	R2407479-002	Zn (213.857 nm)	0.0053	0.84	374.6896
8/22/2024 22:40:53	R2407479-004	Ag (328.068 nm)	-0.0002 u	40.05	15.6135
	R2407479-004	Al (237.312 nm)	0.0266	3.45	60.2649
	R2407479-004	As (188.980 nm)	0.0016	61.91	-0.2786

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407479-004	B (249.772 nm)	0.0031	4.15	202.7377
	R2407479-004	Ba (230.424 nm)	0.0051	0.73	323.2652
	R2407479-004	Be (313.107 nm)	0.0000 u	> 100.00	-17.8350
	R2407479-004	Ca (317.933 nm)	3.3255	0.45	133719.0835
	R2407479-004	Cd (214.439 nm)	0.0000	47.89	11.3509
	R2407479-004	Co (230.786 nm)	0.0002	42.25	7.3649
	R2407479-004	Cr (267.716 nm)	0.0004	6.66	45.6182
	R2407479-004	Cu (327.395 nm)	-0.0001 u	> 100.00	6.8908
	R2407479-004	Fe (234.350 nm)	0.0118	2.36	329.5063
	R2407479-004	K (766.491 nm)	0.1956	13.21	539.3877
	R2407479-004	Mg (279.078 nm)	0.4439	0.28	1932.4307
	R2407479-004	Mn (257.610 nm)	0.0009	0.54	340.0426
	R2407479-004	Mo (202.032 nm)	0.0002	54.16	6.5283
	R2407479-004	Na (588.995 nm)	0.7512	0.60	-245.9540
	R2407479-004	Ni (230.299 nm)	0.0028	13.99	38.7690
	R2407479-004	Pb (220.353 nm)	-0.0003 u	> 100.00	-0.0275
	R2407479-004	Sb (217.582 nm)	0.0015 u	95.33	5.4337
	R2407479-004	Se (196.026 nm)	0.0000 u	> 100.00	0.4743
	R2407479-004	Sn (189.925 nm)	0.0022	35.60	8.1256
	R2407479-004	Sr (216.596 nm)	0.0183	1.00	367.4488
	R2407479-004	Ti (336.122 nm)	0.0001	17.16	78.5241
	R2407479-004	Tl (190.794 nm)	0.0007 u	> 100.00	-1.2066
	R2407479-004	V (292.401 nm)	0.0001	42.20	16.0693
	R2407479-004	Y (360.074 nm)	1.07	0.26	574902.18
	R2407479-004	Y_R (360.074 nm)	1.07	0.26	576341.95
	R2407479-004	Zn (213.857 nm)	0.0024	0.66	175.6470
8/22/2024 22:43:58	Continuing Calibration Verification1	Ag (328.068 nm)	0.4649	0.27	31739.2361
	Continuing Calibration Verification1	Al (237.312 nm)	9.5574	0.19	26324.3045
	Continuing Calibration Verification1	As (188.980 nm)	0.9652	0.02	1745.8539
	Continuing Calibration Verification1	B (249.772 nm)	2.5338	0.35	105200.3522
	Continuing Calibration Verification1	Ba (230.424 nm)	9.3667	0.34	582554.2022
	Continuing Calibration Verification1	Be (313.107 nm)	0.2437	0.33	303420.7978
	Continuing Calibration Verification1	Ca (317.933 nm)	24.3426	0.34	960939.2376
	Continuing Calibration Verification1	Cd (214.439 nm)	0.4926	0.40	32162.7430
	Continuing Calibration Verification1	Co (230.786 nm)	2.4311	0.25	51511.9048
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5003	0.38	28694.5358
	Continuing Calibration Verification1	Cu (327.395 nm)	1.1789	0.19	58058.6325
	Continuing Calibration Verification1	Fe (234.350 nm)	4.7768	0.44	112814.8671
	Continuing Calibration Verification1	K (766.491 nm)	23.5921	0.11	29777.7522
	Continuing Calibration Verification1	Mg (279.078 nm)	24.8894	0.38	108732.6309
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7109	0.35	257536.6829
	Continuing Calibration Verification1	Mo (202.032 nm)	2.4861	0.68	26933.0284
	Continuing Calibration Verification1	Na (588.995 nm)	24.0251	0.17	405048.8701
	Continuing Calibration Verification1	Ni (230.299 nm)	1.9411	0.40	25427.4251
	Continuing Calibration Verification1	Pb (220.353 nm)	0.4883	0.49	2614.8804
	Continuing Calibration Verification1	Sb (217.582 nm)	4.8097	0.38	11744.4254
	Continuing Calibration Verification1	Se (196.026 nm)	0.4888	0.44	452.1104
	Continuing Calibration Verification1	Sn (189.925 nm)	4.8881	0.28	13335.3459
	Continuing Calibration Verification1	Sr (216.596 nm)	2.4139	0.38	47689.5734
	Continuing Calibration Verification1	Ti (336.122 nm)	2.4810	0.34	387840.3784
	Continuing Calibration Verification1	Tl (190.794 nm)	0.9713	0.55	916.3795
	Continuing Calibration Verification1	V (292.401 nm)	2.4618	0.33	94320.0211
	Continuing Calibration Verification1	Y (360.074 nm)	1.01	0.15	545304.18
	Continuing Calibration Verification1	Y_R (360.074 nm)	1.01	0.15	546754.87
	Continuing Calibration Verification1	Zn (213.857 nm)	0.9486	0.22	64478.4901
8/22/2024 22:47:02	Continuing Calibration Blank1	Ag (328.068 nm)	-0.0001 u	> 100.00	22.4009
	Continuing Calibration Blank1	Al (237.312 nm)	0.0012	70.83	-9.8608

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank1	As (188.980 nm)	0.0012	79.39	-0.9340
	Continuing Calibration Blank1	B (249.772 nm)	0.0019	7.57	156.0133
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0009	1.59	67.7861
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000	29.45	-3.8353
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0050	4.42	3029.3334
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0000 u	> 100.00	12.1293
	Continuing Calibration Blank1	Co (230.786 nm)	0.0002 u	> 100.00	8.5237
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0001	41.52	29.4624
	Continuing Calibration Blank1	Cu (327.395 nm)	-0.0002 u	54.47	1.8417
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0040	18.62	145.3638
	Continuing Calibration Blank1	K (766.491 nm)	0.0751	33.21	388.7467
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0041	24.34	10.7334
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0001	7.89	43.7621
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0052	11.64	61.2103
	Continuing Calibration Blank1	Na (588.995 nm)	0.0607	7.90	-12270.5006
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0000 u	> 100.00	1.9746
	Continuing Calibration Blank1	Pb (220.353 nm)	0.0003	94.53	2.9897
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0172	4.37	43.6684
	Continuing Calibration Blank1	Se (196.026 nm)	0.0010	64.16	1.3414
	Continuing Calibration Blank1	Sn (189.925 nm)	0.0046	35.31	14.5440
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0001	71.62	8.9859
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0047	23.19	799.5533
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0008 u	> 100.00	-1.0741
	Continuing Calibration Blank1	V (292.401 nm)	0.0001	28.83	15.2952
	Continuing Calibration Blank1	Y (360.074 nm)	1.05	0.16	566850.21
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.05	0.17	568271.22
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0002	27.81	25.2844
8/22/2024 22:50:06	R2407547-002	Ag (328.068 nm)	-0.0001 u	53.40	17.1230
	R2407547-002	Al (237.312 nm)	0.0109	4.52	17.0140
	R2407547-002	As (188.980 nm)	0.0013 u	> 100.00	-0.6858
	R2407547-002	B (249.772 nm)	0.0115	1.10	551.3315
	R2407547-002	Ba (230.424 nm)	0.0312	1.03	1948.9297
	R2407547-002	Be (313.107 nm)	0.0000 u	> 100.00	-19.2624
	R2407547-002	Ca (317.933 nm)	20.9681	0.41	828121.3216
	R2407547-002	Cd (214.439 nm)	0.0000 u	> 100.00	7.6057
	R2407547-002	Co (230.786 nm)	0.0000 u	> 100.00	2.8467
	R2407547-002	Cr (267.716 nm)	0.0002	18.36	36.4059
	R2407547-002	Cu (327.395 nm)	0.0553	0.66	2732.4363
	R2407547-002	Fe (234.350 nm)	0.0853	0.32	2064.2546
	R2407547-002	K (766.491 nm)	1.3873	3.69	2028.5902
	R2407547-002	Mg (279.078 nm)	4.2833	0.44	18706.5749
	R2407547-002	Mn (257.610 nm)	0.0138	0.37	5012.1067
	R2407547-002	Mo (202.032 nm)	0.0015	18.17	20.8804
	R2407547-002	Na (588.995 nm)	5.4804	0.03	82108.9560
	R2407547-002	Ni (230.299 nm)	0.0019	7.21	26.7313
	R2407547-002	Pb (220.353 nm)	-0.0002 u	> 100.00	0.7089
	R2407547-002	Sb (217.582 nm)	0.0027	46.92	8.2000
	R2407547-002	Se (196.026 nm)	-0.0002 u	> 100.00	0.2822
	R2407547-002	Sn (189.925 nm)	0.0029	45.14	9.9731
	R2407547-002	Sr (216.596 nm)	0.0457	0.46	909.8857
	R2407547-002	Ti (336.122 nm)	0.0008	36.26	187.4027
	R2407547-002	Tl (190.794 nm)	0.0016	68.77	-0.3858
	R2407547-002	V (292.401 nm)	0.0000 u	> 100.00	9.0835
	R2407547-002	Y (360.074 nm)	1.06	0.31	569758.70
	R2407547-002	Y_R (360.074 nm)	1.06	0.31	571216.85
	R2407547-002	Zn (213.857 nm)	0.0026	3.57	190.0801
8/22/2024 22:53:11	R2407547-004	Ag (328.068 nm)	0.0000 u	> 100.00	30.1847

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407547-004	Al (237.312 nm)	0.0076	19.29	7.9164
	R2407547-004	As (188.980 nm)	0.0016	32.55	-0.2390
	R2407547-004	B (249.772 nm)	0.0135	1.22	636.2790
	R2407547-004	Ba (230.424 nm)	0.0373	0.55	2329.3600
	R2407547-004	Be (313.107 nm)	0.0000 u	> 100.00	-13.5875
	R2407547-004	Ca (317.933 nm)	22.7610	0.48	898686.9906
	R2407547-004	Cd (214.439 nm)	0.0000 u	> 100.00	9.2909
	R2407547-004	Co (230.786 nm)	0.0000 u	> 100.00	4.0616
	R2407547-004	Cr (267.716 nm)	0.0003	28.34	40.4320
	R2407547-004	Cu (327.395 nm)	0.0422	0.35	2087.6576
	R2407547-004	Fe (234.350 nm)	0.0584	0.32	1429.4831
	R2407547-004	K (766.491 nm)	1.6204	1.65	2319.9410
	R2407547-004	Mg (279.078 nm)	4.7113	0.45	20576.3856
	R2407547-004	Mn (257.610 nm)	0.0111	0.27	4041.7430
	R2407547-004	Mo (202.032 nm)	0.0009	35.78	14.4866
	R2407547-004	Na (588.995 nm)	5.7794	0.52	87316.0535
	R2407547-004	Ni (230.299 nm)	0.0033	7.32	44.9773
	R2407547-004	Pb (220.353 nm)	0.0003 u	> 100.00	3.0504
	R2407547-004	Sb (217.582 nm)	0.0035	33.23	10.3001
	R2407547-004	Se (196.026 nm)	0.0005 u	> 100.00	0.9171
	R2407547-004	Sn (189.925 nm)	0.0013	19.37	5.7279
	R2407547-004	Sr (216.596 nm)	0.0514	0.62	1021.5585
	R2407547-004	Ti (336.122 nm)	0.0004	52.49	130.3682
	R2407547-004	Tl (190.794 nm)	-0.0002 u	> 100.00	-2.0007
	R2407547-004	V (292.401 nm)	0.0002	54.51	17.6129
	R2407547-004	Y (360.074 nm)	1.05	0.47	567273.41
	R2407547-004	Y_R (360.074 nm)	1.06	0.47	568757.67
	R2407547-004	Zn (213.857 nm)	0.0011	4.45	88.9277
8/22/2024 22:56:16	R2407547-004S	Ag (328.068 nm)	0.0437	0.55	3005.2571
	R2407547-004S	Al (237.312 nm)	1.8809	0.25	5170.1366
	R2407547-004S	As (188.980 nm)	0.0387	1.74	67.0811
	R2407547-004S	B (249.772 nm)	0.9668	0.23	40188.4164
	R2407547-004S	Ba (230.424 nm)	1.8778	0.36	116792.4995
	R2407547-004S	Be (313.107 nm)	0.0469	0.21	58394.7254
	R2407547-004S	Ca (317.933 nm)	23.8137	0.22	940121.1429
	R2407547-004S	Cd (214.439 nm)	0.0477	0.37	3124.8478
	R2407547-004S	Co (230.786 nm)	0.4745	0.27	10057.9551
	R2407547-004S	Cr (267.716 nm)	0.1930	0.19	11082.2980
	R2407547-004S	Cu (327.395 nm)	0.2743	0.20	13515.9176
	R2407547-004S	Fe (234.350 nm)	1.0014	0.03	23690.4962
	R2407547-004S	K (766.491 nm)	19.7102	0.23	24926.5680
	R2407547-004S	Mg (279.078 nm)	6.4090	0.20	27993.4210
	R2407547-004S	Mn (257.610 nm)	0.4715	0.20	170814.3151
	R2407547-004S	Mo (202.032 nm)	0.4775	1.74	5177.1880
	R2407547-004S	Na (588.995 nm)	23.8049	0.20	401214.5070
	R2407547-004S	Ni (230.299 nm)	0.4723	0.30	6188.6414
	R2407547-004S	Pb (220.353 nm)	0.4814	0.31	2578.2714
	R2407547-004S	Sb (217.582 nm)	0.4708	0.93	1151.0544
	R2407547-004S	Se (196.026 nm)	0.9309	0.21	860.5932
	R2407547-004S	Sn (189.925 nm)	4.5276	0.57	12352.0733
	R2407547-004S	Sr (216.596 nm)	1.9152	0.43	37838.1033
	R2407547-004S	Ti (336.122 nm)	0.4798	0.27	75055.4369
	R2407547-004S	Tl (190.794 nm)	1.8560	0.40	1752.8249
	R2407547-004S	V (292.401 nm)	0.4753	0.19	18219.6651
	R2407547-004S	Y (360.074 nm)	1.04	0.08	560185.84
	R2407547-004S	Y_R (360.074 nm)	1.04	0.08	561655.77
	R2407547-004S	Zn (213.857 nm)	0.4623	0.22	31431.4750

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
8/22/2024 22:59:22	R2407547-004SD	Ag (328.068 nm)	0.0445	0.55	3065.0983
	R2407547-004SD	Al (237.312 nm)	1.9234	0.35	5287.1880
	R2407547-004SD	As (188.980 nm)	0.0389	4.28	67.3582
	R2407547-004SD	B (249.772 nm)	0.9898	0.35	41140.2681
	R2407547-004SD	Ba (230.424 nm)	1.9129	0.22	118976.5040
	R2407547-004SD	Be (313.107 nm)	0.0479	0.25	59660.0900
	R2407547-004SD	Ca (317.933 nm)	23.9293	0.28	944671.4964
	R2407547-004SD	Cd (214.439 nm)	0.0487	0.52	3189.6955
	R2407547-004SD	Co (230.786 nm)	0.4845	0.28	10269.3072
	R2407547-004SD	Cr (267.716 nm)	0.1970	0.38	11311.9322
	R2407547-004SD	Cu (327.395 nm)	0.2804	0.14	13815.2246
	R2407547-004SD	Fe (234.350 nm)	1.0209	0.23	24149.7645
	R2407547-004SD	K (766.491 nm)	20.2547	0.31	25607.0189
	R2407547-004SD	Mg (279.078 nm)	6.4671	0.23	28247.1862
	R2407547-004SD	Mn (257.610 nm)	0.4811	0.27	174289.8965
	R2407547-004SD	Mo (202.032 nm)	0.4904	1.20	5316.7903
	R2407547-004SD	Na (588.995 nm)	24.3835	0.17	411289.9356
	R2407547-004SD	Ni (230.299 nm)	0.4799	0.28	6287.5564
	R2407547-004SD	Pb (220.353 nm)	0.4901	0.33	2624.6497
	R2407547-004SD	Sb (217.582 nm)	0.4870	0.38	1190.7347
	R2407547-004SD	Se (196.026 nm)	0.9544	0.40	882.2747
	R2407547-004SD	Sn (189.925 nm)	4.7130	0.34	12857.7230
	R2407547-004SD	Sr (216.596 nm)	1.9364	0.45	38256.3901
	R2407547-004SD	Ti (336.122 nm)	0.4938	0.31	77251.1967
	R2407547-004SD	Tl (190.794 nm)	1.8950	0.18	1789.7300
	R2407547-004SD	V (292.401 nm)	0.4864	0.26	18645.6186
	R2407547-004SD	Y (360.074 nm)	1.04	0.07	558901.72
	R2407547-004SD	Y_R (360.074 nm)	1.04	0.07	560513.97
	R2407547-004SD	Zn (213.857 nm)	0.4708	0.27	32006.6018
8/22/2024 23:02:27	R2407547-004A	Ag (328.068 nm)	0.0435	0.56	2994.6186
	R2407547-004A	Al (237.312 nm)	1.8573	0.33	5104.9647
	R2407547-004A	As (188.980 nm)	0.0372	2.27	64.2916
	R2407547-004A	B (249.772 nm)	0.9585	0.32	39844.0277
	R2407547-004A	Ba (230.424 nm)	1.8517	0.23	115174.3647
	R2407547-004A	Be (313.107 nm)	0.0462	0.22	57507.2282
	R2407547-004A	Ca (317.933 nm)	23.4762	0.28	926837.7221
	R2407547-004A	Cd (214.439 nm)	0.0470	0.27	3078.7285
	R2407547-004A	Co (230.786 nm)	0.4672	0.18	9903.0120
	R2407547-004A	Cr (267.716 nm)	0.1900	0.29	10912.1973
	R2407547-004A	Cu (327.395 nm)	0.2708	0.19	13344.3679
	R2407547-004A	Fe (234.350 nm)	0.9869	0.11	23348.2505
	R2407547-004A	K (766.491 nm)	19.6296	0.42	24825.8060
	R2407547-004A	Mg (279.078 nm)	6.3141	0.29	27578.6538
	R2407547-004A	Mn (257.610 nm)	0.4648	0.27	168376.2859
	R2407547-004A	Mo (202.032 nm)	0.4854	1.18	5262.7819
	R2407547-004A	Na (588.995 nm)	23.6546	0.36	398597.2719
	R2407547-004A	Ni (230.299 nm)	0.4642	0.22	6081.7287
	R2407547-004A	Pb (220.353 nm)	0.4751	0.43	2544.2685
	R2407547-004A	Sb (217.582 nm)	0.4819	0.59	1178.2410
	R2407547-004A	Se (196.026 nm)	0.9176	0.46	848.2877
	R2407547-004A	Sn (189.925 nm)	4.5223	0.61	12337.5706
	R2407547-004A	Sr (216.596 nm)	1.8774	0.33	37092.1409
	R2407547-004A	Ti (336.122 nm)	0.4861	0.26	76041.5292
	R2407547-004A	Tl (190.794 nm)	1.8350	0.32	1733.0180
	R2407547-004A	V (292.401 nm)	0.4690	0.18	17977.9638
	R2407547-004A	Y (360.074 nm)	1.04	0.09	558559.58
	R2407547-004A	Y_R (360.074 nm)	1.04	0.09	560085.70

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407547-004A	Zn (213.857 nm)	0.4559	0.25	30993.2669
8/22/2024 23:05:33	R2407547-004L 5X	Ag (328.068 nm)	-0.0001 u	> 100.00	21.1615
	R2407547-004L 5X	Al (237.312 nm)	0.0030	33.09	-4.9612
	R2407547-004L 5X	As (188.980 nm)	0.0001 u	> 100.00	-2.8924
	R2407547-004L 5X	B (249.772 nm)	0.0037	2.79	230.6402
	R2407547-004L 5X	Ba (230.424 nm)	0.0076	2.24	483.2756
	R2407547-004L 5X	Be (313.107 nm)	0.0000 u	> 100.00	-17.6504
	R2407547-004L 5X	Ca (317.933 nm)	4.5532	0.16	182041.9050
	R2407547-004L 5X	Cd (214.439 nm)	0.0000 u	> 100.00	10.3674
	R2407547-004L 5X	Co (230.786 nm)	0.0001 u	> 100.00	5.3680
	R2407547-004L 5X	Cr (267.716 nm)	0.0001	35.60	28.9133
	R2407547-004L 5X	Cu (327.395 nm)	0.0076	1.12	385.7333
	R2407547-004L 5X	Fe (234.350 nm)	0.0145	1.73	393.7285
	R2407547-004L 5X	K (766.491 nm)	0.3941	6.95	787.4032
	R2407547-004L 5X	Mg (279.078 nm)	0.9366	0.31	4084.9409
	R2407547-004L 5X	Mn (257.610 nm)	0.0024	1.97	861.3199
	R2407547-004L 5X	Mo (202.032 nm)	0.0034	15.11	41.6088
	R2407547-004L 5X	Na (588.995 nm)	1.2067	0.66	7686.0565
	R2407547-004L 5X	Ni (230.299 nm)	0.0013	28.21	17.8822
	R2407547-004L 5X	Pb (220.353 nm)	0.0001 u	> 100.00	2.3490
	R2407547-004L 5X	Sb (217.582 nm)	0.0061	23.67	16.6590
	R2407547-004L 5X	Se (196.026 nm)	0.0034	55.12	3.5564
	R2407547-004L 5X	Sn (189.925 nm)	0.0517	32.20	142.9605
	R2407547-004L 5X	Sr (216.596 nm)	0.0103	2.11	210.7030
	R2407547-004L 5X	Ti (336.122 nm)	0.0020	33.13	368.1087
	R2407547-004L 5X	Tl (190.794 nm)	0.0020	13.06	0.0362
	R2407547-004L 5X	V (292.401 nm)	-0.0002 u	68.86	3.6709
	R2407547-004L 5X	Y (360.074 nm)	1.06	0.11	567841.92
	R2407547-004L 5X	Y_R (360.074 nm)	1.06	0.11	569289.56
	R2407547-004L 5X	Zn (213.857 nm)	0.0003	30.44	36.9904
8/22/2024 23:08:38	Continuing Calibration Verification1	Ag (328.068 nm)	0.4673	0.18	31899.9970
	Continuing Calibration Verification1	Al (237.312 nm)	9.6527	0.11	26586.8635
	Continuing Calibration Verification1	As (188.980 nm)	0.9702	0.34	1755.0819
	Continuing Calibration Verification1	B (249.772 nm)	2.5464	0.35	105725.7070
	Continuing Calibration Verification1	Ba (230.424 nm)	9.3939	0.51	584244.4499
	Continuing Calibration Verification1	Be (313.107 nm)	0.2447	0.40	304620.9474
	Continuing Calibration Verification1	Ca (317.933 nm)	24.3804	0.45	962428.9448
	Continuing Calibration Verification1	Cd (214.439 nm)	0.4944	0.50	32282.2225
	Continuing Calibration Verification1	Co (230.786 nm)	2.4359	0.35	51614.0783
	Continuing Calibration Verification1	Cr (267.716 nm)	0.5014	0.42	28752.8486
	Continuing Calibration Verification1	Cu (327.395 nm)	1.1868	0.15	58444.0181
	Continuing Calibration Verification1	Fe (234.350 nm)	4.7964	0.43	113277.6216
	Continuing Calibration Verification1	K (766.491 nm)	23.8563	0.13	30107.9484
	Continuing Calibration Verification1	Mg (279.078 nm)	24.9016	0.37	108786.1176
	Continuing Calibration Verification1	Mn (257.610 nm)	0.7135	0.34	258473.7559
	Continuing Calibration Verification1	Mo (202.032 nm)	2.4958	0.56	27037.6703
	Continuing Calibration Verification1	Na (588.995 nm)	24.2580	0.25	409103.6202
	Continuing Calibration Verification1	Ni (230.299 nm)	1.9487	0.44	25527.0002
	Continuing Calibration Verification1	Pb (220.353 nm)	0.4899	0.24	2623.4170
	Continuing Calibration Verification1	Sb (217.582 nm)	4.8389	0.31	11815.7940
	Continuing Calibration Verification1	Se (196.026 nm)	0.4945	0.31	457.2988
	Continuing Calibration Verification1	Sn (189.925 nm)	4.9259	0.50	13438.5157
	Continuing Calibration Verification1	Sr (216.596 nm)	2.4162	0.47	47735.2473
	Continuing Calibration Verification1	Ti (336.122 nm)	2.4971	0.30	390367.6682
	Continuing Calibration Verification1	Tl (190.794 nm)	0.9736	0.23	918.5768
	Continuing Calibration Verification1	V (292.401 nm)	2.4703	0.29	94645.0291
	Continuing Calibration Verification1	Y (360.074 nm)	1.01	0.07	544050.38

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification1	Y_R (360.074 nm)	1.01	0.07	545539.38
	Continuing Calibration Verification1	Zn (213.857 nm)	0.9502	0.27	64581.9169
8/22/2024 23:11:41	Continuing Calibration Blank1	Ag (328.068 nm)	-0.0001 u	66.36	19.7372
	Continuing Calibration Blank1	Al (237.312 nm)	0.0014	39.94	-9.3906
	Continuing Calibration Blank1	As (188.980 nm)	0.0007	95.15	-1.8421
	Continuing Calibration Blank1	B (249.772 nm)	0.0025	7.30	179.9856
	Continuing Calibration Blank1	Ba (230.424 nm)	0.0012	1.49	82.0897
	Continuing Calibration Blank1	Be (313.107 nm)	0.0000	34.03	-6.2573
	Continuing Calibration Blank1	Ca (317.933 nm)	0.0058	0.90	3058.0246
	Continuing Calibration Blank1	Cd (214.439 nm)	0.0001	58.49	13.9259
	Continuing Calibration Blank1	Co (230.786 nm)	0.0002	72.42	7.9212
	Continuing Calibration Blank1	Cr (267.716 nm)	0.0001 u	> 100.00	27.3648
	Continuing Calibration Blank1	Cu (327.395 nm)	-0.0001 u	54.33	3.3313
	Continuing Calibration Blank1	Fe (234.350 nm)	0.0035	11.24	133.3643
	Continuing Calibration Blank1	K (766.491 nm)	0.0909	29.10	408.5733
	Continuing Calibration Blank1	Mg (279.078 nm)	0.0045	27.03	12.5678
	Continuing Calibration Blank1	Mn (257.610 nm)	0.0001	13.82	49.5488
	Continuing Calibration Blank1	Mo (202.032 nm)	0.0049	18.80	57.9696
	Continuing Calibration Blank1	Na (588.995 nm)	0.0672	8.70	-12158.0733
	Continuing Calibration Blank1	Ni (230.299 nm)	0.0002	86.25	4.6388
	Continuing Calibration Blank1	Pb (220.353 nm)	-0.0004 u	33.80	-0.3456
	Continuing Calibration Blank1	Sb (217.582 nm)	0.0178	6.75	45.0938
	Continuing Calibration Blank1	Se (196.026 nm)	0.0019 u	> 100.00	2.2025
	Continuing Calibration Blank1	Sn (189.925 nm)	0.0113	31.92	32.7653
	Continuing Calibration Blank1	Sr (216.596 nm)	0.0003	22.15	11.3698
	Continuing Calibration Blank1	Ti (336.122 nm)	0.0044	23.76	745.5533
	Continuing Calibration Blank1	Tl (190.794 nm)	0.0017	75.00	-0.2887
	Continuing Calibration Blank1	V (292.401 nm)	0.0004	24.05	24.2801
	Continuing Calibration Blank1	Y (360.074 nm)	1.05	0.31	565681.12
	Continuing Calibration Blank1	Y_R (360.074 nm)	1.05	0.31	567236.57
	Continuing Calibration Blank1	Zn (213.857 nm)	0.0001	43.03	21.0715
8/23/2024 09:46:59	Continuing Calibration Verification	Ag (328.068 nm)	0.4634	0.20	31635.7099
	Continuing Calibration Verification	Al (237.312 nm)	9.1816	0.09	25288.7040
	Continuing Calibration Verification	As (188.980 nm)	0.9496	0.17	1717.6728
	Continuing Calibration Verification	B (249.772 nm)	2.4198	0.09	100474.0261
	Continuing Calibration Verification	Ba (230.424 nm)	9.0381	0.35	562114.5428
	Continuing Calibration Verification	Be (313.107 nm)	0.2358	0.16	293499.1801
	Continuing Calibration Verification	Ca (317.933 nm)	23.4154	0.05	924445.1291
	Continuing Calibration Verification	Cd (214.439 nm)	0.4706	0.09	30728.9415
	Continuing Calibration Verification	Co (230.786 nm)	2.3309	0.40	49388.1119
	Continuing Calibration Verification	Cr (267.716 nm)	0.4843	0.20	27773.6276
	Continuing Calibration Verification	Cu (327.395 nm)	1.1702	0.28	57630.8239
	Continuing Calibration Verification	Fe (234.350 nm)	4.5969	0.24	108568.4434
	Continuing Calibration Verification	K (766.491 nm)	23.1834	0.14	29267.0427
	Continuing Calibration Verification	Mg (279.078 nm)	24.1561	0.08	105528.7303
	Continuing Calibration Verification	Mn (257.610 nm)	0.6884	0.06	249370.3632
	Continuing Calibration Verification	Mo (202.032 nm)	2.4017	0.50	26018.5010
	Continuing Calibration Verification	Na (588.995 nm)	23.7502	0.54	400260.5193
	Continuing Calibration Verification	Ni (230.299 nm)	1.8764	0.16	24580.8167
	Continuing Calibration Verification	Pb (220.353 nm)	0.4727	0.01	2531.4225
	Continuing Calibration Verification	Sb (217.582 nm)	4.6321	0.17	11310.6959
	Continuing Calibration Verification	Se (196.026 nm)	0.4771	0.67	441.2658
	Continuing Calibration Verification	Sn (189.925 nm)	4.7538	0.15	12969.0339
	Continuing Calibration Verification	Sr (216.596 nm)	2.3077	0.26	45590.5187
	Continuing Calibration Verification	Ti (336.122 nm)	2.4017	0.16	375454.3867
	Continuing Calibration Verification	Tl (190.794 nm)	0.9441	0.42	890.6982
	Continuing Calibration Verification	V (292.401 nm)	2.3858	0.14	91406.8624

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Verification	Y (360.074 nm)	0.99	0.14	533606.65
	Continuing Calibration Verification	Y_R (360.074 nm)	0.99	0.14	534754.59
	Continuing Calibration Verification	Zn (213.857 nm)	0.9307	0.22	63258.8926
8/23/2024 09:50:03	Continuing Calibration Blank	Ag (328.068 nm)	0.0001 u	> 100.00	31.5938
	Continuing Calibration Blank	Al (237.312 nm)	0.0008	41.18	-11.0751
	Continuing Calibration Blank	As (188.980 nm)	0.0012 u	> 100.00	-0.9051
	Continuing Calibration Blank	B (249.772 nm)	0.0024	7.87	176.4788
	Continuing Calibration Blank	Ba (230.424 nm)	0.0012	5.60	81.5893
	Continuing Calibration Blank	Be (313.107 nm)	0.0000	26.91	-10.0248
	Continuing Calibration Blank	Ca (317.933 nm)	0.0059	2.86	3064.6239
	Continuing Calibration Blank	Cd (214.439 nm)	0.0000	36.30	12.8160
	Continuing Calibration Blank	Co (230.786 nm)	0.0002	91.49	7.7887
	Continuing Calibration Blank	Cr (267.716 nm)	0.0001 u	> 100.00	29.4185
	Continuing Calibration Blank	Cu (327.395 nm)	-0.0001 u	> 100.00	6.5316
	Continuing Calibration Blank	Fe (234.350 nm)	0.0043	10.56	152.9634
	Continuing Calibration Blank	K (766.491 nm)	0.1424	15.21	472.8702
	Continuing Calibration Blank	Mg (279.078 nm)	0.0035	21.73	8.2255
	Continuing Calibration Blank	Mn (257.610 nm)	0.0001	8.04	49.1553
	Continuing Calibration Blank	Mo (202.032 nm)	0.0054	12.25	62.9604
	Continuing Calibration Blank	Na (588.995 nm)	0.0423	18.04	-12591.7483
	Continuing Calibration Blank	Ni (230.299 nm)	0.0004	61.79	7.1201
	Continuing Calibration Blank	Pb (220.353 nm)	-0.0002 u	> 100.00	0.6700
	Continuing Calibration Blank	Sb (217.582 nm)	0.0105	22.08	27.4093
	Continuing Calibration Blank	Se (196.026 nm)	0.0025	53.91	2.7526
	Continuing Calibration Blank	Sn (189.925 nm)	0.0045	21.07	14.2585
	Continuing Calibration Blank	Sr (216.596 nm)	0.0002	48.91	10.6597
	Continuing Calibration Blank	Ti (336.122 nm)	0.0048	22.55	808.4432
	Continuing Calibration Blank	Tl (190.794 nm)	0.0013 u	88.60	-0.6303
	Continuing Calibration Blank	V (292.401 nm)	0.0003	49.49	20.5816
	Continuing Calibration Blank	Y (360.074 nm)	1.03	0.12	555999.89
	Continuing Calibration Blank	Y_R (360.074 nm)	1.03	0.12	557164.66
	Continuing Calibration Blank	Zn (213.857 nm)	0.0002	22.23	25.3217
8/23/2024 09:53:08	R2407624-001 2X	Ag (328.068 nm)	-0.0002 u	40.42	14.5139
	R2407624-001 2X	Al (237.312 nm)	0.0054	29.95	1.7496
	R2407624-001 2X	As (188.980 nm)	0.0022	59.90	0.9029
	R2407624-001 2X	B (249.772 nm)	0.3915	1.03	16317.3884
	R2407624-001 2X	Ba (230.424 nm)	0.2063	1.07	12836.5240
	R2407624-001 2X	Be (313.107 nm)	0.0000 u	> 100.00	-22.6959
	R2407624-001 2X	Ca (317.933 nm)	51.9935	0.95	2049258.1707
	R2407624-001 2X	Cd (214.439 nm)	0.0001	16.39	19.1744
	R2407624-001 2X	Co (230.786 nm)	0.0008	36.47	20.8256
	R2407624-001 2X	Cr (267.716 nm)	0.0003	9.03	43.5019
	R2407624-001 2X	Cu (327.395 nm)	-0.0001 u	50.18	3.5180
	R2407624-001 2X	Fe (234.350 nm)	4.4374	1.00	104801.4805
	R2407624-001 2X	K (766.491 nm)	24.2016	1.12	30539.3787
	R2407624-001 2X	Mg (279.078 nm)	17.4086	1.12	76049.6953
	R2407624-001 2X	Mn (257.610 nm)	0.5451	1.11	197479.5440
	R2407624-001 2X	Mo (202.032 nm)	0.0011	20.51	16.7441
	R2407624-001 2X	Na (588.995 nm)	35.6122	1.40	606827.8104
	R2407624-001 2X	Ni (230.299 nm)	0.0144	5.36	189.8028
	R2407624-001 2X	Pb (220.353 nm)	-0.0001 u	> 100.00	1.1544
	R2407624-001 2X	Sb (217.582 nm)	0.0053	8.44	14.6553
	R2407624-001 2X	Se (196.026 nm)	-0.0003 u	> 100.00	0.1255
	R2407624-001 2X	Sn (189.925 nm)	0.0012	71.61	5.2504
	R2407624-001 2X	Sr (216.596 nm)	0.2243	1.04	4436.5851
	R2407624-001 2X	Ti (336.122 nm)	0.0015	12.39	300.1613
	R2407624-001 2X	Tl (190.794 nm)	0.0008 u	> 100.00	-1.0933

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407624-001 2X	V (292.401 nm)	0.0002 u	> 100.00	16.5666
	R2407624-001 2X	Y (360.074 nm)	1.00	0.32	537315.10
	R2407624-001 2X	Y_R (360.074 nm)	1.00	0.32	538525.30
	R2407624-001 2X	Zn (213.857 nm)	0.0012	4.69	92.0003
8/23/2024 09:56:13	R2407792-008 10X	Ag (328.068 nm)	-0.0001 u	46.69	18.2189
	R2407792-008 10X	Al (237.312 nm)	-0.0003 u	> 100.00	-13.8712
	R2407792-008 10X	As (188.980 nm)	0.0002 u	> 100.00	-2.7373
	R2407792-008 10X	B (249.772 nm)	0.0141	1.83	661.9040
	R2407792-008 10X	Ba (230.424 nm)	0.0022	2.24	144.7130
	R2407792-008 10X	Be (313.107 nm)	0.0000 u	> 100.00	-18.7296
	R2407792-008 10X	Ca (317.933 nm)	12.0544	0.17	477285.9363
	R2407792-008 10X	Cd (214.439 nm)	0.0000 u	> 100.00	8.9582
	R2407792-008 10X	Co (230.786 nm)	-0.0001 u	> 100.00	0.4930
	R2407792-008 10X	Cr (267.716 nm)	0.0001	31.79	29.4647
	R2407792-008 10X	Cu (327.395 nm)	-0.0002 u	19.09	0.2437
	R2407792-008 10X	Fe (234.350 nm)	0.0255	1.02	653.4857
	R2407792-008 10X	K (766.491 nm)	0.4229	7.15	823.4626
	R2407792-008 10X	Mg (279.078 nm)	7.1373	0.09	31175.3387
	R2407792-008 10X	Mn (257.610 nm)	0.0009	1.44	352.3596
	R2407792-008 10X	Mo (202.032 nm)	0.0006	13.73	10.7564
	R2407792-008 10X	Na (588.995 nm)	4.5108	0.42	65224.0721
	R2407792-008 10X	Ni (230.299 nm)	0.0020	10.71	27.6143
	R2407792-008 10X	Pb (220.353 nm)	-0.0002 u	66.04	0.4053
	R2407792-008 10X	Sb (217.582 nm)	0.0046	20.18	12.8157
	R2407792-008 10X	Se (196.026 nm)	0.0019	56.02	2.1567
	R2407792-008 10X	Sn (189.925 nm)	0.0015	26.06	6.0331
	R2407792-008 10X	Sr (216.596 nm)	1.2861	0.14	25410.2466
	R2407792-008 10X	Ti (336.122 nm)	0.0004	35.61	127.7459
	R2407792-008 10X	Tl (190.794 nm)	0.0001 u	> 100.00	-1.7462
	R2407792-008 10X	V (292.401 nm)	0.0000 u	> 100.00	9.0265
	R2407792-008 10X	Y (360.074 nm)	1.03	0.14	555875.82
	R2407792-008 10X	Y_R (360.074 nm)	1.03	0.14	557097.85
	R2407792-008 10X	Zn (213.857 nm)	0.0020	4.29	147.9836
8/23/2024 09:59:18	R2407411-007	Ag (328.068 nm)	-0.0001 u	> 100.00	21.5021
	R2407411-007	Al (237.312 nm)	0.0066	11.07	5.1395
	R2407411-007	As (188.980 nm)	0.0022	70.14	0.7843
	R2407411-007	B (249.772 nm)	0.0195	0.71	885.1702
	R2407411-007	Ba (230.424 nm)	0.0218	0.29	1366.4341
	R2407411-007	Be (313.107 nm)	0.0000 u	> 100.00	-19.4937
	R2407411-007	Ca (317.933 nm)	34.1247	0.34	1345955.2657
	R2407411-007	Cd (214.439 nm)	0.0000 u	> 100.00	8.3068
	R2407411-007	Co (230.786 nm)	0.0001 u	> 100.00	4.7757
	R2407411-007	Cr (267.716 nm)	0.0009	5.09	76.8315
	R2407411-007	Cu (327.395 nm)	0.0003	16.98	23.3205
	R2407411-007	Fe (234.350 nm)	0.0159	1.67	425.8549
	R2407411-007	K (766.491 nm)	2.0432	1.79	2848.2953
	R2407411-007	Mg (279.078 nm)	11.1599	0.24	48749.7612
	R2407411-007	Mn (257.610 nm)	0.0012	1.00	445.3811
	R2407411-007	Mo (202.032 nm)	0.0010	10.55	15.8803
	R2407411-007	Na (588.995 nm)	28.0322	0.24	474827.9892
	R2407411-007	Ni (230.299 nm)	0.0026	12.05	35.9928
	R2407411-007	Pb (220.353 nm)	-0.0001 u	> 100.00	0.9786
	R2407411-007	Sb (217.582 nm)	0.0023	58.15	7.2427
	R2407411-007	Se (196.026 nm)	-0.0017 u	57.91	-1.1695
	R2407411-007	Sn (189.925 nm)	0.0010	51.66	4.7552
	R2407411-007	Sr (216.596 nm)	0.0997	0.30	1974.9168
	R2407411-007	Ti (336.122 nm)	0.0003	30.95	102.6211

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	R2407411-007	Tl (190.794 nm)	0.0018	65.20	-0.1513
	R2407411-007	V (292.401 nm)	0.0001	> 100.00	14.9815
	R2407411-007	Y (360.074 nm)	1.03	0.16	553872.35
	R2407411-007	Y_R (360.074 nm)	1.03	0.16	555162.60
	R2407411-007	Zn (213.857 nm)	0.0027	3.07	197.2881
8/23/2024 10:02:21	Continuing Calibration Verification	Ag (328.068 nm)	0.4640	0.13	31676.2333
	Continuing Calibration Verification	Al (237.312 nm)	9.3168	0.17	25661.3511
	Continuing Calibration Verification	As (188.980 nm)	0.9482	0.35	1715.1807
	Continuing Calibration Verification	B (249.772 nm)	2.4448	0.23	101510.7346
	Continuing Calibration Verification	Ba (230.424 nm)	9.0409	0.32	562292.1814
	Continuing Calibration Verification	Be (313.107 nm)	0.2366	0.20	294612.6927
	Continuing Calibration Verification	Ca (317.933 nm)	23.5620	0.21	930216.9812
	Continuing Calibration Verification	Cd (214.439 nm)	0.4721	0.19	30824.2952
	Continuing Calibration Verification	Co (230.786 nm)	2.3470	0.54	49730.7887
	Continuing Calibration Verification	Cr (267.716 nm)	0.4867	0.21	27910.3981
	Continuing Calibration Verification	Cu (327.395 nm)	1.1693	0.35	57582.3789
	Continuing Calibration Verification	Fe (234.350 nm)	4.6221	0.28	109163.6451
	Continuing Calibration Verification	K (766.491 nm)	23.5015	0.28	29664.5471
	Continuing Calibration Verification	Mg (279.078 nm)	24.1928	0.14	105689.1487
	Continuing Calibration Verification	Mn (257.610 nm)	0.6915	0.13	250519.9327
	Continuing Calibration Verification	Mo (202.032 nm)	2.4138	0.51	26149.5797
	Continuing Calibration Verification	Na (588.995 nm)	23.9768	0.27	404207.5690
	Continuing Calibration Verification	Ni (230.299 nm)	1.8786	0.19	24609.5379
	Continuing Calibration Verification	Pb (220.353 nm)	0.4717	0.11	2526.2380
	Continuing Calibration Verification	Sb (217.582 nm)	4.6637	0.24	11387.8843
	Continuing Calibration Verification	Se (196.026 nm)	0.4752	0.50	439.5438
	Continuing Calibration Verification	Sn (189.925 nm)	4.7529	0.12	12966.5116
	Continuing Calibration Verification	Sr (216.596 nm)	2.3113	0.46	45661.8594
	Continuing Calibration Verification	Ti (336.122 nm)	2.4210	0.21	378461.0028
	Continuing Calibration Verification	Tl (190.794 nm)	0.9476	0.23	893.9999
	Continuing Calibration Verification	V (292.401 nm)	2.4008	0.22	91982.4021
	Continuing Calibration Verification	Y (360.074 nm)	1.00	0.20	538728.81
	Continuing Calibration Verification	Y_R (360.074 nm)	1.00	0.20	540024.41
	Continuing Calibration Verification	Zn (213.857 nm)	0.9297	0.22	63191.0609
8/23/2024 10:05:25	Continuing Calibration Blank	Ag (328.068 nm)	-0.0001 u	81.98	22.5399
	Continuing Calibration Blank	Al (237.312 nm)	0.0014	81.52	-9.2347
	Continuing Calibration Blank	As (188.980 nm)	0.0017	66.29	0.0031
	Continuing Calibration Blank	B (249.772 nm)	0.0028	2.42	192.9882
	Continuing Calibration Blank	Ba (230.424 nm)	0.0014	2.52	96.4196
	Continuing Calibration Blank	Be (313.107 nm)	0.0000	20.77	4.3593
	Continuing Calibration Blank	Ca (317.933 nm)	0.0072	2.29	3115.2799
	Continuing Calibration Blank	Cd (214.439 nm)	0.0000 u	> 100.00	10.5605
	Continuing Calibration Blank	Co (230.786 nm)	0.0002	45.02	8.2712
	Continuing Calibration Blank	Cr (267.716 nm)	0.0001	41.00	26.9443
	Continuing Calibration Blank	Cu (327.395 nm)	-0.0001 u	> 100.00	5.6858
	Continuing Calibration Blank	Fe (234.350 nm)	0.0046	16.77	159.9367
	Continuing Calibration Blank	K (766.491 nm)	0.1005	25.40	420.5899
	Continuing Calibration Blank	Mg (279.078 nm)	0.0041	4.26	11.0885
	Continuing Calibration Blank	Mn (257.610 nm)	0.0001	10.48	58.6668
	Continuing Calibration Blank	Mo (202.032 nm)	0.0055	11.67	64.7265
	Continuing Calibration Blank	Na (588.995 nm)	0.0502	6.66	-12453.7135
	Continuing Calibration Blank	Ni (230.299 nm)	0.0005	86.24	8.1657
	Continuing Calibration Blank	Pb (220.353 nm)	-0.0002 u	> 100.00	0.7915
	Continuing Calibration Blank	Sb (217.582 nm)	0.0146	10.75	37.2751
	Continuing Calibration Blank	Se (196.026 nm)	0.0006 u	> 100.00	1.0136
	Continuing Calibration Blank	Sn (189.925 nm)	0.0048	19.79	15.2001
	Continuing Calibration Blank	Sr (216.596 nm)	0.0002	56.17	10.0910

DateTimeMeasured	SolutionLabel	Element Label (nm)	Unadjusted Conc (ppm)	%RSD	Intensity (c/s)
	Continuing Calibration Blank	Ti (336.122 nm)	0.0049	21.77	823.3762
	Continuing Calibration Blank	Tl (190.794 nm)	0.0013 u	> 100.00	-0.6431
	Continuing Calibration Blank	V (292.401 nm)	0.0001	51.50	15.4949
	Continuing Calibration Blank	Y (360.074 nm)	1.04	0.25	560946.79
	Continuing Calibration Blank	Y_R (360.074 nm)	1.04	0.25	562305.79
	Continuing Calibration Blank	Zn (213.857 nm)	0.0002	8.31	27.9202

Summary Calibration Results

Element and wavelength	Type	Units	Equation	Correlation Coefficient	%RSE
Ag (328.068 nm)	Analyte	ppm	68206.90662862 * Concentration + 27.08385974	1.00000	1.45020021
Al (237.312 nm)	Analyte	ppm	2755.71951049 * Concentration - 13.14294538	1.00000	1.25281860
As (188.980 nm)	Analyte	ppm	1812.12975597 * Concentration - 3.12865606	1.00000	2.01782857
B (249.772 nm)	Analyte	ppm	41489.96531037 * Concentration + 75.12458435	0.99999	2.10584076
Ba (230.424 nm)	Analyte	ppm	62193.13623003 * Concentration + 8.91474297	0.99995	2.59524370
Be (313.107 nm)	Analyte	ppm	1245030.08387717 * Concentration - 17.18499985	0.99999	7.45434223
Ca (317.933 nm)	Analyte	ppm	39359.31491301 * Concentration + 2831.28859356	0.99998	13.122120 34
Cd (214.439 nm)	Analyte	ppm	65272.30893589 * Concentration + 9.72375213	0.99998	1.56747203
Co (230.786 nm)	Analyte	ppm	21187.24919073 * Concentration + 3.55511411	0.99997	2.36895030
Cr (267.716 nm)	Analyte	ppm	57302.46919535 * Concentration + 23.91063548	0.99999	1.86509025
Cu (327.395 nm)	Analyte	ppm	49238.76730075 * Concentration + 9.66582812	1.00000	6.53337114
Fe (234.350 nm)	Analyte	ppm	23606.55435409 * Concentration + 50.85922827	0.99998	2.27263435
K (766.491 nm)	Analyte	ppm	1249.68940919 * Concentration + 294.95326923	0.99996	7.33656079
Mg (279.078 nm)	Analyte	ppm	4368.91333013 * Concentration - 6.96938217	1.00000	0.92297342
Mn (257.610 nm)	Analyte	ppm	362253.07130387 * Concentration + 9.13841954	0.99998	2.45376023
Mo (202.032 nm)	Analyte	ppm	10831.58118671 * Concentration + 4.73923779	1.00000	5.62811502
Na (588.995 nm)	Analyte	ppm	17414.14613519 * Concentration - 13328.08598319	1.00000	1.88639875
Ni (230.299 nm)	Analyte	ppm	13099.02245997 * Concentration + 1.49955006	0.99997	3.31154938
Pb (220.353 nm)	Analyte	ppm	5352.09393857 * Concentration + 1.60277740	0.99997	5.32970979
Sb (217.582 nm)	Analyte	ppm	2441.46094231 * Concentration + 1.68728719	1.00000	1.55487086
Se (196.026 nm)	Analyte	ppm	923.96199993 * Concentration + 0.44544086	0.99999	5.36701422
Sn (189.925 nm)	Analyte	ppm	2727.71848374 * Concentration + 2.07125780	0.99999	1.80510309
Sr (216.596 nm)	Analyte	ppm	19753.42859026 * Concentration + 6.34897015	0.99998	1.84129453
Ti (336.122 nm)	Analyte	ppm	156301.10011581 * Concentration + 62.26295117	1.00000	1.06634226
Tl (190.794 nm)	Analyte	ppm	945.41419882 * Concentration - 1.85737593	0.99996	7.16458915
V (292.401 nm)	Analyte	ppm	38308.97953600 * Concentration + 10.54725708	1.00000	0.40686926
Zn (213.857 nm)	Analyte	ppm	67954.97128230 * Concentration + 13.23177903	1.00000	6.81134706

Detailed Calibration Results

Ag (328.068 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	27.0839	0.0000	0.0000	N/A
Standard 2	693.5139	0.0100	0.0098	2.2929
Standard 3	1381.9123	0.0200	0.0199	0.6825
Standard 4	6832.2536	0.1000	0.0998	0.2276
Standard 5	13751.2613	0.2000	0.2012	0.6069
Standard 6	68511.9202	1.0000	1.0041	0.4075

Al (237.312 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	-13.1429	0.0000	0.0000	N/A
Standard 1	257.7095	0.1000	0.0983	1.7126
Standard 2	545.5134	0.2000	0.2027	1.3631
Standard 3	1098.5074	0.4000	0.4034	0.8494
Standard 4	5477.8989	2.0000	1.9926	0.3701
Standard 5	11015.1289	4.0000	4.0020	0.0489
Standard 6	54665.0353	20.0000	19.8417	0.7915

As (188.980 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	-3.1287	0.0000	0.0000	N/A
Standard 1	14.8666	0.0100	0.0099	0.6954
Standard 2	31.8723	0.0200	0.0193	3.4259
Standard 3	68.1818	0.0400	0.0394	1.6207
Standard 4	354.9495	0.2000	0.1976	1.1996
Standard 5	721.9005	0.4000	0.4001	0.0245
Standard 6	3621.3316	2.0000	2.0001	0.0055

B (249.772 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	75.1246	0.0000	0.0000	N/A
Standard 2	4188.6765	0.1000	0.0991	0.8543
Standard 3	8298.1148	0.2000	0.1982	0.9039
Standard 4	41573.2929	1.0000	1.0002	0.0198
Standard 5	84307.5624	2.0000	2.0302	1.5094
Standard 6	427748.1588	10.0000	10.3079	3.0787

Ba (230.424 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	8.9147	0.0000	0.0000	N/A
Standard 1	1230.2535	0.0200	0.0196	1.8108
Standard 2	12622.3436	0.2000	0.2028	1.4053
Standard 3	25309.1470	0.4000	0.4068	1.7003
Standard 4	125045.7878	2.0000	2.0105	0.5230
Standard 5	250161.8393	4.0000	4.0222	0.5549
Standard 6	1190784.9600	20.0000	19.1464	4.2679

Be (313.107 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	-17.1850	0.0000	0.0000	N/A
Standard 1	3188.6328	0.0030	0.0026	14.1703
Standard 2	6230.2616	0.0050	0.0050	0.3582
Standard 3	12623.4595	0.0100	0.0102	1.5288
Standard 4	63744.5831	0.0500	0.0512	2.4261
Standard 5	128731.2636	0.1000	0.1034	3.4099
Standard 6	630105.1418	0.5000	0.5061	1.2220

Ca (317.933 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	2831.2886	0.0000	0.0000	N/A
Standard 2	26900.0251	0.5000	0.6115	22.3026
Standard 3	42692.2562	1.0000	1.0127	1.2745
Standard 4	198006.2284	5.0000	4.9588	0.8240
Standard 5	393466.2658	10.0000	9.9248	0.7516
Standard 6	1891356.1045	50.0000	47.9816	4.0367

MRL Std

Cd (214.439 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	9.7238	0.0000	0.0000	N/A
Standard 1	334.0306	0.0050	0.0050	0.6296
Standard 2	668.7357	0.0100	0.0101	0.9635
Standard 3	1333.0239	0.0200	0.0203	1.3677

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Standard 4	6572.8034	0.1000	0.1005	0.5492
Standard 5	13149.2614	0.2000	0.2013	0.6517
Standard 6	63695.7148	1.0000	0.9757	2.4303

Co (230.786 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	3.5551	0.0000	0.0000	N/A
Standard 2	1082.3896	0.0500	0.0509	1.8381
Standard 3	2164.8997	0.1000	0.1020	2.0116
Standard 4	10732.7287	0.5000	0.5064	1.2795
Standard 5	21407.5419	1.0000	1.0102	1.0230
Standard 6	103192.1611	5.0000	4.8703	2.5937

Cr (267.716 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	23.9106	0.0000	0.0000	N/A
Standard 2	608.4385	0.0100	0.0102	2.0075
Standard 3	1184.4224	0.0200	0.0203	1.2619
Standard 4	5747.3345	0.1000	0.0999	0.1191
Standard 5	11513.9150	0.2000	0.2005	0.2575
Standard 6	56079.7546	1.0000	0.9782	2.1755

Cu (327.395 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	9.6658	0.0000	0.0000	N/A
Standard 1	445.8129	0.0100	0.0089	11.4220
Standard 2	1175.1375	0.0250	0.0237	5.3208
Standard 3	2396.7015	0.0500	0.0485	3.0424
Standard 4	12160.7286	0.2500	0.2468	1.2887
Standard 5	24578.3292	0.5000	0.4990	0.2060
Standard 6	124341.7041	2.5000	2.5251	1.0034

Fe (234.350 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	50.8592	0.0000	0.0000	N/A
Standard 2	2466.7599	0.1000	0.1023	2.3402
Standard 3	4852.9977	0.2000	0.2034	1.7120
Standard 4	23757.0147	1.0000	1.0042	0.4219
Standard 5	47278.1606	2.0000	2.0006	0.0301
Standard 6	229911.8454	10.0000	9.7372	2.6283

K (766.491 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	294.9533	0.0000	0.0000	N/A
Standard 2	859.2236	0.5000	0.4515	9.6943
Standard 3	1482.5315	1.0000	0.9503	4.9701
Standard 4	6200.6728	5.0000	4.7257	5.4850
Standard 5	12362.3227	10.0000	9.6563	3.4371
Standard 6	63370.5314	50.0000	50.4730	0.9460

Mg (279.078 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	-6.9694	0.0000	0.0000	N/A
Standard 2	2196.8270	0.5000	0.5044	0.8853
Standard 3	4393.1245	1.0000	1.0071	0.7137
Standard 4	21845.6547	5.0000	5.0018	0.0369
Standard 5	43580.1707	10.0000	9.9767	0.2335
Standard 6	216039.1611	50.0000	49.4508	1.0985

Mn (257.610 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	9.1384	0.0000	0.0000	N/A
Standard 1	3711.3802	0.0100	0.0102	2.2004
Standard 2	5575.1630	0.0150	0.0154	2.4334
Standard 3	11099.9203	0.0300	0.0306	2.0537
Standard 4	54442.6500	0.1500	0.1503	0.1758
Standard 5	108517.6452	0.3000	0.2995	0.1540
Standard 6	527044.1180	1.5000	1.4549	3.0080

Mo (202.032 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	4.7392	0.0000	0.0000	N/A
Standard 1	247.6391	0.0250	0.0224	10.2994
Standard 2	529.3179	0.0500	0.0484	3.1390
Standard 3	1057.5559	0.1000	0.0972	2.8012
Standard 4	5413.8683	0.5000	0.4994	0.1230
Standard 5	11001.7405	1.0000	1.0153	1.5272
Standard 6	54574.0825	5.0000	5.0380	0.7597

Na (588.995 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	-13328.0860	0.0000	0.0000	N/A
Standard 2	-4352.9556	0.5000	0.5154	3.0786
Standard 3	4178.7284	1.0000	1.0053	0.5321
Standard 4	73396.9576	5.0000	4.9801	0.3970
Standard 5	162187.9526	10.0000	10.0789	0.7893
Standard 6	860563.6948	50.0000	50.1829	0.3657

Ni (230.299 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	1.4996	0.0000	0.0000	N/A
Standard 2	545.7904	0.0400	0.0416	3.8801
Standard 3	1075.5775	0.0800	0.0820	2.4960
Standard 4	5315.4377	0.4000	0.4057	1.4186
Standard 5	10596.1034	0.8000	0.8088	1.1011
Standard 6	50879.9620	4.0000	3.8841	2.8965

Pb (220.353 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	1.6028	0.0000	0.0000	N/A
Standard 1	25.8652	0.0050	0.0045	9.3349
Standard 2	56.3200	0.0100	0.0102	2.2352
Standard 3	112.1704	0.0200	0.0207	3.2938
Standard 4	544.9275	0.1000	0.1015	1.5163

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Standard 5	1082.4062	0.2000	0.2019	0.9701
Standard 6	5208.1397	1.0000	0.9728	2.7196

Sb (217.582 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	1.6873	0.0000	0.0000	N/A
Standard 1	145.4144	0.0600	0.0589	1.8845
Standard 2	240.5831	0.1000	0.0978	2.1505
Standard 3	484.5657	0.2000	0.1978	1.1087
Standard 4	2433.6418	1.0000	0.9961	0.3894
Standard 5	4901.0710	2.0000	2.0067	0.3371
Standard 6	24412.3821	10.0000	9.9984	0.0160

Se (196.026 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	0.4454	0.0000	0.0000	N/A
Standard 2	8.9298	0.0100	0.0092	8.1740
Standard 3	19.6415	0.0200	0.0208	3.8793
Standard 4	92.4872	0.1000	0.0996	0.3836
Standard 5	189.1154	0.2000	0.2042	2.0983
Standard 6	924.1024	1.0000	0.9997	0.0330

Sn (189.925 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	2.0713	0.0000	0.0000	N/A
Standard 2	276.1793	0.1000	0.1005	0.4899
Standard 3	554.1107	0.2000	0.2024	1.1907
Standard 4	2732.8631	1.0000	1.0011	0.1127
Standard 5	5437.9420	2.0000	1.9928	0.3587
Standard 6	26508.8911	10.0000	9.7176	2.8242

Sr (216.596 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	6.3490	0.0000	0.0000	N/A
Standard 2	1005.1695	0.0500	0.0506	1.1288
Standard 3	2009.7464	0.1000	0.1014	1.4202
Standard 4	9937.4895	0.5000	0.5028	0.5511
Standard 5	19929.1197	1.0000	1.0086	0.8573
Standard 6	96386.4340	5.0000	4.8792	2.4169

Ti (336.122 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	62.2630	0.0000	0.0000	N/A
Standard 2	7817.2514	0.0500	0.0496	0.7686
Standard 3	15644.5815	0.1000	0.0997	0.3058
Standard 4	77853.6212	0.5000	0.4977	0.4596
Standard 5	158271.5004	1.0000	1.0122	1.2208
Standard 6	789481.4386	5.0000	5.0506	1.0126

Tl (190.794 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	-1.8574	0.0000	0.0000	N/A
Standard 1	8.8227	0.0100	0.0113	12.9670

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Standard 2	17.8526	0.0200	0.0208	4.2396
Standard 3	35.9999	0.0400	0.0400	0.1076
Standard 4	192.9980	0.2000	0.2061	3.0529
Standard 5	387.5444	0.4000	0.4119	2.9712
Standard 6	1869.6180	2.0000	1.9795	1.0235

V (292.401 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	10.5473	0.0000	0.0000	N/A
Standard 2	1916.6729	0.0500	0.0498	0.4867
Standard 3	3824.0607	0.1000	0.0995	0.4538
Standard 4	19167.7663	0.5000	0.5001	0.0142
Standard 5	38405.2732	1.0000	1.0022	0.2238
Standard 6	191442.5064	5.0000	4.9971	0.0590

Zn (213.857 nm)

Standard	Intensity	Method Concentration	Calculated Concentration	% Error
Blank	13.2318	0.0000	0.0000	N/A
Standard 2	1529.2707	0.0200	0.0223	11.5473
Standard 3	2741.9411	0.0400	0.0402	0.3867
Standard 4	13648.7181	0.2000	0.2007	0.3274
Standard 5	26950.2974	0.4000	0.3964	0.9010
Standard 6	132953.5074	2.0000	1.9563	2.1850

Preparation Information Benchsheet

Prep Run#: 443447
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410201-01	MB		50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		HB:11 Well:H5 Temp:92.0C
2	RQ2410201-02	LCS		50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/236119; 0.5000 mL/233429; 0.5000 mL/236800	On HB:16:40 HB Shutoff:2:40 Pipet/Repipettor:M340,MA100,M23
3	R2407825-001	W-2R	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
4	R2407825-002	W-3R	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
5	R2407825-003	W-4R	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
6	R2407825-004	W-4S	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Cloudy/Colorless-Clear		
7	R2407825-005	W-5	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
8	R2407825-006	W-6R	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
9	R2407825-007	W-7	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
10	R2407825-008	W-9	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
11	RQ2410201-03	R2407825-008 MS	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/233429; 0.5000 mL/236119; 0.5000 mL/236800	
12	RQ2410201-04	R2407825-008 DMS	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/233429; 0.5000 mL/236119; 0.5000 mL/236800	

Preparation Information Benchsheet

Prep Run#: 443447
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

13	R2407825-009	W-10	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
14	R2407825-010	W-11	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
15	R2407825-011	W-14	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
16	R2407825-012	W-15	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
17	R2407825-013	W-16	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
18	R2407825-014	W-17	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
19	R2407825-015	W-18	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
20	R2407825-016	W-21	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
21	R2407825-017	W-22	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
22	R2407825-018	W-23R	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
23	R2407825-019	W-25	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
24	R2407825-020	W-26	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		

Spiking Solutions

Name:	Custom LCS STD A Metals	Inventory ID	233429	Logbook Ref:	233429	Expires On:	07/31/2025	Lot #: 2400837-5
Name:	Custom LCS STD B Metals	Inventory ID	236119	Logbook Ref:	236119	Expires On:	11/02/2024	
Name:	C Spike	Inventory ID	236800	Logbook Ref:	236800	Expires On:	01/31/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	Hot Block Cups	50mL Lot L223102601 (235558)	Nitric Acid Metals Grade HNO3 235979 (235979)
Thermometer	461 (230831)			

Preparation Information Benchsheet

Prep Run#: 443447
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

Preparation Steps

Step: Digestion
Started: 8/20/24 18:40
Finished: 8/21/24 21:58
By: CDISTEFANO
Comments

7825 8/27
(1-20)

Comments:

Reviewed By: Nicole Maassen Date: 8/21/24

Chain of Custody

Relinquished By: [signature] Date: 8/21/24

Received By: [signature] Date: 8/21/24

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443446
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410202-01	MB		50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		HB:11 Well:H5 Temp:92.0C
2	RQ2410202-02	LCS		50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/236800; 0.5000 mL/233429; 0.5000 mL/236119	On HB:16:40 HB Shutoff:2:40 Pipet/Repipettor:M340,MA100,M23
3	R2407573-002	MW-2	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
4	R2407573-004	MW-3	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
5	RQ2410202-03	R2407573-004 MS	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/236119; 0.5000 mL/233429; 0.5000 mL/236800	
6	RQ2410202-04	R2407573-004 DMS	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/233429; 0.5000 mL/236119; 0.5000 mL/236800	
7	R2407573-006	MW-4	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
8	R2407573-008	MW-5	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
9	R2407573-010	MW-6	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
10	R2407573-011	SW-1	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		

Preparation Information Benchsheet

Prep Run#: 443446
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

11	R2407573-012	SW-2	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
12	R2407573-013	DUPE-X	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
13	R2407596-001	GW-3	.06	50mL	6010D/Ag T, As T, Ba T, Cd T, Cr T, Pb T, Se T	<2			50.00mL	Yellow-Cloudy/Colorless-Cloudy		
14	R2407601-021	SFDXX-01	.01	50mL	6010D/As T, Ca T, Cr T, Fe T, Mg T, Mn T, Na T	<2			50.00mL	Colorless-Clear		
15	R2407624-001	MW-304	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
16	R2407624-002	MW-306	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
17	R2407624-003	NCP	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Cloudy/Colorless-Clear		
18	R2407624-004	MW-309R	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
19	R2407624-005	NC-2	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
20	R2407624-006	NC-1	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
21	R2407624-007	MW-316	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Cloudy/Colorless-Cloudy		
22	R2407624-008	DGC-35RR	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		

Preparation Information Benchsheet

Prep Run#: 443446
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

23	R2407624-009	MW-305R	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Cloudy/Colorless-Cloudy		
24	R2407624-010	DGC-7	.01	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Cloudy/Colorless-Cloudy		

Spiking Solutions

Name:	Custom LCS STD A Metals	Inventory ID	233429	Logbook Ref:	233429	Expires On:	07/31/2025	Lot #: 2400837-5
Name:	Custom LCS STD B Metals	Inventory ID	236119	Logbook Ref:	236119	Expires On:	11/02/2024	
Name:	C Spike	Inventory ID	236800	Logbook Ref:	236800	Expires On:	01/31/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	Hot Block Cups	50mL Lot L223102601 (235558)	Nitric Acid Metals Grade HNO3 235979 (235979)
Thermometer	461 (230831)			

Preparation Steps

Step: Digestion
Started: 8/20/24 18:40
Finished: 8/21/24 21:51
By: CDISTEFANO
Comments

7573 8123
7596 8123
7601 8123
7624 8130

Comments:

Reviewed By: Nicole Mansen Date: 8/21/24

Chain of Custody

Relinquished By: CD Date: 8/21/24

Received By: 2-A01 Date: 8/21/24

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443448
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410200-01	MB		50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Sb T, Se T, Sn T, Sr T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		HB:13 Well:H5 Temp:91.9C
2	RQ2410200-02	LCS		50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Sb T, Se T, Sn T, Sr T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/236119; 0.5000 mL/233429; 0.5000 mL/236800	On HB:16:40 HB Shutoff:2:40 Pipet/Repipettor:M340,MA100,M23
3	RQ2410200-03	DLCS		50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Sb T, Se T, Sn T, Sr T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/236119; 0.5000 mL/233429; 0.5000 mL/236800	
4	R2407708-001	UFP Discharge	.03	50mL	6010D/Ag T, Cd T, Cr T, Cu T, Ni T, Pb T, Zn T	<2			50.00mL	Orange-Cloudy/Yellow-Cloudy		
5	R2407719-001	2408081011X ST-5-1175	.02	50mL	6010D/Ag T, Al T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Se T, Sn T, Sr T, V T, Zn T	<2			50.00mL	Colorless-Clear		
6	R2407719-002	2408081030X ST-5-1175	.02	50mL	6010D/Ag T, Al T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Se T, Sn T, Sr T, V T, Zn T	<2			50.00mL	Colorless-Clear		
7	R2407723-001	Condensate - 0824	.06	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Yellow-Cloudy/Colorless-Clear		Tier IV
8	R2407724-001	MW50A-0824	.02	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
9	R2407724-002	MW46A-0824	.02	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
10	R2407724-003	MW34A-0824	.02	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
11	R2407724-004	MW26-0824	.02	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
12	R2407724-005	MW14-0824	.02	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
13	R2407724-006	MW19-0824	.02	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
14	R2407792-003	2408140834A 300-001-GSV	.02	50mL	6010D/Ag T, Al T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Se T, Sn T, Sr T, V T, Zn T	<2			50.00mL	Colorless-Clear		

Preparation Information Benchsheet

Prep Run#: 443448
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

15	R2407792-008	2408140940X WB-5-345	.02	50mL	6010D/Ag T, Al T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Se T, Sn T, Sr T, V T, Zn T	<2			50.00mL	Colorless-Clear		
16	R2407792-011	2408150826A 300-002-GSV	.02	50mL	6010D/Ag T, Al T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Mo T, Na T, Ni T, Pb T, Se T, Sn T, Sr T, V T, Zn T	<2			50.00mL	Colorless-Clear		
17	R2407812-002	WD-SP0001-AUG-XL 0824	.01	50mL	6010D/Fe T	<2			50.00mL	Colorless-Clear		
18	R2407825-021	W-27	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
19	R2407825-023	W-30	.09	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Cloudy/Colorless-Cloudy		
20	R2407825-039	W-2R DUP	.16	50mL	6010D/Ag T, Al T, As T, B T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
21	R2407827-001	Well B	.03	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Clear		
22	R2407827-002	Well C	.03	50mL	6010D/Ca T, Cd T, Fe T, K T, Mg T, Mn T, Na T, Pb T	<2			50.00mL	Colorless-Cloudy/Colorless-Cloudy		

Spiking Solutions

Name:	Custom LCS STD A Metals	Inventory ID	233429	Logbook Ref:	233429	Expires On:	07/31/2025	Lot #: 2400837-5
Name:	Custom LCS STD B Metals	Inventory ID	236119	Logbook Ref:	236119	Expires On:	11/02/2024	
Name:	C Spike	Inventory ID	236800	Logbook Ref:	236800	Expires On:	01/31/2025	

Preparation Materials

1:1 HCl Metals Grade 1:1 235981 (235982) Hot Block Cups 50mL Lot L223102601 (235558) Nitric Acid Metals Grade HNO3 235979 (235979)
Thermometer 460 (230830)

Preparation Steps

Step: Digestion
Started: 8/20/24 18:40
Finished: 8/21/24 22:10
By: CDISTEFANO
Comments

Comments: _____

Reviewed By: Nicole Mansen Date: 8/21/24

Preparation Information Benchsheet

Prep Run#: 443448
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3005A/3010A

Status: Prepped
Prep Date/Time: 8/20/24 18:40

7708 8/30
7919 8/26
7723 (N) 8/26
7724 8/26
7792 8/27
7812 8/27
7825 8/27
7827 8/27

Chain of Custody

Relinquished By:	CD	Date:	8/21/24	Extracts Examined
Received By:	CD - IAO	Date:	8/21/24	Yes No

Preparation Information Benchsheet

Prep Run#: 443498
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/21/24 15:30

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410235-01	MB		10mL	200.7/Ag T, As T, Be T, Ca T, Cd T, Cr T, Cu T, Fe T, K D, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, Zn T	<2			10.00mL	Colorless-Clear		HB:9 Well:D5 Temp:93.3C/93.9C
2	RQ2410235-02	LCS		10mL	200.7/Ag T, As T, Be T, Ca T, Cd T, Cr T, Cu T, Fe T, K D, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, Zn T	<2			10.00mL	Colorless-Clear	0.1000 mL/233429; 0.1000 mL/236800; 0.1000 mL/236119	On HB:14:15 Off HB:16:15 Pipet/Repipettor:M33,M39
3	R2407634-004	24L0422	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		Tier IV
4	R2407634-006	24L0432-24L0430	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		
5	RQ2410235-03	R2407634-006 MS	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear	0.1000 mL/233429; 0.1000 mL/236800; 0.1000 mL/236119	
6	RQ2410235-04	R2407634-006 DMS	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear	0.1000 mL/233429; 0.1000 mL/236800; 0.1000 mL/236119	
7	R2407634-008	24L0433-24L0431	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		
8	RQ2410235-05	R2407634-008 MS	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear	0.1000 mL/236800; 0.1000 mL/236119; 0.1000 mL/233429	
9	RQ2410235-06	R2407634-008 DMS	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear	0.1000 mL/233429; 0.1000 mL/236800; 0.1000 mL/236119	
10	R2407637-002	24L0435 Diss	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		Tier IV
11	R2407729-002	24L0424 Diss	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		Tier IV
12	R2407778-001	Entry Point	.01	10mL	200.7/Ca T	<2			10.00mL	Colorless-Clear		
13	R2407778-002	WWTP	.01	10mL	200.7/Ca T	<2			10.00mL	Colorless-Clear		
14	R2407778-003	Village Hall	.01	10mL	200.7/Ca T	<2			10.00mL	Colorless-Clear		
15	R2407778-004	Speedway	.01	10mL	200.7/Ca T	<2			10.00mL	Colorless-Clear		
16	R2407801-001	Big Tree MHP Lot 23	.05	10mL	200.7/Fe T, Mn T	<2			10.00mL	Colorless-Clear		
17	R2407826-001	Outfall # 14D (PW-A2)	.01	10mL	200.7/Ag T, As T, Be T, Cd T, Cr T, Cu T, Ni T, Pb T, Sb T, Se T, Tl T, Zn T	<2			10.00mL	Colorless-Clear		
18	R2407826-002	Section 3A1 Porewater	.01	10mL	200.7/Ag T, As T, Be T, Cd T, Cr T, Cu T, Ni T, Pb T, Sb T, Se T, Tl T, Zn T	<2			10.00mL	Colorless-Clear		
19	R2407828-001	Outfall # 14E (BW-4)	.01	10mL	200.7/Ag T, As T, Be T, Cd T, Cr T, Cu T, Ni T, Pb T, Sb T, Se T, Tl T, Zn T	<2			10.00mL	Colorless-Clear		
20	R2407921-001	R20-08202024	.04	10mL	200.7/Ca T, Fe T, Mg T, Na T	<2			10.00mL	Colorless-Clear		
21	R2407922-001	R41-08202024	.04	10mL	200.7/Ca T, Fe T, Mg T, Na T	<2			10.00mL	Colorless-Clear		
22	R2407923-001	R25-08202024	.04	10mL	200.7/Ca T, Fe T, Mg T, Na T	<2			10.00mL	Colorless-Clear		
23	R2407924-001	R39-08202024	.04	10mL	200.7/Ca T, Fe T, Mg T, Na T	<2			10.00mL	Colorless-Clear		
24	R2407925-001	R9-08202024	.04	10mL	200.7/Ca T, Fe T, Mg T, Na T	<2			10.00mL	Colorless-Cloudy/Colorless-Clear		
25	R2407926-001	R30-08202024	.04	10mL	200.7/Ca T, Fe T, Mg T, Na T	<2			10.00mL	Colorless-Clear		
26	R2407927-001	R7-08202024	.04	10mL	200.7/Ca T, Fe T, Mg T, Na T	<2			10.00mL	Colorless-Clear		

Preparation Information Benchsheet

Prep Run#: 443498
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method:

Status: Prepped
Prep Date/Time: 8/21/24 15:30

Spiking Solutions

Name:	Custom LCS STD A Metals	Inventory ID	233429	Logbook Ref:	233429	Expires On:	07/31/2025	Lot #: 2400837-5
Name:	Custom LCS STD B Metals	Inventory ID	236119	Logbook Ref:	236119	Expires On:	11/02/2024	
Name:	C Spike	Inventory ID	236800	Logbook Ref:	236800	Expires On:	01/31/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	1:1 Nitric Acid Metals Grade	1:1 235979 (235980)	Hot Block Cups	10mL Lot J602711-6995 (236487)
Thermometer	401 (182586)				

Preparation Steps

Step: Digestion
Started: 8/21/24 15:30
Finished: 8/22/24 00:25
By: CDISTEFANO
Comments

7634 ⑩ 8/30
7637 | |
7729 | |

7778 8/27
7801 8/27
7826 8/27
7828 8/27
7921 → 7927 *
RUSH 8/27

ICP

Comments:

Reviewed By: Nicole Mansen Date: 8/21/24

Chain of Custody

Relinquished By: CD Date: 8/21/24 1
Received By: R - AO1 Date: 8/21/24

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443495
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/21/24 15:30

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410232-01	MB		10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		HB:9 Well:D5 Temp:93.3C/93.9C
2	RQ2410232-02	LCS		10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear	0.1000 mL/236119; 0.1000 mL/236800; 0.1000 mL/233429	On HB:14:15 Off HB:16:15 Pipet/Repipettor:M33,M39
3	R2407411-001	24L0399	.01	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		Tier IV
4	R2407411-003	24L0402	.04	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
5	R2407411-005	24L0410	.01	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
6	R2407411-007	24L0415	.04	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
7	R2407454-001	24L0418	.01	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		Tier IV
8	R2407454-003	24L0419	.04	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
9	R2407455-001	24S0141	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		Tier IV
10	R2407455-003	24S0140	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy		
11	R2407455-005	24S0142-24S0144	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy		
12	RQ2410232-03	R2407455-005 MS	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy	0.1000 mL/236119; 0.1000 mL/233429; 0.1000 mL/236800	
13	RQ2410232-04	R2407455-005 DMS	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy	0.1000 mL/236800; 0.1000 mL/233429; 0.1000 mL/236119	
14	R2407455-007	24S0143	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
15	R2407479-001	24L0416	.01	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		Tier IV
16	R2407479-003	24L0417	.04	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
17	R2407529-001	24S0126	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		Tier IV
18	R2407529-003	24S0115	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
19	R2407529-005	24S0113	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
20	R2407547-001	24L0031	.04	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		Tier IV
21	R2407547-003	24L0032	.01	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
22	R2407552-001	Hudson T02.02	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		Tier IV
23	R2407552-003	Hudson T01.01	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		

Preparation Information Benchsheet

Prep Run#: 443495
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/21/24 15:30

24	R2407552-005	Hudson T03.07	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy		
25	RQ2410232-05	R2407552-005 MS	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy	0.1000 mL/236119; 0.1000 mL/233429; 0.1000 mL/236800	
26	RQ2410232-06	R2407552-005 DMS	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy	0.1000 mL/236119; 0.1000 mL/233429; 0.1000 mL/236800	

Spiking Solutions

Name:	Custom LCS STD A Metals	Inventory ID	233429	Logbook Ref:	233429	Expires On:	07/31/2025	Lot #: 2400837-5
Name:	Custom LCS STD B Metals	Inventory ID	236119	Logbook Ref:	236119	Expires On:	11/02/2024	
Name:	C Spike	Inventory ID	236800	Logbook Ref:	236800	Expires On:	01/31/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	1:1 Nitric Acid Metals Grade	1:1 235979 (235980)	Hot Block Cups	10mL Lot J602711-6995 (236487)
Thermometer	401 (182586)				

Preparation Steps

Step: Digestion
Started: 8/21/24 15:30
Finished: 8/22/24 00:22
By: CDISTEFANO
Comments

7411 @ 8/30 ZAP
7454
7455
7479
7529
7547
7552
VA
RBS

Comments:

Reviewed By: Nicole Manson Date: 8/22/24

Chain of Custody

Relinquished By: CD Date: 8/21/24

Received By: R. Ao Date: 8/21/24

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443497
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/21/24 15:30

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410234-01	MB		10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		HB:9 Well:D5 Temp:93.3C/93.9C
2	RQ2410234-02	LCS		10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear	0.1000 mL/233429; 0.1000 mL/236119; 0.1000 mL/236800	On HB:14:15 Off HB:16:15 Pipet/Repipettor:M33,M39
3	R2407554-001	Hudson T04.02	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		Tier IV
4	R2407554-003	Hudson T05.05	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
5	R2407557-001	Hudson Transect T27 P03	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		Tier IV
6	R2407557-003	Hudson Transect T27 P03	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
7	R2407557-005	Hudson Transect T26 P09	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
8	R2407557-007	Hudson Transect T25 P02	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
9	R2407557-009	Hudson Transect T24 P05	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
10	R2407634-003	24L0422	.03	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		Tier IV
11	R2407634-005	24L0432-24L0430	.01	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
12	RQ2410234-03	R2407634-005 MS	.01	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear	0.1000 mL/236800; 0.1000 mL/233429; 0.1000 mL/236119	
13	RQ2410234-04	R2407634-005 DMS	.01	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear	0.1000 mL/236119; 0.1000 mL/233429; 0.1000 mL/236800	
14	R2407634-007	24L0433-24L0431	.03	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
15	RQ2410234-05	R2407634-007 MS	.03	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear	0.1000 mL/236800; 0.1000 mL/233429; 0.1000 mL/236119	
16	RQ2410234-06	R2407634-007 DMS	.03	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear	0.1000 mL/236800; 0.1000 mL/236119; 0.1000 mL/233429	
17	R2407637-001	24L0435	.03	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		Tier IV
18	R2407640-001	20S0202	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		Tier IV
19	R2407640-003	24S0203	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Clear		
20	R2407685-001	24S0152	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy		Tier IV
21	R2407685-003	24S0153	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy		
22	R2407685-005	24S0151	.03	10mL	200.7/Ca T, Fe T, K T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy		

Preparation Information Benchsheet

Prep Run#: 443497
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/21/24 15:30

23	R2407729-001	24L0424	.03	10mL	200.7/Ca T, Fe T, Mg T, Mn T, Na T	<2			10.00mL	Colorless-Cloudy/Colorless-Cloudy		Tier IV

Spiking Solutions

Name:	Custom LCS STD A Metals	Inventory ID	233429	Logbook Ref:	233429	Expires On:	07/31/2025	Lot #: 2400837-5
Name:	Custom LCS STD B Metals	Inventory ID	236119	Logbook Ref:	236119	Expires On:	11/02/2024	
Name:	C Spike	Inventory ID	236800	Logbook Ref:	236800	Expires On:	01/31/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	1:1 Nitric Acid Metals Grade	1:1 235979 (235980)	Hot Block Cups	10mL Lot J602711-6995 (236487)
Thermometer	401 (182586)				

Preparation Steps

Step: Digestion
Started: 8/21/24 15:30
Finished: 8/22/24 00:24
By: CDISTEFANO
Comments

7554 @ 8/30
7557
7634
7637
7640
7685
7729

ICV
R-05

Comments:

Reviewed By: Nicole Manson Date: 8/21/24

Chain of Custody

Relinquished By: Date: 8/21/24

Received By: R - A01 Date: 8/21/24

Extracts Examined
Yes No

Preparation Information Benchsheet

Prep Run#: 443496
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/21/24 15:30

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ2410233-01	MB		10mL	200.7/K D	<2			10.00mL	Colorless-Clear		HB:9 Well:D5 Temp:93.3C/93.9C
2	RQ2410233-02	LCS		10mL	200.7/K D	<2			10.00mL	Colorless-Clear	0.1000 mL/236119; 0.1000 mL/233429; 0.1000 mL/236800	On HB:14:15 Off HB:16:15 Pipet/Repipettor:M33,M39
3	R2407411-002	24L0399 Diss	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		Tier IV
4	R2407411-004	24L0402 Diss	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		
5	R2407411-006	24L0410 Diss	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		
6	R2407411-008	24L0415 Diss	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		
7	R2407454-002	24L0418 Diss	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		Tier IV
8	R2407454-004	24L0419 Diss	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		
9	R2407479-002	24L0416 Diss	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		Tier IV
10	R2407479-004	24L0417 Diss	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		
11	R2407547-002	24L0031 Diss	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		Tier IV
12	R2407547-004	24L0032 Diss	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear		
13	RQ2410233-03	R2407547-004 MS	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear	0.1000 mL/236800; 0.1000 mL/233429; 0.1000 mL/236119	
14	RQ2410233-04	R2407547-004 DMS	.02	10mL	200.7/K D	<2			10.00mL	Colorless-Clear	0.1000 mL/236800; 0.1000 mL/236119; 0.1000 mL/233429	

Spiking Solutions

Name:	Custom LCS STD A Metals	Inventory ID	233429	Logbook Ref:	233429	Expires On:	07/31/2025	Lot #: 2400837-5
Name:	Custom LCS STD B Metals	Inventory ID	236119	Logbook Ref:	236119	Expires On:	11/02/2024	
Name:	C Spike	Inventory ID	236800	Logbook Ref:	236800	Expires On:	01/31/2025	

Preparation Materials

1:1 HCl Metals Grade	1:1 235981 (235982)	1:1 Nitric Acid Metals Grade	1:1 235979 (235980)	Hot Block Cups	10mL Lot J602711-6995 (236487)
Thermometer	401 (182586)				

Preparation Steps

Step: Digestion
Started: 8/21/24 15:30
Finished: 8/22/24 00:22
By: CDISTEFANO
Comments

Preparation Information Benchsheet

Prep Run#: 443496
Team: Metals/CDISTEFANO

Prep WorkFlow: MetDigAqICP
Prep Method: EPA 200.2

Status: Prepped
Prep Date/Time: 8/21/24 15:30

7411 (N) 8/30
7454
7479
7547

Comments:

Reviewed By: Nicole Manser Date: 8/21/24

Chain of Custody

Relinquished By:	CD	Date:	8/21/24	Extracts Examined
Received By:	R-Ao	Date:	8/21/24	Yes No

ICP ICV/CCV Standard

Standard is prepared daily

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)
Cal Std 1	Ca	233888	5000	1.00	200	25.00
	Mg		5000			25.00
	K		5000			25.00
	Na		5000			25.00
Cal Std 2	Ag	233889	100	1.00		0.50
	Cr		100			0.50
	Mn		150			0.75
	Ni		400			2.00
	Zn		200			1.00
Cal Std 3	Al	235477	2000	1.00		10.00
	Ba		2000			10.00
	Be		50			0.25
	Co		500			2.50
	Cu		250			1.25
	Fe		1000			5.00
	V		500			2.50
Cal Std 4	As	235157	100	2.00		1.00
	Cd		50			0.50
	Pb		50			0.50
	Se		50			0.50
	Tl		100			1.00
	Sb	235285	1000	1.00		5.00
	Sn	235152	1000	1.00		5.00
	B	231910	1000	0.50		2.50
	Mo	233427	1000	0.50		2.50
	Ti	233840	1000	0.50		2.50
	Sr	230304	1000	0.50		2.50
	Si	235479	1000	2.00		10.00

Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
16% HNO3 5% HCl	NM 7/25/24	A	235979	234782	7/26/24	M36
2% HNO3 5% HCl	EC 7/26/24	B	235979	234782	7/27/24	M36
16% HNO3 5% HCl	NM 7/29/24	C	235979	234782	7/30/24	M36
10% HNO3 5% HCl	EC 7/31/24	D	235979	235981	8/1/24	M40
2% HNO3 5% HCl	NM 7/31/24	E	235979	235981	8/1/24	M40
10% HNO3 5% HCl	NM 8/2/24	F	235979	235981	8/3/24	M36
2% HNO3 5% HCl	NM 8/5/24	G	235979	235981	8/6/24	M36
10% HNO3 5% HCl	NM 8/6/24	H	235979	235981	8/7/24	M36
2% HNO3 5% HNO3	NM 8/7/24	I	235979	235981	8/8/24	M40
10% HNO3 5% HCl	NM 8/8/24	J	235979	235981	8/9/24	M40
10% HNO3 5% HCl	NM 8/9/24	K	235979	235981	8/10/24	M40
10% HNO3 5% HCl	NM 8/13/24	L	235979	235981	8/14/24	M40
2% HNO3 5% HCl	NM 8/14/24	M	235979	235981	8/15/24	M40
10% HNO3 5% HCl	NM 8/15/24	N	235979	235981	8/16/24	M36
10% HNO3 5% HCl	NM 8/19/24	O	235979	235981	8/20/24	M40
2% HNO3 5% HCl	NM 8/21/24	P	235979	235981	8/22/24	M36
10% HNO3 5% HCl	NM 8/21/24	Q	235979	235981	8/22/24	M40
2% HNO3 5% HCl	NM 8/22/24	R	235979	235981	8/23/24	M36
		S				
		T				
		U				
		V				
		W				
		X				
		Y				
		Z				
		AA				
		BB				
		CC				
		DD				

ICP Calibration Standard #1

Standard is prepared every 6 months or as necessary

Metal	ALS Lot #	Conc. (ppm)	Vol (mls)	Final Vol (mls)	Final Conc. (ppm)
Al	233887	10000	0.01	1000	0.100
As	230302	1000	0.01		0.010
Ba	233717	1000	0.02		0.020
Be	230311 (1/10)	100	0.03		0.003
Cd	234567 (1/10)	100	0.05		0.005
Cu	230454	1000	0.01		0.010
Mn	233718	1000	0.01		0.010
Mo	233720	1000	0.025		0.025
Pb	233694 (1/10)	100	0.05		0.050
Sb	230313	1000	0.06		0.060
Tl	233695	1000	0.01		0.010

Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
2% HNO3 5% HCl	NM 6/28/24	**A**	235024	234782	12/28/24	M39
10% HNO3 5% HCl	NM 7/29/24	**B**	235979	234782	TS: 1/14/25	M37
		C				
		D				
		E				
		F				
		G				
		H				
		I				
		J				
		K				
		L				
		M				
		N				
		O				
		P				
		Q				
		R				
		S				
		T				
		U				
		V				
		W				
		X				
		Y				
		Z				

ICP Calibration Standard 6

Standard is prepared every 6 months or as necessary

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)
Cal Std 2	Ag	234476	100	5.00	500	1.00
	Cr		100			1.00
	Mn		150			1.50
	Ni		400			4.00
	Zn		200			2.00
Cal Std 3	Al	233055	2000	5.00		20.00
	Ba		2000			20.00
	Be		50			0.50
	Co		500			5.00
	Cu		250			2.50
	Fe		1000			10.00
	V		500			5.00
Cal Std 4	As	231798	100	10.00		2.00
	Cd		50			1.00
	Pb		50			1.00
	Se		50			1.00
	Tl		100			2.00
	Ca	230305	10000	2.50		50.00
	Mg	230307	10000	2.50		50.00
	K	233452	10000	2.50		50.00
	Na	230308	10000	2.50		50.00
	Sb	230313	1000	5.00		10.00
	Sn	234660	1000	5.00		10.00
	B	233693	1000	5.00		10.00
	Mo	233720	1000	2.50		5.00
	Ti	235397	1000	2.50		5.00
	Sr	230310	1000	2.50		5.00
	Si	234659	10000	~~25.00~~ 2.50 NM 7/29/24		50.00

Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
10% HNO3 5% HCl	NM 7/29/24	A	235979	234782	11/2/24	M38
		B				
		C				
		D				
		E				
		F				
		G				
		H				
		I				
		J				
		K				
		L				
		M				
		N				
		O				
		P				
		Q				
		R				
		S				
		T				
		U				
		V				
		W				
		X				
		Y				
		Z				

ICP HLCCV Standard

Standard is prepared every 6 months or as necessary

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)
Cal Std 2	Ag	234476	100	4.00	200	2.00
	Cr		100			Below
	Mn		150			Below
	Ni		400			8.00
	Zn		200			Below
Cal Std 3	Al	233055	2000	4.00		Below
	Ba		2000			40.00
	Be		50			1.00
	Co		500			10.00
	Cu		250			Below
	Fe		1000			Below
	V		500			10.00
Cal Std 4	As	231798	100	8.00		4.00
	Cd		50			2.00
	Pb		50			Below
	Se		50			Below
	Tl		100			4.00
	Ca	230305	10000	5.00		250.00
	K	233452	10000	2.00		100.00
	Mg	230307	10000	10.00		500.00
	Na	230308	10000	5.00		250.00
	Al	233887	10000	9.20		500.00
	Fe	230306	1000	1.60		100.00
	B	233693	1000	10.00		50.00
	Mo	233720	1000	2.00		10.00
	Ti	235397	1000	2.00		10.00
	Sr	230310	1000	2.00		10.00
	Cr	230312	1000	1.60		10.00
	Pb	233694	1000	1.60		10.00
	Se	230309	1000	1.60		10.00
	Mn	233718	1000	1.40		10.00
	Zn	233723	1000	1.20		10.00
	Cu	230454	1000	3.00		20.00
	Si	234659	10000	~~20.00~~ 2.00		100.00

Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
10% HNO3 5% HCl	NM 7/12/24	A	235979	234782	11/2/24	M38 M36
2% HNO3 5% HCl	NM 7/26/24	B	235979	234782	11/2/24	M38 M40
		C				
		D				
		E				
		F				
		G				
		H				
		I				
		J				
		K				
		L				
		M				
		N				
		O				
		P				
		Q				
		R				
		S				
		T				
		U				
		V				
		W				
		X				
		Y				
		Z				

ICP HLCCV3 (Standard is prepared every 6 months or as necessary)

/HLCCVB

Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst / Date	Letter ID	Nitric Acid Lot #	HCL Lot #	Expiration Date	Pipet ID
CA	230305	10,000	~~2.000~~ 4.000	~~100~~ 200	200.00	2% HNO_3 5% HNO_3	MFM 4/24/24	A	233477	233283	10/24/24	M36 M38
CU	230454	1000	~~0.400~~ 0.800		4.00	10% HNO_3 5% HCl	NM 5/16/24	B	233477	233283	11/2/24	M40 M38
FE	230306	10,000	~~0.400~~ 0.800		40.00			C				
K	233452	10,000	~~1.000~~ 2.000		100.00			D				
TL	233695	1000	~~0.300~~ 0.600		3.00			E				
NA	230308	10,000	~~1.500~~ 3.000		150.00			F				
MG	230307	10,000	~~4.000~~ 8.000		400.00			G				
								H				
								I				
								J				
								K				
								L				
								M				
								N				
								O				
								P				
								Q				
								R				
								S				
								T				
								U				

ICP Mixed SIC/ ICSA Standard

Standard is prepared every 6 months or as necessary

	Metal	ALS Lot #	Conc. (ppm)	Vol (mls)	Final Vol (mls)	Final Conc. (ppm)
Inter. A Soln	**Al**	236126	5000	50	500	500.0
	Ca	↓	5000			500.0
	Fe		2000			100.0
	Mg		5000			250.0

Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
10% HNO3 5% HCl	NM 7/12/24	**A**	235929 ~~235924~~ NM 7/12/24	234782	1/12/25	dispo
		B				
		C				
		D				
		E				
		F				
		G				
		H				
		I				
		J				
		K				
		L				
		M				
		N				
		O				
		P				
		Q				
		R				
		S				
		T				
		U				
		V				
		W				
		X				
		Y				
		Z				

ICP Internal Standard Solution

Standard is prepared every 6 months or as necessary

(Added In-line)

Metal	ALS Lot #	Conc. (ppm)	Vol (mls)	Final Vol (mls)	Final Conc. (ppm)
Y	233696	10000	2.00	2000	10.0
Cs	233726	10000	2		10.0

Matrix	Analyst/ Date	Letter ID	HNO3 Lot #	HCl Lot #	Expiration Date	Pipet ID
2% HNO3/ 5% HCl	NM 6/11/24	A	235024	233783	12/11/24	M36
	NM 6/11/24	B	235024	233783	12/11/24	M36
	NM 6/25/24	C	235024	234782	12/25/24	M36
	NM 6/25/24	D	235024	234782	12/25/24	M36
	NM 7/16/24	E	235979	234782	1/16/25	M36
	NM 7/16/24	F	235979	234782	1/16/25	M36
	NM 8/6/24	G	235979	235981	2/6/25	M36
	NM 8/6/24	H	235979	235981	2/6/25	M36
		I				
		J				
		K				
		L				
		M				
		N				
		O				
		P				
		Q				
		R				
		S				
		T				
		U				
		V				
		W				
		X				
		Y				
		Z				

7900 ICP-MS 200.8/6020A
Sample Report

Sample Name	MIXED SIC CHECK
File Name	064SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\BatchTemplate\071224-MS7900.b
Acq Time	07/12/24 15:33:03
Sample Type	Sample
Total Dilution	1.0000
Comment	—
ISTD Ref FileName	017CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	QC Flag
Be	9	45	No Gas	0.544	ppb	10.0	971.15	
Al	27	72	No Gas	322444.426	ppb	4.5	5612154514.77	>LDR
V	51	72	He	0.436	ppb	6.1	2732.49	
Cr	52	72	No Gas	1.521	ppb	5.3	73591.58	
Mn	55	72	No Gas	2.187	ppb	6.5	107919.86	
Co	59	72	He	1.801	ppb	2.1	20840.82	
Ni	60	72	No Gas	3.840	ppb	3.3	36625.17	
Cu	63	72	No Gas	1.557	ppb	5.7	37782.21	
Zn	66	72	No Gas	13.477	ppb	6.3	87873.52	
As	75	72	No Gas	0.337	ppb	187.4	1856.60	
Se	78	72	He	0.284	ppb	39.3	79.33	
Se	82	72	No Gas	1.412	ppb	13.9	636.20	
Mo	98	89	No Gas	0.609	ppb	8.2	11393.09	
Ag	107	89	No Gas	0.525	ppb	39.0	15625.66	
Cd	111	89	No Gas	0.040	ppb	41.4	1844.92	
Sb	123	89	No Gas	1.599	ppb	36.3	31605.47	
Ba	137	115	No Gas	1.096	ppb	5.8	9460.01	
Tl	203	115	No Gas	0.136	ppb	54.6	1867.95	
Pb	208	115	No Gas	3.825	ppb	3.1	158862.77	
Th	232	115	No Gas	5.755	ppb	74.8	203228.61	
U	238	115	No Gas	0.101	ppb	69.9	3412.86	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Sc	45	No Gas	4808164.11	4.6	4532583.29	106.08	60	125	
Sc	45	He	234013.32	1.7	213409.89	109.65	60	125	
Ge	72	No Gas	3656053.33	4.9	3361580.56	108.76	60	125	
Ge	72	He	510426.87	2.0	432580.99	118	60	125	
Y	89	No Gas	5149165.63	1.0	4860989.67	105.93	60	125	
Y	89	He	747082.99	2.6	669269.97	111.63	60	125	
Rh	103	No Gas	4007497.76	3.8	4190673.03	95.63	60	125	
Rh	103	He	1858212.01	2.7	1872215.83	99.25	60	125	
In	115	No Gas	4446155.24	1.0	4430208.29	100.36	60	125	
Lu	175	No Gas	20700.78	3.8	17529.44	118.09	60	125	

Sample Dilutions 6010C/6010D/200.7

Final Volume: 6-8mL

Analyst: NM
strument: ICP7

Date 8/22/24
Analysis 6010D//200.7

Common Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor
1/2	2%HNO3/ 5%HCL	3	3	**1/2**												
1/3	2%HNO3/ 5%HCL	2	4	**1/3**												
1/4	2%HNO3/ 5%HCL	2	6	**1/4**												
1/5	2%HNO3/ 5%HCL	1.2	4.8	**1/5**												
1/10	2%HNO3/ 5%HCL	0.6	5.4	**1/10**												
1/10	2%HNO3/ 5%HCL	0.8	7.2	**1/10**												
1/20	2%HNO3/ 5%HCL	0.3	5.7	**1/20**												
1/20	2%HNO3/ 5%HCL	0.4	7.6	**1/20**												
1/50	2%HNO3/ 5%HCL	1	4	**1/5**	0.6	5.4	**1/50**									
1/100	2%HNO3/ 5%HCL	0.6	5.4	**1/10**	0.6	5.4	**1/100**									
1/200	2%HNO3/ 5%HCL	1	1	**1/2**	0.6	5.4	**1/20**	0.6	5.4	**1/200**						
1/500	2%HNO3/ 5%HCL	1	4	**1/5**	0.6	5.4	**1/50**	0.6	5.4	**1/500**						
1/1000	2%HNO3/ 5%HCL	0.6	5.4	**1/10**	0.6	5.4	**1/100**	0.6	5.4	**1/1000**						
1/2000	2%HNO3/ 5%HCL	1	1	**1/2**	0.6	5.4	**1/20**	0.6	5.4	**1/200**	0.6	5.4	**1/2000**			
1/5000	2%HNO3/ 5%HCL	1	4	**1/5**	0.6	5.4	**1/50**	0.6	5.4	**1/500**	0.6	5.4	**1/5000**			
1/10000	2%HNO3/ 5%HCL	0.6	5.4	**1/10**	0.6	5.4	**1/100**	0.6	5.4	**1/1000**	0.6	5.4	**1/10000**			
1/20000	2%HNO3/ 5%HCL	1	1	**1/2**	0.6	5.4	**1/20**	0.6	5.4	**1/200**	0.6	5.4	**1/2000**	0.6	5.4	**1/20000**

Special Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor	mLs of Sample	mLs of Diluent	Dilution Factor

Form 2

Calibration Verifications

Mercury by EPA 7470A,Metals by EPA 6010D,Metals by EPA 6020B

Workorder

R2407792

Client

NASA/WSTF/Navarro

Project

White Sands Test Facility

09/25/2024

ALS Environmental–Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Form 2 - Calibration Verifications

Client NASA/WSTF/Navarro

Project White Sands Test Facility

Workorder **R2407792**

Mercury by EPA 7470A

R-CVAA-03_851522		ICV			LLCCV			CCV			CCV			LLCCV			CCV		
Units mg/L	**Run Date**	08/22/24			08/22/24			08/22/24			08/22/24			08/22/24			08/22/24		
	Run Time	09:25			09:32			09:34			10:02			10:30			10:36		
Analyte		Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q
Mercury		3.14	**105**		0.246	**123**		3.11	**104**		3.07	**102**		0.231	**116**		3.03	**101**	

Q - %Recovery Flag * - %Recovery (%R) Outside Limits

QC ID	%R Limits	
CCV	80 - 120	**3.0** - Hg
ICV	90 - 110	**3.0** - Hg
LLCCV	70 - 130	**0.2** - Hg

Form 2 - Calibration Verifications

Client NASA/WSTF/Navarro

Project White Sands Test Facility

Workorder **R2407792**

Metals by EPA 6010D (P)

R-ICP-AES-07_851512	ICV			CCV			CCV			CCV			CCV		
Units ppm **Run Date**	08/21/24			08/21/24			08/21/24			08/21/24			08/21/24		
Run Time	15:55			21:51			22:26			23:05			23:31		
Analyte	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q
Aluminum	9.81	**98**		9.96	**100**		9.96	**100**		9.93	**99**		9.91	**99**	
Barium	9.84	**98**		9.87	**99**		9.88	**99**		9.81	**98**		9.81	**98**	
Beryllium	0.247	**99**		0.249	**100**		0.248	**99**		0.248	**99**		0.248	**99**	
Boron	2.34	**94**		2.37	**95**		2.36	**94**		2.36	**94**		2.35	**94**	
Cadmium	0.500	**100**		0.507	**101**		0.503	**101**		0.503	**101**		0.503	**101**	
Calcium	24.90	**100**		25.20	**101**		25.10	**100**		25.00	**100**		25.00	**100**	
Chromium	0.515	**103**		0.521	**104**		0.518	**104**		0.518	**104**		0.518	**104**	
Cobalt	2.47	**99**		2.51	**100**		2.50	**100**		2.49	**100**		2.49	**100**	
Copper	1.25	**100**		1.26	**101**		1.25	**100**		1.25	**100**		1.25	**100**	
Iron	4.92	**98**		5.00	**100**		4.96	**99**		4.96	**99**		4.95	**99**	
Lead	0.499	**100**		0.504	**101**		0.500	**100**		0.499	**100**		0.500	**100**	
Magnesium	25.50	**102**		25.70	**103**		25.60	**102**		25.50	**102**		25.60	**102**	
Manganese	0.735	**98**		0.744	**99**		0.741	**99**		0.739	**99**		0.739	**99**	
Molybdenum	2.57	**103**		2.60	**104**		2.59	**104**		2.59	**103**		2.59	**104**	
Nickel	2.01	**100**		2.02	**101**		2.02	**101**		2.01	**100**		2.01	**100**	
Potassium	24.50	**98**		24.90	**100**		25.00	**100**		25.00	**100**		24.80	**99**	
Selenium	0.484	**97**		0.493	**99**		0.492	**98**		0.489	**98**		0.487	**97**	
Silver	0.509	**102**		0.512	**102**		0.510	**102**		0.510	**102**		0.510	**102**	
Sodium	24.90	**100**		25.00	**100**		25.00	**100**		25.00	**100**		24.90	**99**	
Strontium	2.50	**100**		2.54	**102**		2.53	**101**		2.52	**101**		2.53	**101**	
Tin	4.98	**100**		5.03	**101**		5.00	**100**		5.00	**100**		4.99	**100**	
Vanadium	2.54	**102**		2.57	**103**		2.56	**102**		2.55	**102**		2.56	**102**	
Zinc	0.991	**99**		0.999	**100**		0.997	**100**		0.992	**99**		0.993	**99**	

Q - %Recovery Flag * - %Recovery (%R) Outside Limits

QC ID	%R Limits	
CCV	90 - 110	**10.0** - Al, Ba; **0.250** - Be; **2.50** - B, Co, Mo, Sr, V; **0.5** - Cd, Cr, Pb, Se, Ag; **25.0** - Ca, Mg, K, Na; **1.25** - Cu; **5.0** - Fe, Sn; **0.750** - Mn; **2.0** - Ni; **1.0** - Zn
ICV	90 - 110	**10.0** - Al, Ba; **0.250** - Be; **2.50** - B, Co, Mo, Sr, V; **0.5** - Cd, Cr, Pb, Se, Ag; **25.0** - Ca, Mg, K, Na; **1.25** - Cu; **5.0** - Fe, Sn; **0.750** - Mn; **2.0** - Ni; **1.0** - Zn
ICV	90 - 110	**10.0** - Al, Ba; **0.250** - Be; **2.50** - B, Co, Mo, Sr, V; **0.5** - Cd, Cr, Pb, Se, Ag; **25.0** - Ca, Mg, K, Na; **1.25** - Cu; **5.0** - Fe, Sn; **0.750** - Mn; **2.0** - Ni; **1.0** - Zn

Form 2 - Calibration Verifications

Client NASA/WSTF/Navarro

Project White Sands Test Facility

Workorder **R2407792**

Metals by EPA 6010D (P)

R-ICP-AES-07_851748		ICV			CCV			CCV			CCV			CCV			CCV		
Units mg/L	**Run Date**	08/22/24			08/22/24			08/22/24			08/22/24			08/22/24			08/23/24		
	Run Time	15:06			15:22			15:59			16:23			16:48			09:46		
Analyte		Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q
Strontium		2.43	**97**		2.48	**99**		2.46	**99**		2.45	**98**		2.44	**97**		2.31	**92**	

R-ICP-AES-07_851748		CCV		
Units ppm	**Run Date**	08/23/24		
	Run Time	10:02		
Analyte		Found	%R	Q
Strontium		2.31	**92**	

Q - %Recovery Flag * - %Recovery (%R) Outside Limits

QC ID	%R Limits	
CCV	90 - 110	**2.50** - Sr
ICV	90 - 110	**2.50** - Sr

Form 2 - Calibration Verifications

Client NASA/WSTF/Navarro

Project White Sands Test Facility

Workorder **R2407792**

Metals by EPA 6020B (MS)

R-ICP-MS-02_852205		ICV			CCV			CCV			CCV			CCV			CCV		
Units mg/L	**Run Date**	08/27/24			08/27/24			08/27/24			08/27/24			08/27/24			08/27/24		
	Run Time	13:09			13:48			14:15			14:38			14:55			15:07		
	Data File	027_ICV			048_CCV			062_CCV			074_CCV			083_CCV			089_CCV		
Analyte		Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q
Antimony		49.30	**99**		0.0500	**100**		0.0475	**95**		0.0492	**98**		0.0504	**101**		0.0487	**97**	
Arsenic		48.70	**97**		0.0499	**100**		0.0500	**100**		0.0491	**98**		0.0487	**97**		0.0509	**102**	
Thallium		49.80	**100**		0.0510	**102**		0.0501	**100**		0.0504	**101**		0.0491	**98**		0.0496	**99**	

Q - %Recovery Flag * - %Recovery (%R) Outside Limits

QC ID	%R Limits	
CCV	90 - 110	**0.05** - Sb, As, Tl
ICV	90 - 110	**50.0** - Sb, As, Tl

General Chemistry

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140835A 300-001-GSV	**Basis:**	NA
Lab Code:	R2407792-004		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**263**	mg/L	2.0	1.8	1	08/19/24 14:33	
Chloride	300.0	**73.7**	mg/L	2.0	0.5	10	08/23/24 22:06	
Fluoride, undistilled	300.0	**0.60**	mg/L	0.10	0.010	1	08/23/24 22:00	
Sulfate	300.0	**405**	mg/L	20	4	100	08/23/24 22:13	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140836A 300-001-GSV	**Basis:**	NA
Lab Code:	R2407792-005		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Solids, Total Dissolved (TDS)	SM 2540 C-2015	**1350**	mg/L	12	11	1	08/20/24 13:30	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/14/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408140838A 300-001-GSV	**Basis:**	NA
Lab Code:	R2407792-007		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate+Nitrite as Nitrogen	353.2	**61.6**	mg/L	5.0	0.2	100	08/23/24 14:12	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150827A 300-002-GSV	**Basis:**	NA
Lab Code:	R2407792-012		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**239**	mg/L	2.0	1.8	1	08/19/24 14:40	
Chloride	300.0	**58.8**	mg/L	2.0	0.5	10	08/23/24 22:25	
Fluoride, undistilled	300.0	**0.83**	mg/L	0.10	0.010	1	08/23/24 22:19	
Sulfate	300.0	**293**	mg/L	20	4	100	08/23/24 22:31	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150828A 300-002-GSV	**Basis:**	NA
Lab Code:	R2407792-013		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Solids, Total Dissolved (TDS)	SM 2540 C-2015	**800**	mg/L	10	9	1	08/20/24 13:30	

Analytical Report

Client:	NASA/WSTF/Navarro	**Service Request:**	R2407792
Project:	White Sands Test Facility/24EC008B	**Date Collected:**	08/15/24
Sample Matrix:	Water	**Date Received:**	08/16/24 07:45
Sample Name:	2408150830A 300-002-GSV	**Basis:**	NA
Lab Code:	R2407792-015		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate+Nitrite as Nitrogen	353.2	**0.075**	mg/L	0.050	0.002	1	08/23/24 14:16	

Analytical Results Summary

Instrument Name: R-Buret-02 **Analyst:** KAWONG **Analysis Lot:** 851174 **Method/Testcode:** SM 2320 B-1997(2011)/Alkalinity

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2410150-01	Alkalinity, Total as CaCO3	MB		Water	0.16 mg/L		2.0 mg/L U	1	1.8	2.0			8/19/24 06:35	N	II
KQ2410150-02	Alkalinity, Total as CaCO3	LCS		Water	25.04 mg/L		25.0 mg/L	1	1.8	2.0	100		8/19/24 06:43	N	II
K2407535-011	Alkalinity, Total as CaCO3	N/A		Water	1263.12 mg/L		1260 mg/L	3	5.4	6.0			8/19/24 07:15	N	II
K2407592-005	Alkalinity, Total as CaCO3	N/A		Water	286.72 mg/L		287 mg/L	1	1.8	2.0			8/19/24 07:23	N	IV
K2407592-007	Alkalinity, Total as CaCO3	N/A		Water	146.24 mg/L		146 mg/L	1	1.8	2.0			8/19/24 07:28	N	IV
K2407592-009	Alkalinity, Total as CaCO3	N/A		Water	414.32 mg/L		414 mg/L	1	1.8	2.0			8/19/24 07:36	N	IV
K2407592-011	Alkalinity, Total as CaCO3	N/A		Water	400.72 mg/L		401 mg/L	1	1.8	2.0			8/19/24 07:44	N	IV
K2407592-013	Alkalinity, Total as CaCO3	N/A		Water	271.84 mg/L		272 mg/L	1	1.8	2.0			8/19/24 07:52	N	IV
K2407592-015	Alkalinity, Total as CaCO3	N/A		Water	472.16 mg/L		472 mg/L	1	1.8	2.0			8/19/24 08:14	N	IV
K2407592-017	Alkalinity, Total as CaCO3	N/A		Water	295.36 mg/L		295 mg/L	1	1.8	2.0			8/19/24 08:21	N	IV
KQ2410150-03	Alkalinity, Total as CaCO3	DUP	R2407592-017	Water	296.48 mg/L		296 mg/L	1	1.8	2.0		<1	8/19/24 08:28	N	IV
K2407592-019	Alkalinity, Total as CaCO3	N/A		Water	326.00 mg/L		326 mg/L	1	1.8	2.0			8/19/24 08:36	N	IV
K2407640-001	Alkalinity, Total as CaCO3	N/A		Water	12.40 mg/L		12.4 mg/L	1	1.8	2.0			8/19/24 08:43	N	IV
K2407640-003	Alkalinity, Total as CaCO3	N/A		Water	86.48 mg/L		86.5 mg/L	1	1.8	2.0			8/19/24 08:50	N	IV
K2407643-001	Alkalinity, Total as CaCO3	N/A		Water	72.88 mg/L		72.9 mg/L	1	1.8	2.0			8/19/24 08:56	N	IV
K2407643-003	Alkalinity, Total as CaCO3	N/A		Water	75.52 mg/L		75.5 mg/L	1	1.8	2.0			8/19/24 09:02	N	IV
K2407643-005	Alkalinity, Total as CaCO3	N/A		Water	75.04 mg/L		75.0 mg/L	1	1.8	2.0			8/19/24 09:09	N	IV
K2407643-007	Alkalinity, Total as CaCO3	N/A		Water	76.80 mg/L		76.8 mg/L	1	1.8	2.0			8/19/24 09:15	N	IV
K2407643-009	Alkalinity, Total as CaCO3	N/A		Water	77.28 mg/L		77.3 mg/L	1	1.8	2.0			8/19/24 09:35	N	IV
KQ2410150-04	Alkalinity, Total as CaCO3	DUP	R2407643-009	Water	77.44 mg/L		77.4 mg/L	1	1.8	2.0		<1	8/19/24 09:41	N	IV
K2407643-011	Alkalinity, Total as CaCO3	N/A		Water	76.80 mg/L		76.8 mg/L	1	1.8	2.0			8/19/24 09:47	N	IV
K2407643-013	Alkalinity, Total as CaCO3	N/A		Water	93.76 mg/L		93.8 mg/L	1	1.8	2.0			8/19/24 09:54	N	IV
K2407643-015	Alkalinity, Total as CaCO3	N/A		Water	0.32 mg/L		2.0 mg/L U	1	1.8	2.0			8/19/24 09:57	N	IV
K2407643-017	Alkalinity, Total as CaCO3	N/A		Water	76.72 mg/L		76.7 mg/L	1	1.8	2.0			8/19/24 10:03	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-Buret-02 **Analyst:** KAWONG **Analysis Lot:** 851175 **Method/Testcode:** SM 2320 B-1997(2011)/Alkalinity

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2410151-01	Alkalinity, Total as CaCO3	MB		Water	0.08 mg/L		2.0 mg/L U	1	1.8	2.0			8/19/24 09:29	N	IV
KQ2410151-02	Alkalinity, Total as CaCO3	LCS		Water	25.52 mg/L		25.5 mg/L	1	1.8	2.0	102		8/19/24 10:11	N	IV
K2407643-019	Alkalinity, Total as CaCO3	N/A		Water	73.36 mg/L		73.4 mg/L	1	1.8	2.0			8/19/24 10:18	N	IV
K2407643-022	Alkalinity, Total as CaCO3	N/A		Water	73.04 mg/L		73.0 mg/L	1	1.8	2.0			8/19/24 10:24	N	IV
K2407634-003	Alkalinity, Total as CaCO3	N/A		Water	17.04 mg/L		17.0 mg/L	1	1.8	2.0			8/19/24 10:33	N	IV
K2407634-005	Alkalinity, Total as CaCO3	N/A		Water	35.76 mg/L		35.8 mg/L	1	1.8	2.0			8/19/24 10:53	Y	IV
KQ2410151-03	Alkalinity, Total as CaCO3	DUP	R2407634-005	Water	35.68 mg/L		35.7 mg/L	1	1.8	2.0		<1	8/19/24 11:00	N	IV
K2407634-007	Alkalinity, Total as CaCO3	N/A		Water	37.92 mg/L		37.9 mg/L	1	1.8	2.0			8/19/24 11:06	Y	IV
KQ2410151-04	Alkalinity, Total as CaCO3	DUP	R2407634-007	Water	38.00 mg/L		38.0 mg/L	1	1.8	2.0		<1	8/19/24 11:12	N	IV
K2407680-001	Alkalinity, Total as CaCO3	N/A		Drinking Water	364.24 mg/L		364 mg/L	1	1.8	2.0			8/19/24 11:20	N	II
K2407683-001	Alkalinity, Total as CaCO3	N/A		Water	257.36 mg/L		257 mg/L	1	1.8	2.0			8/19/24 11:26	N	IV
K2407683-007	Alkalinity, Total as CaCO3	N/A		Water	321.52 mg/L		322 mg/L	1	1.8	2.0			8/19/24 11:33	N	IV
K2407687-001	Alkalinity, Total as CaCO3	N/A		Water	515.12 mg/L		515 mg/L	1	1.8	2.0			8/19/24 11:42	N	II
K2407687-002	Alkalinity, Total as CaCO3	N/A		Water	199.92 mg/L		200 mg/L	1	1.8	2.0			8/19/24 11:49	N	II
K2407688-001	Alkalinity, Total as CaCO3	N/A		Water	187.52 mg/L		188 mg/L	1	1.8	2.0			8/19/24 11:56	N	II
K2407723-001	Alkalinity, Total as CaCO3	N/A		Water	1128.00 mg/L		1130 mg/L	3	5.4	6.0			8/19/24 12:18	N	IV
K2407724-001	Alkalinity, Total as CaCO3	N/A		Water	197.44 mg/L		197 mg/L	1	1.8	2.0			8/19/24 12:24	N	II
K2407724-002	Alkalinity, Total as CaCO3	N/A		Water	138.24 mg/L		138 mg/L	1	1.8	2.0			8/19/24 12:30	N	II
K2407724-003	Alkalinity, Total as CaCO3	N/A		Water	201.28 mg/L		201 mg/L	1	1.8	2.0			8/19/24 12:37	N	II
K2407724-004	Alkalinity, Total as CaCO3	N/A		Water	405.20 mg/L		405 mg/L	1	1.8	2.0			8/19/24 12:45	N	II
K2407724-005	Alkalinity, Total as CaCO3	N/A		Water	140.96 mg/L		141 mg/L	1	1.8	2.0			8/19/24 12:51	N	II
K2407724-006	Alkalinity, Total as CaCO3	N/A		Water	211.52 mg/L		212 mg/L	1	1.8	2.0			8/19/24 12:58	N	II
K2407685-001	Alkalinity, Total as CaCO3	N/A		Water	79.84 mg/L		79.8 mg/L	1	1.8	2.0			8/19/24 13:04	N	IV
K2407685-003	Alkalinity, Total as CaCO3	N/A		Water	170.00 mg/L		170 mg/L	1	1.8	2.0			8/19/24 13:10	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-Buret-02 **Analyst:** KAWONG **Analysis Lot:** 851176 **Method/Testcode:** SM 2320 B-1997(2011)/Alkalinity

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2410152-01	Alkalinity, Total as CaCO3	MB		Water	0.08 mg/L		2.0 mg/L U	1	1.8	2.0			8/19/24 12:10	N	IV
KQ2410152-02	Alkalinity, Total as CaCO3	LCS		Water	25.84 mg/L		25.8 mg/L	1	1.8	2.0	103		8/19/24 13:19	N	IV
K2407685-005	Alkalinity, Total as CaCO3	N/A		Water	129.20 mg/L		129 mg/L	1	1.8	2.0			8/19/24 13:41	N	IV
K2407763-001	Alkalinity, Total as CaCO3	N/A		Water	158.64 mg/L		159 mg/L	1	1.8	2.0			8/19/24 13:47	N	II
KQ2410152-03	Alkalinity, Total as CaCO3	DUP	R2407763-001	Water	159.44 mg/L		159 mg/L	1	1.8	2.0		<1	8/19/24 13:54	N	II
K2407776-002	Alkalinity, Total as CaCO3	N/A		Drinking Water	95.12 mg/L		95.1 mg/L	1	1.8	2.0			8/19/24 14:00	N	II
K2407778-001	Alkalinity, Total as CaCO3	N/A		Water	115.20 mg/L		115 mg/L	1	1.8	2.0			8/19/24 14:06	N	II
K2407778-002	Alkalinity, Total as CaCO3	N/A		Water	115.20 mg/L		115 mg/L	1	1.8	2.0			8/19/24 14:13	N	II
K2407778-003	Alkalinity, Total as CaCO3	N/A		Water	114.32 mg/L		114 mg/L	1	1.8	2.0			8/19/24 14:19	N	II
K2407778-004	Alkalinity, Total as CaCO3	N/A		Water	115.76 mg/L		116 mg/L	1	1.8	2.0			8/19/24 14:26	N	II
K2407792-004	Alkalinity, Total as CaCO3	N/A		Water	263.20 mg/L		263 mg/L	1	1.8	2.0			8/19/24 14:33	N	IV
K2407792-012	Alkalinity, Total as CaCO3	N/A		Water	238.80 mg/L		239 mg/L	1	1.8	2.0			8/19/24 14:40	N	IV
K2407825-001	Alkalinity, Total as CaCO3	N/A		Water	96.96 mg/L		97.0 mg/L	1	1.8	2.0			8/19/24 15:01	N	II
K2407825-002	Alkalinity, Total as CaCO3	N/A		Water	276.16 mg/L		276 mg/L	1	1.8	2.0			8/19/24 15:09	N	II
K2407825-003	Alkalinity, Total as CaCO3	N/A		Water	48.96 mg/L		49.0 mg/L	1	1.8	2.0			8/19/24 15:15	N	II
K2407825-004	Alkalinity, Total as CaCO3	N/A		Water	673.20 mg/L		673 mg/L	1	1.8	2.0			8/19/24 15:24	N	II
K2407825-005	Alkalinity, Total as CaCO3	N/A		Water	90.40 mg/L		90.4 mg/L	1	1.8	2.0			8/19/24 15:31	N	II
K2407825-006	Alkalinity, Total as CaCO3	N/A		Water	104.24 mg/L		104 mg/L	1	1.8	2.0			8/19/24 15:37	N	II
K2407825-007	Alkalinity, Total as CaCO3	N/A		Water	711.04 mg/L		711 mg/L	1	1.8	2.0			8/19/24 15:46	N	II
K2407825-008	Alkalinity, Total as CaCO3	N/A		Water	646.48 mg/L		646 mg/L	1	1.8	2.0			8/19/24 15:54	Y	II
KQ2410152-04	Alkalinity, Total as CaCO3	DUP	R2407825-008	Water	646.32 mg/L		646 mg/L	1	1.8	2.0		<1	8/19/24 16:03	N	II
K2407825-017	Alkalinity, Total as CaCO3	N/A		Water	85.52 mg/L		85.5 mg/L	1	1.8	2.0			8/19/24 16:09	N	II
K2407825-015	Alkalinity, Total as CaCO3	N/A		Water	58.56 mg/L		58.6 mg/L	1	1.8	2.0			8/19/24 16:33	N	II
K2407825-016	Alkalinity, Total as CaCO3	N/A		Water	50.64 mg/L		50.6 mg/L	1	1.8	2.0			8/19/24 16:39	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-Buret-02 **Analyst:** KAWONG **Analysis Lot:** 851177 **Method/Testcode:** SM 2320 B-1997(2011)/Alkalinity

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2410153-01	Alkalinity, Total as CaCO3	MB		Water	0.24 mg/L		2.0 mg/L U	1	1.8	2.0			8/19/24 16:24	N	IV
KQ2410153-02	Alkalinity, Total as CaCO3	LCS		Water	25.04 mg/L		25.0 mg/L	1	1.8	2.0	100		8/19/24 16:47	N	IV
R2407805-001	Alkalinity, Total as CaCO3	N/A		Water	90.16 mg/L		90.2 mg/L	1	1.8	2.0			8/19/24 16:53	N	IV
R2407805-003	Alkalinity, Total as CaCO3	N/A		Water	105.76 mg/L		106 mg/L	1	1.8	2.0			8/19/24 17:00	N	IV
R2407805-005	Alkalinity, Total as CaCO3	N/A		Water	231.36 mg/L		231 mg/L	1	1.8	2.0			8/19/24 17:06	N	IV
R2407805-007	Alkalinity, Total as CaCO3	N/A		Water	244.40 mg/L		244 mg/L	1	1.8	2.0			8/19/24 17:13	N	IV
R2407805-009	Alkalinity, Total as CaCO3	N/A		Water	180.00 mg/L		180 mg/L	1	1.8	2.0			8/19/24 17:19	N	IV
R2407807-001	Alkalinity, Total as CaCO3	N/A		Water	0.96 mg/L		2.0 mg/L U	1	1.8	2.0			8/19/24 17:24	N	IV
KQ2410153-03	Alkalinity, Total as CaCO3	DUP	R2407807-001	Water	-0.08 mg/L		2.0 mg/L U	1	1.8	2.0		NC	8/19/24 17:27	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Sample Dilutions

Analyst: KW
Instrument: Skalar

Date 8/19/24
Analysis AQC

Sample ID	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor
R2407535011	DI	10	20	3												

CK 8/20/24

analyst: Kirstie Wong 8/19/24

CKG (CK 8/20/24)

CK 8/20/24

Alkalinity Analysis Report

Started	Finished	Application	Description	Operator
8/19/2024 6:08 AM	8/19/2024 5:42 PM	WATERS		kwong

MeanSlope	Offsets	Buffer 10 Lort#	Buffer 4 Lot#	CalibrationInfo	CalDateTime
99.2	7.121			pH electrode,pH,(Pt1000),CAL_pH2	2024-08-18 18:34:02
99.2	7.127			pH electrode,pH,(Pt1000),CAL_pH2	2024-08-19 05:16:39

Rack	Pos	Identity	pH init	Total Alk (mg/L)	Carb Alk (mg/L)	BiCarb Alk (mg/L)	Dil	vol EP1	B_EP1_pH	Vol EP1	B_EP2_pH	B_Vol_End	C_EP1_Vol	C_EP2_pH	C_Vol_End	Date / Time
B1	1	PH 7 CHECK			0.00	0.00	1									8/19/2024 6:14 AM
B1	2	WARM UP	6.616	1.28	0.00	1.28	1	0	4.449	0.046	4.177	0.06				8/19/2024 6:21 AM
B1	3	CCV	9.716	50.80	39.04	11.76	1	0.488	-9999	-9999	-9999	0.5	0	4.477	0.282	8/19/2024 6:32 AM
B1	4	CCB	5.271	0.16	0.00	0.16	1	0	4.434	0.014	4.181	0.024				8/19/2024 6:35 AM
B1	5	LCS	7.234	25.04	0.00	25.04	1	0	-9999	-9999	-9999	0.5	0	4.467	0.126	8/19/2024 6:43 AM
B1	6	15 PPM	9.323	14.32	9.44	4.88	1	0.118	4.46	0.256	4.184	0.272				8/19/2024 6:51 AM
B1	7	100 PPM	10.034	96.48	82.40	14.08	1	-9999					0.53	4.493	1.912	8/19/2024 6:58 AM
B1	8	500 PPM	10.592	489.68	462.56	27.12	1	-9999					5.282	4.486	11.742	8/19/2024 7:07 AM
B1	9	R2407535-011	6.732	1,263.12	0.00	1,263.12	3	0	-9999	-9999	-9999	0.5	0	4.494	10.026	8/19/2024 7:15 AM
B1	10	R2407592-005	7.158	286.72	0.00	286.72	1	0	-9999	-9999	-9999	0.5	0	4.49	6.668	8/19/2024 7:23 AM
B1	11	R2407592-007	11.191	146.24	18.40	0.00	1	-9999					2.926	4.494	3.156	8/19/2024 7:28 AM
B1	12	R2407592-009	7.256	414.32	0.00	414.32	1	0	-9999	-9999	-9999	0.5	0	4.502	9.858	8/19/2024 7:36 AM
B1	13	R2407592-011	6.631	400.72	0.00	400.72	1	0	-9999	-9999	-9999	0.5	0	4.506	9.518	8/19/2024 7:44 AM
B1	14	R2407592-013	7.417	271.84	0.00	271.84	1	0	-9999	-9999	-9999	0.5	0	4.501	6.296	8/19/2024 7:52 AM
B1	15	CCV	10.11	53.12	37.92	15.20	1	0.474	-9999	-9999	-9999	0.5	0	4.456	0.354	8/19/2024 8:02 AM
B1	16	CCB	5.545	0.48	0.00	0.48	1	0	4.462	0.03	4.196	0.048				8/19/2024 8:06 AM
B1	17	R2407592-015	6.848	472.16	0.00	472.16	1	0	-9999	-9999	-9999	0.5	0	4.506	11.304	8/19/2024 8:14 AM
B1	18	R2407592-017	7.025	295.36	0.00	295.36	1	0	-9999	-9999	-9999	0.5	0	4.506	6.884	8/19/2024 8:21 AM
B1	19	R2407592-017 DUP	7.035	296.48	0.00	296.48	1	0	-9999	-9999	-9999	0.5	0	4.502	6.912	8/19/2024 8:28 AM
B1	20	R2407592-019	7.171	326.00	0.00	326.00	1	0	-9999	-9999	-9999	0.5	0	4.499	7.65	8/19/2024 8:36 AM
B1	21	R2407640-001	6.963	12.40	0.00	12.40	1	0	4.493	0.344	4.193	0.378				8/19/2024 8:43 AM
B1	22	R2407640-003	7.629	86.48	0.00	86.48	1	0	-9999	-9999	-9999	0.5	0	4.493	1.662	8/19/2024 8:50 AM
B1	23	R2407643-001	7.495	72.88	0.00	72.88	1	0	-9999	-9999	-9999	0.5	0	4.495	1.322	8/19/2024 8:56 AM
B1	24	R2407643-003	7.843	75.52	0.00	75.52	1	0	-9999	-9999	-9999	0.5	0	4.484	1.388	8/19/2024 9:02 AM
B1	25	R2407643-005	7.784	75.04	0.00	75.04	1	0	-9999	-9999	-9999	0.5	0	4.487	1.376	8/19/2024 9:09 AM
B1	26	R2407643-007	7.772	76.80	0.00	76.80	1	0	-9999	-9999	-9999	0.5	0	4.493	1.42	8/19/2024 9:15 AM
B1	27	CCV	9.879	51.68	35.84	15.84	1	0.448	-9999	-9999	-9999	0.5	0	4.456	0.344	8/19/2024 9:25 AM
B1	28	CCB	5.088	0.08	0.00	0.08	1	0	4.476	0.018	4.187	0.034				8/19/2024 9:29 AM
B1	29	R2407643-009	7.721	77.28	0.00	77.28	1	0	-9999	-9999	-9999	0.5	0	4.492	1.432	8/19/2024 9:35 AM
B1	30	R2407643-009 DUP	7.784	77.44	0.00	77.44	1	0	-9999	-9999	-9999	0.5	0	4.494	1.436	8/19/2024 9:41 AM
B1	31	R2407643-011	7.743	76.80	0.00	76.80	1	0	-9999	-9999	-9999	0.5	0	4.483	1.42	8/19/2024 9:47 AM
B1	32	R2407643-013	7.791	93.76	0.00	93.76	1	0	-9999	-9999	-9999	0.5	0	4.494	1.844	8/19/2024 9:54 AM
B1	33	R2407643-015	5.328	0.32	0.00	0.32	1	0	4.469	0.026	4.195	0.044				8/19/2024 9:57 AM
B1	34	R2407643-017	7.661	76.72	0.00	76.72	1	0	-9999	-9999	-9999	0.5	0	4.494	1.418	8/19/2024 10:03 A
B1	35	LCS	7.359	25.52	0.00	25.52	1	0	-9999	-9999	-9999	0.5	0	4.461	0.138	8/19/2024 10:11 A
B1	36	R2407643-019	7.615	73.36	0.00	73.36	1	0	-9999	-9999	-9999	0.5	0	4.471	1.334	8/19/2024 10:18 A
B1	37	R2407643-022	7.72	73.04	0.00	73.04	1	0	-9999	-9999	-9999	0.5	0	4.468	1.326	8/19/2024 10:24 A
B1	38	R2407634-003	7.005	17.04	0.00	17.04	1	0	4.479	0.458	4.195	0.49				8/19/2024 10:33 A
B1	39	CCV	9.743	51.20	33.92	17.28	1	0.424	-9999	-9999	-9999	0.5	0	4.475	0.356	8/19/2024 10:43 A
B1	40	CCB	5.259	0.00	0.00	0.00	1	0	4.474	0.016	4.194	0.032				8/19/2024 10:46 A
B1	41	R2407634-005	7.008	35.76	0.00	35.76	1	0	-9999	-9999	-9999	0.5	0	4.471	0.394	8/19/2024 10:53 A
B1	42	R2407634-005 DUP	7.035	35.68	0.00	35.68	1	0	-9999	-9999	-9999	0.5	0	4.485	0.392	8/19/2024 11:00 A
B1	43	R2407634-007	7.258	37.92	0.00	37.92	1	0	-9999	-9999	-9999	0.5	0	4.49	0.448	8/19/2024 11:06 A
B1	44	R2407634-007 DUP	7.244	38.00	0.00	38.00	1	0	-9999	-9999	-9999	0.5	0	4.49	0.45	8/19/2024 11:12 A
B1	45	R2407680-001	7.383	364.24	0.00	364.24	1	0	-9999	-9999	-9999	0.5	0	4.494	8.606	8/19/2024 11:20 A
B1	46	R2407683-001	8.152	257.36	0.00	257.36	1	0	-9999	-9999	-9999	0.5	0	4.483	5.934	8/19/2024 11:26 A
B1	47	R2407683-007	7.131	321.52	0.00	321.52	1	0	-9999	-9999	-9999	0.5	0	4.487	7.538	8/19/2024 11:33 A
B1	48	R2407687-001	7.681	515.12	0.00	515.12	1	0	-9999	-9999	-9999	0.5	0	4.507	12.378	8/19/2024 11:42 A
B1	49	R2407687-002	7.629	199.92	0.00	199.92	1	0	-9999	-9999	-9999	0.5	0	4.499	4.498	8/19/2024 11:49 A
B1	50	R2407688-001	7.704	187.52	0.00	187.52	1	0	-9999	-9999	-9999	0.5	0	4.488	4.188	8/19/2024 11:56 A
B1	51	CCV	9.867	52.24	35.36	16.88	1	0.442	-9999	-9999	-9999	0.5	0	4.489	0.364	8/19/2024 12:06 P
B1	52	CCB	5.38	0.08	0.00	0.08	1	0	4.476	0.02	4.19	0.038				8/19/2024 12:10 P
B1	53	R2407723-001	6.937	1,128.00	0.00	1,128.00	3	0	-9999	-9999	-9999	0.5	0	4.492	8.9	8/19/2024 12:18 P
B1	54	R2407724-001	7.365	197.44	0.00	197.44	1	0	-9999	-9999	-9999	0.5	0	4.499	4.436	8/19/2024 12:24 P
B1	55	R2407724-002	11.202	138.24	43.20	0.00	1	-9999					2.416	4.491	2.956	8/19/2024 12:30 P
B1	56	R2407724-003	7.303	201.28	0.00	201.28	1	0	-9999	-9999	-9999	0.5	0	4.493	4.532	8/19/2024 12:37 P
B1	57	R2407724-004	6.725	405.20	0.00	405.20	1	0	-9999	-9999	-9999	0.5	0	4.503	9.63	8/19/2024 12:45 P
B1	58	R2407724-005	7.95	140.96	0.00	140.96	1	0	-9999	-9999	-9999	0.5	0	4.493	3.024	8/19/2024 12:51 P
B1	59	R2407724-006	7.002	211.52	0.00	211.52	1	0	-9999	-9999	-9999	0.5	0	4.499	4.788	8/19/2024 12:58 P
B1	60	R2407685-001	7.418	79.84	0.00	79.84	1	0	-9999	-9999	-9999	0.5	0	4.491	1.496	8/19/2024 1:04 PM
B2	1	R2407685-003	7.818	170.00	0.00	170.00	1	0	-9999	-9999	-9999	0.5	0	4.474	3.75	8/19/2024 1:10 PM
B2	2	LCS	7.355	25.84	0.00	25.84	1	0	-9999	-9999	-9999	0.5	0	4.498	0.146	8/19/2024 1:19 PM
B2	3	CCV	9.724	50.88	30.72	20.16	1	0.384	-9999	-9999	-9999	0.5	0	4.491	0.388	8/19/2024 1:30 PM
B2	4	CCB	5.521	0.40	0.00	0.40	1	0	4.483	0.024	4.183	0.038				8/19/2024 1:34 PM
B2	5	R2407685-005	7.45	129.20	0.00	129.20	1	0	-9999	-9999	-9999	0.5	0	4.485	2.73	8/19/2024 1:41 PM
B2	6	R2407763-001	7.668	158.64	0.00	158.64	1	0	-9999	-9999	-9999	0.5	0	4.499	3.466	8/19/2024 1:47 PM

Rack	Pos	Identity	pH init	Total Alk (mg/L)	Carb Alk (mg/L)	BiCarb Alk (mg/L)	Dil	vol EP1	B_EP1_pH	Vol EP1	B_EP2_pH	B_Vol_End	C_EP1_Vol	C_EP2_pH	C_Vol_End	Date / Time
B2	7	R2407763-001 DUP	7.587	159.44	0.00	159.44	1	0	-9999	-9999	-9999	0.5	0	4.488	3.486	8/19/2024 1:54 PM
B2	8	R2407776-002	8.137	95.12	0.00	95.12	1	0	-9999	-9999	-9999	0.5	0	4.475	1.878	8/19/2024 2:00 PM
B2	9	R2407778-001	7.451	115.20	0.00	115.20	1	0	-9999	-9999	-9999	0.5	0	4.461	2.38	8/19/2024 2:06 PM
B2	10	R2407778-002	7.576	115.20	0.00	115.20	1	0	-9999	-9999	-9999	0.5	0	4.485	2.38	8/19/2024 2:13 PM
B2	11	R2407778-003	7.478	114.32	0.00	114.32	1	0	-9999	-9999	-9999	0.5	0	4.496	2.358	8/19/2024 2:19 PM
B2	12	R2407778-004	7.552	115.76	0.00	115.76	1	0	-9999	-9999	-9999	0.5	0	4.464	2.394	8/19/2024 2:26 PM
B2	13	R2407792-004	7.324	263.20	0.00	263.20	1	0	-9999	-9999	-9999	0.5	0	4.5	6.08	8/19/2024 2:33 PM
B2	14	R2407792-012	7.543	238.80	0.00	238.80	1	0	-9999	-9999	-9999	0.5	0	4.492	5.47	8/19/2024 2:40 PM
B2	15	CCV	9.924	51.76	34.24	17.52	1	0.428	-9999	-9999	-9999	0.5	0	4.464	0.366	8/19/2024 2:51 PM
B2	16	CCB	5.53	0.16	0.00	0.16	1	0	4.48	0.022	4.178	0.04				8/19/2024 2:55 PM
B2	17	R2407825-001	7.912	96.96	0.00	96.96	1	0	-9999	-9999	-9999	0.5	0	4.499	1.924	8/19/2024 3:01 PM
B2	18	R2407825-002	7.188	276.16	0.00	276.16	1	0	-9999	-9999	-9999	0.5	0	4.506	6.404	8/19/2024 3:09 PM
B2	19	R2407825-003	7.764	48.96	0.00	48.96	1	0	-9999	-9999	-9999	0.5	0	4.485	0.724	8/19/2024 3:15 PM
B2	20	R2407825-004	6.745	673.20	0.00	673.20	1	0	-9999	-9999	-9999	0.5	0	4.511	16.33	8/19/2024 3:24 PM
B2	21	R2407825-005	7.817	90.40	0.00	90.40	1	0	-9999	-9999	-9999	0.5	0	4.486	1.76	8/19/2024 3:31 PM
B2	22	R2407825-006	7.396	104.24	0.00	104.24	1	0	-9999	-9999	-9999	0.5	0	4.496	2.106	8/19/2024 3:37 PM
B2	23	R2407825-007	7.278	711.04	0.00	711.04	1	0	-9999	-9999	-9999	0.5	0	4.512	17.276	8/19/2024 3:46 PM
B2	24	R2407825-008	7.421	646.48	0.00	646.48	1	0	-9999	-9999	-9999	0.5	0	4.514	15.662	8/19/2024 3:54 PM
B2	25	R2407825-008 DUP	7.436	646.32	0.00	646.32	1	0	-9999	-9999	-9999	0.5	0	4.505	15.658	8/19/2024 4:03 PM
B2	26	R2407825-017	7.702	85.52	0.00	85.52	1	0	-9999	-9999	-9999	0.5	0	4.493	1.638	8/19/2024 4:09 PM
B2	27	CCV	9.953	51.92	34.40	17.52	1	0.43	-9999	-9999	-9999	0.5	0	4.406	0.368	8/19/2024 4:20 PM
B2	28	CCB	5.689	0.24	0.00	0.24	1	0	4.45	0.024	4.181	0.042				8/19/2024 4:24 PM
B2	29	R2407825-015	8.675	58.56	15.20	43.36	1	0.19	-9999	-9999	-9999	0.5	0	4.483	0.774	8/19/2024 4:33 PM
B2	30	R2407825-016	7.469	50.64	0.00	50.64	1	0	-9999	-9999	-9999	0.5	0	4.475	0.766	8/19/2024 4:39 PM
B2	31	LCS	7.53	25.04	0.00	25.04	1	0	-9999	-9999	-9999	0.5	0	4.459	0.126	8/19/2024 4:47 PM
B2	32	R2407805-001	7.887	90.16	0.00	90.16	1	0	-9999	-9999	-9999	0.5	0	4.479	1.754	8/19/2024 4:53 PM
B2	33	R2407805-003	8.112	105.76	0.00	105.76	1	0	-9999	-9999	-9999	0.5	0	4.485	2.144	8/19/2024 5:00 PM
B2	34	R2407805-005	8.112	231.36	0.00	231.36	1	0	-9999	-9999	-9999	0.5	0	4.506	5.284	8/19/2024 5:06 PM
B2	35	R2407805-007	8.157	244.40	0.00	244.40	1	0	-9999	-9999	-9999	0.5	0	4.489	5.61	8/19/2024 5:13 PM
B2	36	R2407805-009	7.9	180.00	0.00	180.00	1	0	-9999	-9999	-9999	0.5	0	4.493	4	8/19/2024 5:19 PM
B2	37	R2407801-001	5.774	0.96	0.00	0.96	1	0	4.492	0.042	4.195	0.06				8/19/2024 5:24 PM
B2	38	R2407807-001 DUP	5.383	-0.08	0.00	-0.08	1	0	4.419	0.02	4.166	0.042				8/19/2024 5:27 PM
B2	39	CCV	9.784	50.00	32.96	17.04	1	0.412	-9999	-9999	-9999	0.5	0	4.484	0.338	8/19/2024 5:38 PM
B2	40	CCB	5.348	0.16	0.00	0.16	1	0	4.363	0.022	4.129	0.04				8/19/2024 5:42 PM

ALS Environmental
1565 Jefferson Rd., Rochester, NY 14623

General Chemistry Analytical Run Cover Sheet

Analyst: Ku Date: 8/19/24

Analysis: ___Alkalinity _____ Instrument: __SKALAR_____R-Buret-02 and R-pH-08_
METROHM PH PROBE 2088804

STOCK SOLN'S	*Log # Prep/Exp. Dates*	*Reagent*	*weight (g)*	*Final Vol. (mLs)*	*Conc. (mg/L)*
Reference Stock	SEE BELOW	Na2CO3 205420 **Exp: 5/30/2025**	5.3	1000	5000 (A)
Working Ref Stock	SEE BELOW	*Prep: 10 mL of 5000 mg/L (A) diluted to 1000 mL w/DI TV=50 mg/L*			
LCS	SEE BELOW	PURCHASED 1000PPM			

QUALITY CONTROL		*Vol. (mLs)*	*Conc. (mg/L)*	*Final Vol. (mLs)*	*TV*
Water LCS		25	1000	1000	25mg/L
Soil LCS		2.5	1000	100	2000mg/kg
ICV/CCV		10	5000	1000	50mg/L

REAGENTS		*Log Book #, Exp. Dates*	*Comments*
Purchased Titrant	0.020 N H2SO4	236067 Exp 02/28/2026	Date Opened:08/13/2024 30 Day Exp:09/13/2024
pH 4 Buffer	236756	Exp 07/31/2026	
pH 7 Buffer	236055	Exp 05/31/2026	
pH 10 Buffer	236117	Exp 11/30/2025	

COMMENTS:

25 mL of sample is used by the instrument during titration
1000 mg/L Std Sol'n (Purchased): 233200 (Exp: 11/19/2025)
50 mg/L Ref Sol'n: Prepared fresh daily from 5000 mg/L
5000mg/L Sol'n: 234450 (Exp:04/04/2025)
Balance used:
Pipet used: Maga pH 7 Check: 7.00 \
Disposable Pipets: (Fisher) 26023005

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 851900 **Method/Testcode:** 300.0/Br

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2410482-01	Bromide	CCV		Water	1.98 mg/L	10 mL	1.98 mg/L	1					8/23/24 15:38	N	II
KQ2410482-01	Bromide	CCV		Water	1.98 mg/L	10 mL	1.98 mg/L	1					8/23/24 15:38	N	II
KQ2410482-01	Chloride	CCV		Water	4.07 mg/L	10 mL	4.07 mg/L	1					8/23/24 15:38	N	II
KQ2410482-01	Chloride	CCV		Water	4.07 mg/L	10 mL	4.07 mg/L	1					8/23/24 15:38	N	II
KQ2410482-01	Fluoride, undistilled	CCV		Water	1.96 mg/L	10 mL	1.96 mg/L	1					8/23/24 15:38	N	II
KQ2410482-01	Nitrate as Nitrogen	CCV		Water	1.97 mg/L	10 mL	1.97 mg/L	1					8/23/24 15:38	N	II
KQ2410482-01	Nitrate as Nitrogen	CCV		Water	1.97 mg/L	10 mL	1.97 mg/L	1					8/23/24 15:38	N	II
KQ2410482-01	Nitrite as Nitrogen	CCV		Water	2.01 mg/L	10 mL	2.01 mg/L	1					8/23/24 15:38	N	II
KQ2410482-01	Sulfate	CCV		Water	3.95 mg/L	10 mL	3.95 mg/L	1					8/23/24 15:38	N	II
KQ2410482-01	Sulfate	CCV		Water	3.95 mg/L	10 mL	3.95 mg/L	1					8/23/24 15:38	N	II
KQ2410482-02	Bromide	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/23/24 15:45	N	II
KQ2410482-02	Bromide	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/23/24 15:45	N	II
KQ2410482-02	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 15:45	N	II
KQ2410482-02	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 15:45	N	II
KQ2410482-02	Fluoride, undistilled	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/23/24 15:45	N	II
KQ2410482-02	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 15:45	N	II
KQ2410482-02	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 15:45	N	II
KQ2410482-02	Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 15:45	N	II
KQ2410482-02	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 15:45	N	II
KQ2410482-02	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 15:45	N	II
KQ2410482-03	Bromide	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/23/24 15:45	N	II
KQ2410482-03	Bromide	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/23/24 15:45	N	II
KQ2410482-03	Chloride	MB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 15:45	N	II
KQ2410482-03	Chloride	MB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 15:45	N	II
KQ2410482-03	Fluoride, undistilled	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/23/24 15:45	N	II
KQ2410482-03	Nitrate as Nitrogen	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 15:45	N	II
KQ2410482-03	Nitrate as Nitrogen	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 15:45	N	II
KQ2410482-03	Nitrite as Nitrogen	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 15:45	N	II
KQ2410482-03	Sulfate	MB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 15:45	N	II
KQ2410482-03	Sulfate	MB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 15:45	N	II
KQ2410482-04	Bromide	LCS		Water	1.00 mg/L	10 mL	1.00 mg/L	1	0.04	0.10	100		8/23/24 15:51	N	II
KQ2410482-04	Bromide	LCS		Water	1.00 mg/L	10 mL	1.00 mg/L	1	0.04	0.10	100		8/23/24 15:51	N	II
KQ2410482-04	Chloride	LCS		Water	1.97 mg/L	10 mL	1.97 mg/L	1	0.05	0.20	99		8/23/24 15:51	N	II
KQ2410482-04	Chloride	LCS		Water	1.97 mg/L	10 mL	1.97 mg/L	1	0.05	0.20	99		8/23/24 15:51	N	II
KQ2410482-04	Fluoride, undistilled	LCS		Water	0.98 mg/L	10 mL	0.977 mg/L	1	0.010	0.10	98		8/23/24 15:51	N	II
KQ2410482-04	Nitrate as Nitrogen	LCS		Water	0.99 mg/L	10 mL	0.985 mg/L	1	0.02	0.10	99		8/23/24 15:51	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 851900 **Method/Testcode:** 9056A/NO3

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2410482-04	Nitrate as Nitrogen	LCS		Water	0.99 mg/L	10 mL	0.985 mg/L	1	0.02	0.10	99		8/23/24 15:51	N	II
KQ2410482-04	Nitrite as Nitrogen	LCS		Water	0.98 mg/L	10 mL	0.980 mg/L	1	0.02	0.10	98		8/23/24 15:51	N	II
KQ2410482-04	Sulfate	LCS		Water	1.98 mg/L	10 mL	1.98 mg/L	1	0.04	0.20	99		8/23/24 15:51	N	II
KQ2410482-04	Sulfate	LCS		Water	1.98 mg/L	10 mL	1.98 mg/L	1	0.04	0.20	99		8/23/24 15:51	N	II
K2408138-004	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 15:57	N	II
K2408138-004	Chloride	N/A		Water	1.14 mg/L	10 mL	1.1 mg/L J	10	0.5	2.0			8/23/24 15:57	N	II
K2408138-004	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/23/24 15:57	N	II
K2408138-005	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 16:03	N	II
K2408138-005	Chloride	N/A		Water	1.91 mg/L	10 mL	1.9 mg/L J	10	0.5	2.0			8/23/24 16:03	N	II
K2408138-005	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/23/24 16:03	N	II
K2408138-006	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 16:10	N	II
K2408138-006	Chloride	N/A		Water	1.33 mg/L	10 mL	1.3 mg/L J	10	0.5	2.0			8/23/24 16:10	N	II
K2408138-006	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/23/24 16:10	N	II
K2408138-006	Sulfate	N/A		Water	16.76 mg/L	10 mL	16.8 mg/L	10	0.4	2.0			8/23/24 16:10	N	II
K2408138-007	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 16:16	N	II
K2408138-007	Chloride	N/A		Water	4.95 mg/L	10 mL	5.0 mg/L	10	0.5	2.0			8/23/24 16:16	N	II
K2408138-007	Nitrate as Nitrogen	N/A		Water	0.60 mg/L	10 mL	0.6 mg/L J	10	0.2	1.0			8/23/24 16:16	N	II
K2408138-007	Sulfate	N/A		Water	64.43 mg/L	10 mL	64.4 mg/L	10	0.4	2.0			8/23/24 16:16	N	II
K2408138-001	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 16:22	N	II
K2408138-001	Chloride	N/A		Water	3.16 mg/L	10 mL	3.2 mg/L	10	0.5	2.0			8/23/24 16:22	N	II
K2408138-001	Nitrate as Nitrogen	N/A		Water	1.32 mg/L	10 mL	1.3 mg/L	10	0.2	1.0			8/23/24 16:22	N	II
K2408138-001	Sulfate	N/A		Water	44.53 mg/L	10 mL	44.5 mg/L	10	0.4	2.0			8/23/24 16:22	N	II
K2408138-002	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 16:29	N	II
K2408138-002	Nitrate as Nitrogen	N/A		Water	0.26 mg/L	10 mL	0.3 mg/L J	10	0.2	1.0			8/23/24 16:29	N	II
K2408138-002	Sulfate	N/A		Water	75.95 mg/L	10 mL	75.9 mg/L	10	0.4	2.0			8/23/24 16:29	N	II
K2408138-003	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 16:35	N	II
K2408138-003	Chloride	N/A		Water	0.76 mg/L	10 mL	0.8 mg/L J	10	0.5	2.0			8/23/24 16:35	N	II
K2408138-003	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/23/24 16:35	N	II
K2408138-003	Sulfate	N/A		Water	37.19 mg/L	10 mL	37.2 mg/L	10	0.4	2.0			8/23/24 16:35	N	II
KQ2410482-07	Bromide	MS	R2408138-003	Water	9.66 mg/L	10 mL	9.7 mg/L	10	0.4	1.0	97		8/23/24 16:41	N	II
KQ2410482-07	Chloride	MS	R2408138-003	Water	19.35 mg/L	10 mL	19.4 mg/L	10	0.5	2.0	93		8/23/24 16:41	N	II
KQ2410482-07	Nitrate as Nitrogen	MS	R2408138-003	Water	9.50 mg/L	10 mL	9.5 mg/L	10	0.2	1.0	95		8/23/24 16:41	N	II
KQ2410482-07	Sulfate	MS	R2408138-003	Water	54.83 mg/L	10 mL	54.8 mg/L	10	0.4	2.0	88		8/23/24 16:41	N	II
KQ2410482-08	Bromide	DMS	R2408138-003	Water	9.68 mg/L	10 mL	9.7 mg/L	10	0.4	1.0	97	<1	8/23/24 16:47	N	II
KQ2410482-08	Chloride	DMS	R2408138-003	Water	19.40 mg/L	10 mL	19.4 mg/L	10	0.5	2.0	93	<1	8/23/24 16:47	N	II
KQ2410482-08	Nitrate as Nitrogen	DMS	R2408138-003	Water	9.52 mg/L	10 mL	9.5 mg/L	10	0.2	1.0	95	<1	8/23/24 16:47	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 851900 **Method/Testcode:** 9056A/SO4

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
2Q2410482-08	Sulfate	DMS	R2408138-003	Water	54.72 mg/L	10 mL	54.7 mg/L	10	0.4	2.0	88	<1	8/23/24 16:47	N	II
2Q2410482-05	Bromide	CCV		Water	1.98 mg/L	10 mL	1.98 mg/L	1					8/23/24 16:54	N	II
2Q2410482-05	Bromide	CCV		Water	1.98 mg/L	10 mL	1.98 mg/L	1					8/23/24 16:54	N	II
2Q2410482-05	Chloride	CCV		Water	4.07 mg/L	10 mL	4.07 mg/L	1					8/23/24 16:54	N	II
2Q2410482-05	Chloride	CCV		Water	4.07 mg/L	10 mL	4.07 mg/L	1					8/23/24 16:54	N	II
2Q2410482-05	Fluoride, undistilled	CCV		Water	1.95 mg/L	10 mL	1.95 mg/L	1					8/23/24 16:54	N	II
2Q2410482-05	Nitrate as Nitrogen	CCV		Water	1.97 mg/L	10 mL	1.97 mg/L	1					8/23/24 16:54	N	II
2Q2410482-05	Nitrate as Nitrogen	CCV		Water	1.97 mg/L	10 mL	1.97 mg/L	1					8/23/24 16:54	N	II
2Q2410482-05	Nitrite as Nitrogen	CCV		Water	2.01 mg/L	10 mL	2.01 mg/L	1					8/23/24 16:54	N	II
2Q2410482-05	Sulfate	CCV		Water	3.95 mg/L	10 mL	3.95 mg/L	1					8/23/24 16:54	N	II
2Q2410482-05	Sulfate	CCV		Water	3.95 mg/L	10 mL	3.95 mg/L	1					8/23/24 16:54	N	II
2Q2410482-06	Bromide	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/23/24 17:00	N	II
2Q2410482-06	Bromide	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/23/24 17:00	N	II
2Q2410482-06	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 17:00	N	II
2Q2410482-06	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 17:00	N	II
2Q2410482-06	Fluoride, undistilled	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/23/24 17:00	N	II
2Q2410482-06	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 17:00	N	II
2Q2410482-06	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 17:00	N	II
2Q2410482-06	Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 17:00	N	II
2Q2410482-06	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 17:00	N	II
2Q2410482-06	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 17:00	N	II
2408101-001	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 17:12	N	II
2408101-001	Chloride	N/A		Water	41.27 mg/L	10 mL	41.3 mg/L	10	0.5	2.0			8/23/24 17:12	N	II
2408101-001	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/23/24 17:12	N	II
2Q2410482-09	Bromide	MS	R2408101-001	Water	9.66 mg/L	10 mL	9.7 mg/L	10	0.4	1.0	97		8/23/24 17:19	N	II
2Q2410482-09	Chloride	MS	R2408101-001	Water	58.38 mg/L	10 mL	58.4 mg/L	10	0.5	2.0	86*		8/23/24 17:19	N	II
2Q2410482-09	Nitrate as Nitrogen	MS	R2408101-001	Water	9.44 mg/L	10 mL	9.4 mg/L	10	0.2	1.0	94		8/23/24 17:19	N	II
2Q2410482-10	Bromide	DMS	R2408101-001	Water	9.79 mg/L	10 mL	9.8 mg/L	10	0.4	1.0	98	1	8/23/24 17:25	N	II
2Q2410482-10	Chloride	DMS	R2408101-001	Water	58.79 mg/L	10 mL	58.8 mg/L	10	0.5	2.0	88*	<1	8/23/24 17:25	N	II
2Q2410482-10	Nitrate as Nitrogen	DMS	R2408101-001	Water	9.57 mg/L	10 mL	9.6 mg/L	10	0.2	1.0	96	1	8/23/24 17:25	N	II
2408102-001	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 17:31	N	II
2408102-001	Chloride	N/A		Water	41.91 mg/L	10 mL	41.9 mg/L	10	0.5	2.0			8/23/24 17:31	N	II
2408102-001	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/23/24 17:31	N	II
2408161-001	Nitrate as Nitrogen	N/A		Water	0.88 mg/L	10 mL	0.9 mg/L J	10	0.2	1.0			8/23/24 17:37	N	II
2408161-001	Nitrite as Nitrogen	N/A		Water	1.49 mg/L	10 mL	1.5 mg/L	10	0.2	1.0			8/23/24 17:37	N	II
2408161-003	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/23/24 17:44	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 851900 **Method/Testcode:** 300.0/NO2

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R2408161-003	Nitrite as Nitrogen	N/A		Water	0.78 mg/L	10 mL	0.8 mg/L J	10	0.2	1.0			8/23/24 17:44	N	II
R2408161-002	Fluoride, undistilled	N/A		Water	0.19 mg/L	10 mL	0.19 mg/L	1	0.010	0.10			8/23/24 17:50	N	II
R2408161-002	Nitrate as Nitrogen	N/A		Water	6.19 mg/L	10 mL	6.2 mg/L	10	0.2	1.0			8/23/24 17:56	N	II
R2408161-002	Nitrite as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/23/24 17:56	N	II
R2408137-001	Bromide	N/A		Water	1.50 mg/L	10 mL	1.5 mg/L	10	0.4	1.0			8/23/24 18:02	N	IV
R2408137-001	Nitrate as Nitrogen	N/A		Water	0.24 mg/L	10 mL	0.2 mg/L J	10	0.2	1.0			8/23/24 18:02	N	IV
R2408137-001	Sulfate	N/A		Water	19.74 mg/L	10 mL	19.7 mg/L	10	0.4	2.0			8/23/24 18:02	N	IV
RQ2410482-11	Bromide	CCV		Water	1.98 mg/L	10 mL	1.98 mg/L	1					8/23/24 18:09	N	IV
RQ2410482-11	Bromide	CCV		Water	1.98 mg/L	10 mL	1.98 mg/L	1					8/23/24 18:09	N	IV
RQ2410482-11	Chloride	CCV		Water	4.08 mg/L	10 mL	4.08 mg/L	1					8/23/24 18:09	N	IV
RQ2410482-11	Chloride	CCV		Water	4.08 mg/L	10 mL	4.08 mg/L	1					8/23/24 18:09	N	IV
RQ2410482-11	Fluoride, undistilled	CCV		Water	1.95 mg/L	10 mL	1.95 mg/L	1					8/23/24 18:09	N	IV
RQ2410482-11	Nitrate as Nitrogen	CCV		Water	1.97 mg/L	10 mL	1.97 mg/L	1					8/23/24 18:09	N	IV
RQ2410482-11	Nitrate as Nitrogen	CCV		Water	1.97 mg/L	10 mL	1.97 mg/L	1					8/23/24 18:09	N	IV
RQ2410482-11	Nitrite as Nitrogen	CCV		Water	2.02 mg/L	10 mL	2.02 mg/L	1					8/23/24 18:09	N	IV
RQ2410482-11	Sulfate	CCV		Water	3.95 mg/L	10 mL	3.95 mg/L	1					8/23/24 18:09	N	IV
RQ2410482-11	Sulfate	CCV		Water	3.95 mg/L	10 mL	3.95 mg/L	1					8/23/24 18:09	N	IV
RQ2410482-12	Bromide	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/23/24 18:15	N	IV
RQ2410482-12	Bromide	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/23/24 18:15	N	IV
RQ2410482-12	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 18:15	N	IV
RQ2410482-12	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 18:15	N	IV
RQ2410482-12	Fluoride, undistilled	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/23/24 18:15	N	IV
RQ2410482-12	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 18:15	N	IV
RQ2410482-12	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 18:15	N	IV
RQ2410482-12	Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 18:15	N	IV
RQ2410482-12	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 18:15	N	IV
RQ2410482-12	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 18:15	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 851902 **Method/Testcode:** 300.0/Br

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2410485-01	Bromide	CCV		Water	1.98 mg/L	10 mL	1.98 mg/L	1					8/23/24 18:09	N	IV
KQ2410485-01	Chloride	CCV		Water	4.08 mg/L	10 mL	4.08 mg/L	1					8/23/24 18:09	N	IV
KQ2410485-01	Nitrate as Nitrogen	CCV		Water	1.97 mg/L	10 mL	1.97 mg/L	1					8/23/24 18:09	N	IV
KQ2410485-01	Sulfate	CCV		Water	3.95 mg/L	10 mL	3.95 mg/L	1					8/23/24 18:09	N	IV
KQ2410485-02	Bromide	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/23/24 18:15	N	IV
KQ2410485-02	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 18:15	N	IV
KQ2410485-02	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 18:15	N	IV
KQ2410485-02	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 18:15	N	IV
KQ2410485-03	Bromide	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/23/24 18:15	N	IV
KQ2410485-03	Chloride	MB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 18:15	N	IV
KQ2410485-03	Nitrate as Nitrogen	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 18:15	N	IV
KQ2410485-03	Sulfate	MB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 18:15	N	IV
KQ2410485-04	Bromide	LCS		Water	1.00 mg/L	10 mL	1.00 mg/L	1	0.04	0.10	100		8/23/24 18:21	N	IV
KQ2410485-04	Chloride	LCS		Water	1.97 mg/L	10 mL	1.97 mg/L	1	0.05	0.20	99		8/23/24 18:21	N	IV
KQ2410485-04	Nitrate as Nitrogen	LCS		Water	0.99 mg/L	10 mL	0.987 mg/L	1	0.02	0.10	99		8/23/24 18:21	N	IV
KQ2410485-04	Sulfate	LCS		Water	1.97 mg/L	10 mL	1.97 mg/L	1	0.04	0.20	99		8/23/24 18:21	N	IV
K2408137-003	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 18:27	N	IV
K2408137-003	Chloride	N/A		Water	57.88 mg/L	10 mL	57.9 mg/L	10	0.5	2.0			8/23/24 18:27	N	IV
K2408137-003	Nitrate as Nitrogen	N/A		Water	0.30 mg/L	10 mL	0.3 mg/L J	10	0.2	1.0			8/23/24 18:27	N	IV
K2408137-003	Sulfate	N/A		Water	5.22 mg/L	10 mL	5.2 mg/L	10	0.4	2.0			8/23/24 18:27	N	IV
K2408137-005	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 18:34	N	IV
K2408137-005	Chloride	N/A		Water	7.90 mg/L	10 mL	7.9 mg/L	10	0.5	2.0			8/23/24 18:34	N	IV
K2408137-005	Nitrate as Nitrogen	N/A		Water	0.22 mg/L	10 mL	0.2 mg/L J	10	0.2	1.0			8/23/24 18:34	N	IV
K2408137-005	Sulfate	N/A		Water	8.47 mg/L	10 mL	8.5 mg/L	10	0.4	2.0			8/23/24 18:34	N	IV
K2408137-007	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 18:40	N	IV
K2408137-007	Chloride	N/A		Water	81.88 mg/L	10 mL	81.9 mg/L	10	0.5	2.0			8/23/24 18:40	N	IV
K2408137-007	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/23/24 18:40	N	IV
K2408137-007	Sulfate	N/A		Water	27.62 mg/L	10 mL	27.6 mg/L	10	0.4	2.0			8/23/24 18:40	N	IV
K2408137-009	Bromide	N/A		Water	0.29 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 18:46	N	IV
K2408137-009	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/23/24 18:46	N	IV
K2408137-011	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 18:52	N	IV
K2408137-011	Chloride	N/A		Water	18.81 mg/L	10 mL	18.8 mg/L	10	0.5	2.0			8/23/24 18:52	N	IV
K2408137-011	Nitrate as Nitrogen	N/A		Water	0.25 mg/L	10 mL	0.3 mg/L J	10	0.2	1.0			8/23/24 18:52	N	IV
K2408137-011	Sulfate	N/A		Water	6.62 mg/L	10 mL	6.6 mg/L	10	0.4	2.0			8/23/24 18:52	N	IV
K2408137-013	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 18:59	N	IV
K2408137-013	Chloride	N/A		Water	5.72 mg/L	10 mL	5.7 mg/L	10	0.5	2.0			8/23/24 18:59	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 851902 **Method/Testcode:** 300.0/NO3

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R2408137-013	Nitrate as Nitrogen	N/A		Water	0.28 mg/L	10 mL	0.3 mg/L J	10	0.2	1.0			8/23/24 18:59	N	IV
R2408137-013	Sulfate	N/A		Water	63.48 mg/L	10 mL	63.5 mg/L	10	0.4	2.0			8/23/24 18:59	N	IV
R2410485-05	Bromide	MS	R2408137-013	Water	9.69 mg/L	10 mL	9.7 mg/L	10	0.4	1.0	97		8/23/24 19:05	N	IV
R2410485-05	Chloride	MS	R2408137-013	Water	24.42 mg/L	10 mL	24.4 mg/L	10	0.5	2.0	94		8/23/24 19:05	N	IV
R2410485-05	Nitrate as Nitrogen	MS	R2408137-013	Water	9.64 mg/L	10 mL	9.6 mg/L	10	0.2	1.0	94		8/23/24 19:05	N	IV
R2410485-05	Sulfate	MS	R2408137-013	Water	80.78 mg/L	10 mL	80.8 mg/L	10	0.4	2.0	86*		8/23/24 19:05	N	IV
R2410485-06	Bromide	DMS	R2408137-013	Water	9.71 mg/L	10 mL	9.7 mg/L	10	0.4	1.0	97	<1	8/23/24 19:11	N	IV
R2410485-06	Chloride	DMS	R2408137-013	Water	24.45 mg/L	10 mL	24.5 mg/L	10	0.5	2.0	94	<1	8/23/24 19:11	N	IV
R2410485-06	Nitrate as Nitrogen	DMS	R2408137-013	Water	9.67 mg/L	10 mL	9.7 mg/L	10	0.2	1.0	94	<1	8/23/24 19:11	N	IV
R2410485-06	Sulfate	DMS	R2408137-013	Water	80.46 mg/L	10 mL	80.5 mg/L	10	0.4	2.0	85*	<1	8/23/24 19:11	N	IV
R2408137-015	Bromide	N/A		Water	0.40 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 19:17	N	IV
R2408137-015	Chloride	N/A		Water	63.44 mg/L	10 mL	63.4 mg/L	10	0.5	2.0			8/23/24 19:17	N	IV
R2408137-015	Nitrate as Nitrogen	N/A		Water	0.21 mg/L	10 mL	0.2 mg/L J	10	0.2	1.0			8/23/24 19:17	N	IV
R2408137-015	Sulfate	N/A		Water	29.72 mg/L	10 mL	29.7 mg/L	10	0.4	2.0			8/23/24 19:17	N	IV
R2410485-07	Bromide	CCV		Water	1.98 mg/L	10 mL	1.98 mg/L	1					8/23/24 19:24	N	IV
R2410485-07	Chloride	CCV		Water	4.08 mg/L	10 mL	4.08 mg/L	1					8/23/24 19:24	N	IV
R2410485-07	Nitrate as Nitrogen	CCV		Water	1.98 mg/L	10 mL	1.98 mg/L	1					8/23/24 19:24	N	IV
R2410485-07	Sulfate	CCV		Water	3.95 mg/L	10 mL	3.95 mg/L	1					8/23/24 19:24	N	IV
R2410485-08	Bromide	CCB		Water	0.42 mg/L	10 mL	0.42 mg/L	1	0.04	0.10			8/23/24 19:30	N	IV
R2410485-08	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 19:30	N	IV
R2410485-08	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 19:30	N	IV
R2410485-08	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 19:30	N	IV
R2408137-017	Bromide	N/A		Water	0.46 mg/L	10 mL	0.5 mg/L J	10	0.4	1.0			8/23/24 19:36	N	IV
R2408137-017	Chloride	N/A		Water	72.18 mg/L	10 mL	72.2 mg/L	10	0.5	2.0			8/23/24 19:36	N	IV
R2408137-017	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/23/24 19:36	N	IV
R2408137-017	Sulfate	N/A		Water	29.47 mg/L	10 mL	29.5 mg/L	10	0.4	2.0			8/23/24 19:36	N	IV
R2408137-019	Bromide	N/A		Water	0.34 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 19:42	Y	IV
R2408137-019	Chloride	N/A		Water	45.86 mg/L	10 mL	45.9 mg/L	10	0.5	2.0			8/23/24 19:42	Y	IV
R2408137-019	Nitrate as Nitrogen	N/A		Water	0.28 mg/L	10 mL	0.3 mg/L J	10	0.2	1.0			8/23/24 19:42	Y	IV
R2408137-019	Sulfate	N/A		Water	0.72 mg/L	10 mL	0.7 mg/L J	10	0.4	2.0			8/23/24 19:42	Y	IV
R2410485-09	Bromide	MS	R2408137-019	Water	10.04 mg/L	10 mL	10.0 mg/L	10	0.4	1.0	100		8/23/24 19:49	N	IV
R2410485-09	Chloride	MS	R2408137-019	Water	63.52 mg/L	10 mL	63.5 mg/L	10	0.5	2.0	88*		8/23/24 19:49	N	IV
R2410485-09	Nitrate as Nitrogen	MS	R2408137-019	Water	9.69 mg/L	10 mL	9.7 mg/L	10	0.2	1.0	94		8/23/24 19:49	N	IV
R2410485-09	Sulfate	MS	R2408137-019	Water	19.70 mg/L	10 mL	19.7 mg/L	10	0.4	2.0	95		8/23/24 19:49	N	IV
R2410485-10	Bromide	DMS	R2408137-019	Water	10.05 mg/L	10 mL	10.0 mg/L	10	0.4	1.0	100	<1	8/23/24 19:55	N	IV
R2410485-10	Chloride	DMS	R2408137-019	Water	63.47 mg/L	10 mL	63.5 mg/L	10	0.5	2.0	88*	<1	8/23/24 19:55	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 851902 **Method/Testcode:** 300.0/NO3

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ2410485-10	Nitrate as Nitrogen	DMS	R2408137-019	Water	9.70 mg/L	10 mL	9.7 mg/L	10	0.2	1.0	94	- <1	8/23/24 19:55	N	IV
RQ2410485-10	Sulfate	DMS	R2408137-019	Water	19.71 mg/L	10 mL	19.7 mg/L	10	0.4	2.0	95	<1	8/23/24 19:55	N	IV
R2408137-021	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 20:01	N	IV
R2408137-021	Chloride	N/A		Water	49.17 mg/L	10 mL	49.2 mg/L	10	0.5	2.0			8/23/24 20:01	N	IV
R2408137-021	Nitrate as Nitrogen	N/A		Water	0.23 mg/L	10 mL	0.2 mg/L J	10	0.2	1.0			8/23/24 20:01	N	IV
R2408137-021	Sulfate	N/A		Water	32.16 mg/L	10 mL	32.2 mg/L	10	0.4	2.0			8/23/24 20:01	N	IV
R2408137-023	Bromide	N/A		Water	0.37 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 20:08	N	IV
R2408137-023	Chloride	N/A		Water	71.31 mg/L	10 mL	71.3 mg/L	10	0.5	2.0			8/23/24 20:08	N	IV
R2408137-023	Nitrate as Nitrogen	N/A		Water	0.50 mg/L	10 mL	0.5 mg/L J	10	0.2	1.0			8/23/24 20:08	N	IV
R2408137-023	Sulfate	N/A		Water	35.58 mg/L	10 mL	35.6 mg/L	10	0.4	2.0			8/23/24 20:08	N	IV
R2408137-025	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 20:14	N	IV
R2408137-025	Chloride	N/A		Water	56.52 mg/L	10 mL	56.5 mg/L	10	0.5	2.0			8/23/24 20:14	N	IV
R2408137-025	Nitrate as Nitrogen	N/A		Water	0.27 mg/L	10 mL	0.3 mg/L J	10	0.2	1.0			8/23/24 20:14	N	IV
R2408137-025	Sulfate	N/A		Water	108.14 mg/L	10 mL	108 mg/L	10	0.4	2.0			8/23/24 20:14	N	IV
R2408137-027	Bromide	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.4	1.0			8/23/24 20:20	N	IV
R2408137-027	Chloride	N/A		Water	42.47 mg/L	10 mL	42.5 mg/L	10	0.5	2.0			8/23/24 20:20	N	IV
R2408137-027	Nitrate as Nitrogen	N/A		Water	0.00 mg/L	10 mL	1.0 mg/L U	10	0.2	1.0			8/23/24 20:20	N	IV
R2408137-027	Sulfate	N/A		Water	0.71 mg/L	10 mL	0.7 mg/L J	10	0.4	2.0			8/23/24 20:20	N	IV
RQ2410485-11	Bromide	CCV		Water	2.03 mg/L	10 mL	2.03 mg/L	1					8/23/24 20:26	N	IV
RQ2410485-11	Chloride	CCV		Water	4.19 mg/L	10 mL	4.19 mg/L	1					8/23/24 20:26	N	IV
RQ2410485-11	Nitrate as Nitrogen	CCV		Water	2.03 mg/L	10 mL	2.03 mg/L	1					8/23/24 20:26	N	IV
RQ2410485-11	Sulfate	CCV		Water	4.03 mg/L	10 mL	4.03 mg/L	1					8/23/24 20:26	N	IV
RQ2410485-12	Bromide	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.04	0.10			8/23/24 20:33	N	IV
RQ2410485-12	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 20:33	N	IV
RQ2410485-12	Nitrate as Nitrogen	CCB		Water	0.08 mg/L	10 mL	0.08 mg/L J	1	0.02	0.10			8/23/24 20:33	N	IV
RQ2410485-12	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 20:33	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 851805 **Method/Testcode:** 300.0/Chloride

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2410516-01	Chloride	CCV		Water	4.19 mg/L	10 mL	4.19 mg/L	1					8/23/24 20:26	N	IV
KQ2410516-01	Fluoride, undistilled	CCV		Water	1.99 mg/L	10 mL	1.99 mg/L	1					8/23/24 20:26	N	IV
KQ2410516-01	Sulfate	CCV		Water	4.03 mg/L	10 mL	4.03 mg/L	1					8/23/24 20:26	N	IV
KQ2410516-02	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 20:33	N	IV
KQ2410516-02	Fluoride, undistilled	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/23/24 20:33	N	IV
KQ2410516-02	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 20:33	N	IV
KQ2410516-11	Chloride	MB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 20:33	N	IV
KQ2410516-11	Fluoride, undistilled	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/23/24 20:33	N	IV
KQ2410516-11	Sulfate	MB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 20:33	N	IV
KQ2410516-12	Chloride	LCS		Water	1.96 mg/L	10 mL	1.96 mg/L	1	0.05	0.20	98		8/23/24 20:39	N	IV
KQ2410516-12	Fluoride, undistilled	LCS		Water	0.97 mg/L	10 mL	0.968 mg/L	1	0.010	0.10	97		8/23/24 20:39	N	IV
KQ2410516-12	Sulfate	LCS		Water	1.97 mg/L	10 mL	1.97 mg/L	1	0.04	0.20	99		8/23/24 20:39	N	IV
R2407124-005	Chloride	N/A		Water	0.00 mg/L	10 mL	2.0 mg/L U	10	0.5	2.0			8/23/24 20:45	Y	IV
R2407124-005	Sulfate	N/A		Water	0.00 mg/L	10 mL	2.0 mg/L U	10	0.4	2.0			8/23/24 20:45	Y	IV
KQ2410516-03	Chloride	MS	R2407124-005	Water	19.06 mg/L	10 mL	19.1 mg/L	10	0.5	2.0	95		8/23/24 20:51	N	IV
KQ2410516-03	Sulfate	MS	R2407124-005	Water	19.37 mg/L	10 mL	19.4 mg/L	10	0.4	2.0	97		8/23/24 20:51	N	IV
KQ2410516-04	Chloride	DMS	R2407124-005	Water	19.06 mg/L	10 mL	19.1 mg/L	10	0.5	2.0	95	<1	8/23/24 20:58	N	IV
KQ2410516-04	Sulfate	DMS	R2407124-005	Water	19.31 mg/L	10 mL	19.3 mg/L	10	0.4	2.0	97	<1	8/23/24 20:58	N	IV
R2407626-001	Sulfate	N/A		Water	100.57 mg/L	10 mL	101 mg/L	20	0.8	4.0			8/23/24 21:04	N	II
R2407626-001	Chloride	N/A		Water	1232.64 mg/L	10 mL	1230 mg/L	200	9	40			8/23/24 21:10	N	II
R2407627-001	Chloride	N/A		Water	81.57 mg/L	10 mL	81.6 mg/L	10	0.5	2.0			8/23/24 21:16	N	II
R2407627-001	Sulfate	N/A		Water	4.13 mg/L	10 mL	4.1 mg/L	10	0.4	2.0			8/23/24 21:16	N	II
R2407457-005	Chloride	N/A		Water	14.26 mg/L	10 mL	14.3 mg/L	10	0.5	2.0			8/23/24 21:23	N	IV
R2407457-007	Chloride	N/A		Water	265.00 mg/L	10 mL	265 mg/L	50	3	10			8/23/24 21:29	N	IV
R2407815-001	Chloride	N/A		Water	137.73 mg/L	10 mL	138 mg/L	50	3	10			8/23/24 21:35	N	II
R2407815-001	Sulfate	N/A		Water	261.24 mg/L	10 mL	261 mg/L	50	2	10			8/23/24 21:35	N	II
KQ2410516-05	Chloride	CCV		Drinking Water	4.14 mg/L	10 mL	4.14 mg/L	1					8/23/24 21:41	N	II
KQ2410516-05	Fluoride, undistilled	CCV		Drinking Water	1.97 mg/L	10 mL	1.97 mg/L	1					8/23/24 21:41	N	II
KQ2410516-05	Sulfate	CCV		Drinking Water	4.00 mg/L	10 mL	4.00 mg/L	1					8/23/24 21:41	N	II
KQ2410516-06	Chloride	CCB		Drinking Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 21:48	N	II
KQ2410516-06	Fluoride, undistilled	CCB		Drinking Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/23/24 21:48	N	II
KQ2410516-06	Sulfate	CCB		Drinking Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 21:48	N	II
R2407667-001	Fluoride, undistilled	N/A		Drinking Water	0.64 mg/L	10 mL	0.64 mg/L	1	0.010	0.10			8/23/24 21:54	N	II

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Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 851805 **Method/Testcode:** 300.0/F

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R2407792-004	Fluoride, undistilled	N/A		Water	0.60 mg/L	10 mL	0.60 mg/L	1	0.010	0.10			8/23/24 22:00	N	IV
R2407792-004	Chloride	N/A		Water	73.72 mg/L	10 mL	73.7 mg/L	10	0.5	2.0			8/23/24 22:06	N	IV
R2407792-004	Sulfate	N/A		Water	405.49 mg/L	10 mL	405 mg/L	100	4	20			8/23/24 22:13	N	IV
R2407792-012	Fluoride, undistilled	N/A		Water	0.83 mg/L	10 mL	0.83 mg/L	1	0.010	0.10			8/23/24 22:19	N	IV
R2407792-012	Chloride	N/A		Water	58.81 mg/L	10 mL	58.8 mg/L	10	0.5	2.0			8/23/24 22:25	N	IV
R2407792-012	Sulfate	N/A		Water	292.69 mg/L	10 mL	293 mg/L	100	4	20			8/23/24 22:31	N	IV
RQ2410516-07	Sulfate	MS	R2407792-012	Water	484.66 mg/L	10 mL	485 mg/L	100	4	20	96		8/23/24 22:38	N	IV
RQ2410516-08	Sulfate	DMS	R2407792-012	Water	484.42 mg/L	10 mL	484 mg/L	100	4	20	96	<1	8/23/24 22:44	N	IV
R2407830-002	Sulfate	N/A		Drinking Water	18.55 mg/L	10 mL	18.6 mg/L	10	0.4	2.0			8/23/24 22:50	N	II
RQ2410516-09	Chloride	CCV		Drinking Water	4.11 mg/L	10 mL	4.11 mg/L	1					8/23/24 22:56	N	II
RQ2410516-09	Fluoride, undistilled	CCV		Drinking Water	1.97 mg/L	10 mL	1.97 mg/L	1					8/23/24 22:56	N	II
RQ2410516-09	Sulfate	CCV		Drinking Water	3.98 mg/L	10 mL	3.98 mg/L	1					8/23/24 22:56	N	II
RQ2410516-10	Chloride	CCB		Drinking Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 23:03	N	II
RQ2410516-10	Fluoride, undistilled	CCB		Drinking Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/23/24 23:03	N	II
RQ2410516-10	Sulfate	CCB		Drinking Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 23:03	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 851806 **Method/Testcode:** 9056A/Chloride

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
2Q2410517-01	Chloride	CCV		Water	4.11 mg/L	10 mL	4.11 mg/L	1					8/23/24 22:56	N	II
2Q2410517-01	Fluoride, undistilled	CCV		Water	1.97 mg/L	10 mL	1.97 mg/L	1					8/23/24 22:56	N	II
2Q2410517-01	Nitrate as Nitrogen	CCV		Water	1.99 mg/L	10 mL	1.99 mg/L	1					8/23/24 22:56	N	II
2Q2410517-01	Sulfate	CCV		Water	3.98 mg/L	10 mL	3.98 mg/L	1					8/23/24 22:56	N	II
2Q2410517-02	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 23:03	N	II
2Q2410517-02	Fluoride, undistilled	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/23/24 23:03	N	II
2Q2410517-02	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 23:03	N	II
2Q2410517-02	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 23:03	N	II
2Q2410517-03	Chloride	MB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/23/24 23:03	N	II
2Q2410517-03	Fluoride, undistilled	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/23/24 23:03	N	II
2Q2410517-03	Nitrate as Nitrogen	MB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/23/24 23:03	N	II
2Q2410517-03	Sulfate	MB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/23/24 23:03	N	II
2Q2410517-04	Chloride	LCS		Water	1.97 mg/L	10 mL	1.97 mg/L	1	0.05	0.20	98		8/23/24 23:09	N	II
2Q2410517-04	Fluoride, undistilled	LCS		Water	0.97 mg/L	10 mL	0.972 mg/L	1	0.010	0.10	97		8/23/24 23:09	N	II
2Q2410517-04	Nitrate as Nitrogen	LCS		Water	0.98 mg/L	10 mL	0.983 mg/L	1	0.02	0.10	98		8/23/24 23:09	N	II
2Q2410517-04	Sulfate	LCS		Water	1.97 mg/L	10 mL	1.97 mg/L	1	0.04	0.20	99		8/23/24 23:09	N	II
2407939-003	Fluoride, undistilled	N/A		Water	8.14 mg/L	10 mL	8.14 mg/L	3	0.03	0.30			8/23/24 23:40	N	II
2407633-001	Sulfate	N/A		Water	2181.21 mg/L	10 mL	2180 mg/L	400	16	80			8/24/24 00:05	N	II
2Q2410517-05	Chloride	CCV		Water	4.06 mg/L	10 mL	4.06 mg/L	1					8/24/24 00:11	N	II
2Q2410517-05	Fluoride, undistilled	CCV		Water	1.95 mg/L	10 mL	1.95 mg/L	1					8/24/24 00:11	N	II
2Q2410517-05	Nitrate as Nitrogen	CCV		Water	1.96 mg/L	10 mL	1.96 mg/L	1					8/24/24 00:11	N	II
2Q2410517-05	Sulfate	CCV		Water	3.95 mg/L	10 mL	3.95 mg/L	1					8/24/24 00:11	N	II
2Q2410517-06	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/24/24 00:18	N	II
2Q2410517-06	Fluoride, undistilled	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/24/24 00:18	N	II
2Q2410517-06	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/24/24 00:18	N	II
2Q2410517-06	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/24/24 00:18	N	II
2407573-006	Chloride	N/A		Water	177.46 mg/L	10 mL	177 mg/L	20	0.9	4.0			8/24/24 00:24	N	II
2407573-006	Sulfate	N/A		Water	511.98 mg/L	10 mL	512 mg/L	100	4	20			8/24/24 00:30	N	II
2Q2410517-07	Sulfate	MS	R2407573-006	Water	697.00 mg/L	10 mL	697 mg/L	100	4	20	93		8/24/24 00:37	N	II
2Q2410517-08	Sulfate	DMS	R2407573-006	Water	697.82 mg/L	10 mL	698 mg/L	100	4	20	93	<1	8/24/24 00:43	N	II
2407573-010	Sulfate	N/A		Water	871.29 mg/L	10 mL	871 mg/L	200	8	40			8/24/24 00:49	N	II
2407573-012	Sulfate	N/A		Water	328.03 mg/L	10 mL	328 mg/L	50	2	10			8/24/24 00:55	N	II
2407573-013	Sulfate	N/A		Water	328.21 mg/L	10 mL	328 mg/L	50	2	10			8/24/24 01:02	N	II
2407724-001	Sulfate	N/A		Water	615.49 mg/L	10 mL	615 mg/L	100	4	20			8/24/24 01:08	N	II
2407724-002	Sulfate	N/A		Water	198.56 mg/L	10 mL	199 mg/L	40	1.6	8.0			8/24/24 01:14	N	II
2407724-003	Sulfate	N/A		Water	1228.84 mg/L	10 mL	1230 mg/L	200	8	40			8/24/24 01:20	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-IC-10 **Analyst:** KAWONG **Analysis Lot:** 851806 **Method/Testcode:** 9056A/Chloride

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2410517-09	Chloride	CCV		Water	4.08 mg/L	10 mL	4.08 mg/L	1					8/24/24 01:27	N	II
KQ2410517-09	Fluoride, undistilled	CCV		Water	1.96 mg/L	10 mL	1.96 mg/L	1					8/24/24 01:27	N	II
KQ2410517-09	Nitrate as Nitrogen	CCV		Water	1.97 mg/L	10 mL	1.97 mg/L	1					8/24/24 01:27	N	II
KQ2410517-09	Sulfate	CCV		Water	3.96 mg/L	10 mL	3.96 mg/L	1					8/24/24 01:27	N	II
KQ2410517-10	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/24/24 01:33	N	II
KQ2410517-10	Fluoride, undistilled	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/24/24 01:33	N	II
KQ2410517-10	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/24/24 01:33	N	II
KQ2410517-10	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/24/24 01:33	N	II
K2407724-004	Sulfate	N/A		Water	131.46 mg/L	10 mL	131 mg/L	40	1.6	8.0			8/24/24 01:39	N	II
K2407825-022	Chloride	N/A		Water	118.28 mg/L	10 mL	118 mg/L	40	1.7	8.0			8/24/24 01:45:47	N	II
K2407825-022	Sulfate	N/A		Water	2368.67 mg/L	10 mL	2370 mg/L	400	16	80			8/24/24 01:52	N	II
KQ2410517-11	Chloride	CCV		Water	4.09 mg/L	10 mL	4.09 mg/L	1					8/24/24 01:58	N	II
KQ2410517-11	Fluoride, undistilled	CCV		Water	1.96 mg/L	10 mL	1.96 mg/L	1					8/24/24 01:58	N	II
KQ2410517-11	Nitrate as Nitrogen	CCV		Water	1.98 mg/L	10 mL	1.98 mg/L	1					8/24/24 01:58	N	II
KQ2410517-11	Sulfate	CCV		Water	3.96 mg/L	10 mL	3.96 mg/L	1					8/24/24 01:58	N	II
KQ2410517-12	Chloride	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.05	0.20			8/24/24 02:04	N	II
KQ2410517-12	Fluoride, undistilled	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.010	0.10			8/24/24 02:04	N	II
KQ2410517-12	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.10 mg/L U	1	0.02	0.10			8/24/24 02:04	N	II
KQ2410517-12	Sulfate	CCB		Water	0.00 mg/L	10 mL	0.20 mg/L U	1	0.04	0.20			8/24/24 02:04	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Determination overview IC 10 pipette :Chrome|Bottom 300.0/9056A 8/23/24 KW

	Method name	Determination start	Position	Ident	Dilution	Info 1	Info 2
1	10-082224FAST	2024-08-23 15:38:55 UTC-4	1	CCV	1	300.0/9056A	
2	10-082224FAST	2024-08-23 15:45:12 UTC-4	2	CCB	1	300.0/9056A	
3	10-082224FAST	2024-08-23 15:51:26 UTC-4	3	LCS 851908	1	300.0/9056A	
4	10-082224FAST	2024-08-23 15:57:43 UTC-4	4	R2408138-004	10	300.0 CBN	MWVBR
5	10-082224FAST	2024-08-23 16:03:58 UTC-4	5	R2408138-005	10	300.0 CBN	MWV
6	10-082224FAST	2024-08-23 16:10:15 UTC-4	6	R2408138-006	10	300.0 CBNS	MWU (MWUBR ON CHAIN)
7	10-082224FAST	2024-08-23 16:16:30 UTC-4	7	R2408138-007	10	300.0 CBNS	MWE
8	10-082224FAST	2024-08-23 16:22:45 UTC-4	8	R2408138-001	10	300.0 CBNS	MWRBR
9	10-082224FAST	2024-08-23 16:29:00 UTC-4	9	R2408138-002	10	300.0 BNS	MWJ
10	10-082224FAST	2024-08-23 16:35:16 UTC-4	10	R2408138-003	10	300.0 CBNS	MWSBR
11	10-082224FAST	2024-08-23 16:41:34 UTC-4	11	R2408138-003 MS	10	300.0 CBNS	MWSBR MS
12	10-082224FAST	2024-08-23 16:47:50 UTC-4	12	R2408138-003 MSD	10	300.0 CBNS	MWSBR MSD
13	10-082224FAST	2024-08-23 16:54:05 UTC-4	13	CCV	1	300.0/9056A	
14	10-082224FAST	2024-08-23 17:00:22 UTC-4	14	CCB	1	300.0/9056A	
15	10-082224FAST	2024-08-23 17:06:36 UTC-4	15	DNR	10	300.0 CBNS	MWSBR
16	10-082224FAST	2024-08-23 17:12:51 UTC-4	16	R2408101-001	10	300.0 CBN	
17	10-082224FAST	2024-08-23 17:19:06 UTC-4	17	R2408101-001 MS	10	300.0 CBN	
18	10-082224FAST	2024-08-23 17:25:21 UTC-4	18	R2408101-001 MSD	10	300.0 CBN	
19	10-082224FAST	2024-08-23 17:31:37 UTC-4	19	R2408102-001	10	300.0 CBN	
20	10-082224FAST	2024-08-23 17:37:52 UTC-4	20	R2408161-001	10	300.0NN	TKP
21	10-082224FAST	2024-08-23 17:44:08 UTC-4	21	R2408161-003	10	300.0NN	PTP
22	10-082224FAST	2024-08-23 17:50:23 UTC-4	22	R2408161-002	1	300.0 F	STE
23	10-082224FAST	2024-08-23 17:56:39 UTC-4	23	R2408161-002	10	300.0 NN	STE
24	10-082224FAST	2024-08-23 18:02:55 UTC-4	24	R2408137-001	10	300.0 BNS	MW203D2
25	10-082224FAST	2024-08-23 18:09:10 UTC-4	25	CCV	1	300.0/9056A	
26	10-082224FAST	2024-08-23 18:15:26 UTC-4	26	CCB	1	300.0/9056A	
27	10-082224FAST	2024-08-23 18:21:40 UTC-4	27	LCS 851902	1	300.0/9056A	
28	10-082224FAST	2024-08-23 18:27:56 UTC-4	28	R2408137-003	10	300.0 CBNS	MW208D
29	10-082224FAST	2024-08-23 18:34:11 UTC-4	29	R2408137-005	10	300.0 CBNS	MW208D2
30	10-082224FAST	2024-08-23 18:40:26 UTC-4	30	R2408137-007	10	300.0 CBNS	MW209D
31	10-082224FAST	2024-08-23 18:46:41 UTC-4	31	R2408137-009	10	300.0 BN	MW209S
32	10-082224FAST	2024-08-23 18:52:56 UTC-4	32	R2408137-011	10	300.0 CBNS	MW204D
33	10-082224FAST	2024-08-23 18:59:11 UTC-4	33	R2408137-013	10	300.0 CBNS	MW204S
34	10-082224FAST	2024-08-23 19:05:26 UTC-4	34	R2408137-013 MS	10	300.0 CBNS	MW204S MS
35	10-082224FAST	2024-08-23 19:11:42 UTC-4	35	R2408137-013 MSD	10	300.0 CBNS	MW204S MSD
36	10-082224FAST	2024-08-23 19:17:57 UTC-4	36	R2408137-015	10	300.0 CBNS	DUP X
37	10-082224FAST	2024-08-23 19:24:12 UTC-4	37	CCV	1	300.0/9056A	
38	10-082224FAST	2024-08-23 19:30:28 UTC-4	38	CCB	1	300.0/9056A	
39	10-082224FAST	2024-08-23 19:36:44 UTC-4	39	R2408137-017	10	300.0 CBNS	MW203S
40	10-082224FAST	2024-08-23 19:42:59 UTC-4	40	R2408137-019	10	300.0 CBNS	MW203D
41	10-082224FAST	2024-08-23 19:49:14 UTC-4	41	R2408137-019 MS!	10	300.0 CBNS	MW203D MS!
42	10-082224FAST	2024-08-23 19:55:30 UTC-4	42	R2408137-019 MSD!	10	300.0 CBNS	MW203D MSD!
43	10-082224FAST	2024-08-23 20:01:45 UTC-4	43	R2408137-021	10	300.0 CBNS	MW206S
44	10-082224FAST	2024-08-23 20:08:00 UTC-4	44	R2408137-023	10	300.0 CBNS	MW206D
45	10-082224FAST	2024-08-23 20:14:15 UTC-4	45	R2408137-025	10	300.0 CBNS	MW207S
46	10-082224FAST	2024-08-23 20:20:35 UTC-4	46	R2408137-027	10	300.0 CBNS	MW207D
47	10-082224FAST	2024-08-23 20:26:49 UTC-4	47	CCV	1	300.0/9056A	
48	10-082224FAST	2024-08-23 20:33:05 UTC-4	48	CCB	1	300.0/9056A	
49	10-082224FAST	2024-08-23 20:39:20 UTC-4	49	LCS 851805	1	300.0/9056A	
50	10-082224FAST	2024-08-23 20:45:36 UTC-4	50	R2407124-005	10	300.0 CS	
51	10-082224FAST	2024-08-23 20:51:51 UTC-4	51	R2407124-005 MS!	10	300.0 CS	
52	10-082224FAST	2024-08-23 20:58:06 UTC-4	52	R2407124-005 MSD!	10	300.0 CS	
53	10-082224FAST	2024-08-23 21:04:21 UTC-4	53	R2407626-001	20	300.0 S	
54	10-082224FAST	2024-08-23 21:10:37 UTC-4	54	R2407626-001	200	300.0 C	
55	10-082224FAST	2024-08-23 21:16:52 UTC-4	55	R2407627-001	10	300.0 CS	
56	10-082224FAST	2024-08-23 21:23:07 UTC-4	56	R2407457-005	10	300.0 C	
57	10-082224FAST	2024-08-23 21:29:22 UTC-4	57	R2407457-007	50	300.0 C	
58	10-082224FAST	2024-08-23 21:35:38 UTC-4	58	R2407815-001	50	300.0 CS	
59	10-082224FAST	2024-08-23 21:41:53 UTC-4	59	CCV	1	300.0/9056A	
60	10-082224FAST	2024-08-23 21:48:08 UTC-4	60	CCB	1	300.0/9056A	
61	10-082224FAST	2024-08-23 21:54:23 UTC-4	61	R2407667-001	1	300.0 F	
62	10-082224FAST	2024-08-23 22:00:38 UTC-4	62	R2407792-004	1	300.0 F	
63	10-082224FAST	2024-08-23 22:06:53 UTC-4	63	R2407792-004	10	300.0 C	

Determination overview

	Method name	Determination start	Position	Ident	Dilution	Info 1	Info 2
64	10-082224FAST	2024-08-23 22:13:09 UTC-4	64	R2407792-004	100	300.0 S	
65	10-082224FAST	2024-08-23 22:19:24 UTC-4	65	R2407792-012	1	300.0 F	
66	10-082224FAST	2024-08-23 22:25:39 UTC-4	66	R2407792-012	10	300.0 C	
67	10-082224FAST	2024-08-23 22:31:55 UTC-4	67	R2407792-012	100	300.0 S	
68	10-082224FAST	2024-08-23 22:38:10 UTC-4	68	R2407792-012 MS	100	300.0 S	
69	10-082224FAST	2024-08-23 22:44:26 UTC-4	69	R2407792-012 MSD	100	300.0 S	
70	10-082224FAST	2024-08-23 22:50:41 UTC-4	70	R2407830-002	10	300.0 S	
71	10-082224FAST	2024-08-23 22:56:56 UTC-4	71	CCV	1	300.0/9056A	
72	10-082224FAST	2024-08-23 23:03:12 UTC-4	72	CCB	1	300.0/9056A	
73	10-082224FAST	2024-08-23 23:09:26 UTC-4	73	LCS 851806	1	300.0/9056A	
74	10-082224FAST	2024-08-23 23:15:42 UTC-4	74	R2407881-001 DNR	2	300.0 F	
75	10-082224FAST	2024-08-23 23:21:57 UTC-4	75	R2407881-001 MS! DNR	2	300.0 F	
76	10-082224FAST	2024-08-23 23:28:12 UTC-4	76	R2407881-001 MSD! DNR	2	300.0 F	
77	10-082224FAST	2024-08-23 23:34:28 UTC-4	77	R2407939-002 DNR	1	300.0 F	
78	10-082224FAST	2024-08-23 23:40:42 UTC-4	78	R2407939-003	3	300.0 F	
79	10-082224FAST	2024-08-23 23:46:58 UTC-4	79	R2407830-003 DNR	10	300.0 S	
80	10-082224FAST	2024-08-23 23:53:13 UTC-4	80	R2407830-003 MS DNR	10	300.0 S	
81	10-082224FAST	2024-08-23 23:59:28 UTC-4	81	R2407830-003 MSD DNR	10	300.0 S	
82	10-082224FAST	2024-08-24 00:05:44 UTC-4	82	R2407633-001	400	9056A S	
83	10-082224FAST	2024-08-24 00:11:58 UTC-4	83	CCV	1	300.0/9056A	
84	10-082224FAST	2024-08-24 00:18:13 UTC-4	84	CCB	1	300.0/9056A	
85	10-082224FAST	2024-08-24 00:24:32 UTC-4	85	R2407573-006	20	9056A C	
86	10-082224FAST	2024-08-24 00:30:47 UTC-4	86	R2407573-006	100	9056A S	
87	10-082224FAST	2024-08-24 00:37:02 UTC-4	87	R2407573-006 MS	100	9056A S	
88	10-082224FAST	2024-08-24 00:43:17 UTC-4	88	R2407573-006 MSD	100	9056A S	
89	10-082224FAST	2024-08-24 00:49:32 UTC-4	89	R2407573-010	200	9056A S	
90	10-082224FAST	2024-08-24 00:55:47 UTC-4	90	R2407573-012	50	9056A S	
91	10-082224FAST	2024-08-24 01:02:02 UTC-4	91	R2407573-013	50	9056A S	
92	10-082224FAST	2024-08-24 01:08:18 UTC-4	92	R2407724-001	100	9056A S	
93	10-082224FAST	2024-08-24 01:14:32 UTC-4	93	R2407724-002	40	9056A S	
94	10-082224FAST	2024-08-24 01:20:47 UTC-4	94	R2407724-003	200	9056A S	
95	10-082224FAST	2024-08-24 01:27:02 UTC-4	95	CCV	1	300.0/9056A	
96	10-082224FAST	2024-08-24 01:33:18 UTC-4	96	CCB	1	300.0/9056A	
97	10-082224FAST	2024-08-24 01:39:32 UTC-4	97	R2407724-004	40	9056A S	
98	10-082224FAST	2024-08-24 01:45:47 UTC-4	98	R2407825-022	40	9056A C	
99	10-082224FAST	2024-08-24 01:52:02 UTC-4	99	R2407825-022	400	9056A S	
100	10-082224FAST	2024-08-24 01:58:17 UTC-4	100	CCV	1	300.0/9056A	
101	10-082224FAST	2024-08-24 02:04:33 UTC-4	101	CCB	1	300.0/9056A	

Sample Dilutions

Final Volume: 8-10mL - IC#3,10

Analyst: KW
Instrument: IC 10

Date 08/23/24
Analysis 300.0/9056A

Common Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor
1/2	DI	4.5	4.5	1/2												
1/3	DI	3	6	1/3												
1/4	DI	2	6	1/4												
1/5	DI	2	8	1/5												
1/10	DI	1	9	1/10												
1/20	DI	3	3	1/2	1	9	1/20									
1/30	DI	3	6	1/3	1	9	1/30									
1/40	DI	1	3	1/4	1	9	1/40									
1/50	DI	1	4	1/5	1	9	1/50									
1/100	DI	1	9	1/10	1	9	1/100									
1/200	DI	3	3	1/2	1	9	1/20	1	9	1/200						
1/300	DI	3	6	1/3	1	9	1/30	1	9	1/300						
1/400	DI	1	3	1/4	1	9	1/40	1	9	1/400						
1/500	DI	1	4	1/5	1	9	1/50	1	9	1/500						
1/1000	DI	1	9	1/10	1	9	1/100	1	9	1/1000						
1/2000	DI	3	3	1/2	1	9	1/20	1	9	1/200	1	9	1/2000			
1/3000	DI	3	6	1/3	1	9	1/30	1	9	1/300	1	9	1/3000			
1/4000	DI	1	3	1/4	1	9	1/40	1	9	1/400	1	9	1/4000			
1/10000	DI	1	9	1/10	1	9	1/100	1	9	1/1000	1	9	1/10000			
1/20000	DI	1	1	1/2	1	9	1/20	1	9	1/200	1	9	1/2000	1	9	1/20000
1/40000	DI	1	3	1/4	1	9	1/40	1	9	1/400	1	9	1/4000	1	9	1/40000
1/100000	DI	1	9	1/10	1	9	1/100	1	9	1/1000	1	9	1/10000	1	9	1/100000

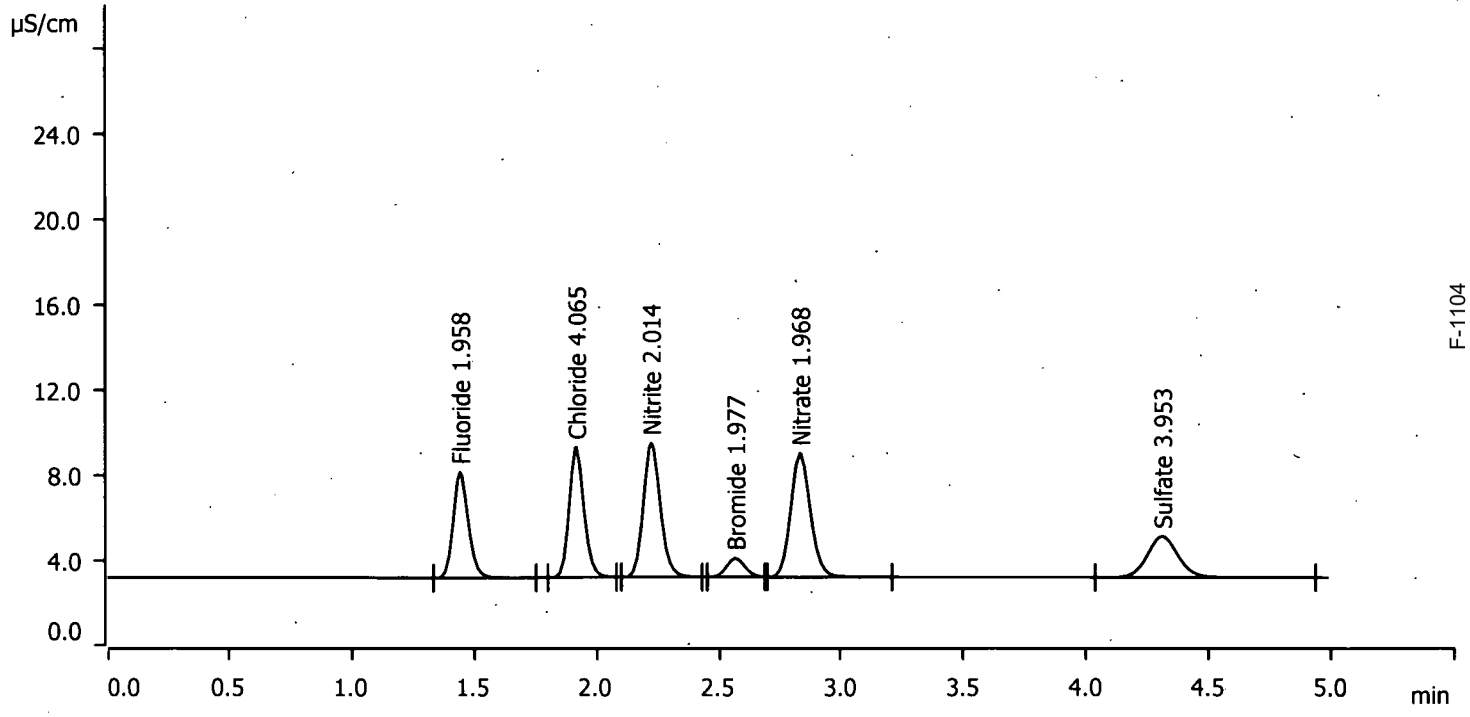
Special Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor

Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-08-23 15:38:55 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90615
Sample Position	1
Comment 1	300.0/9056A
Comment 2	

Anions



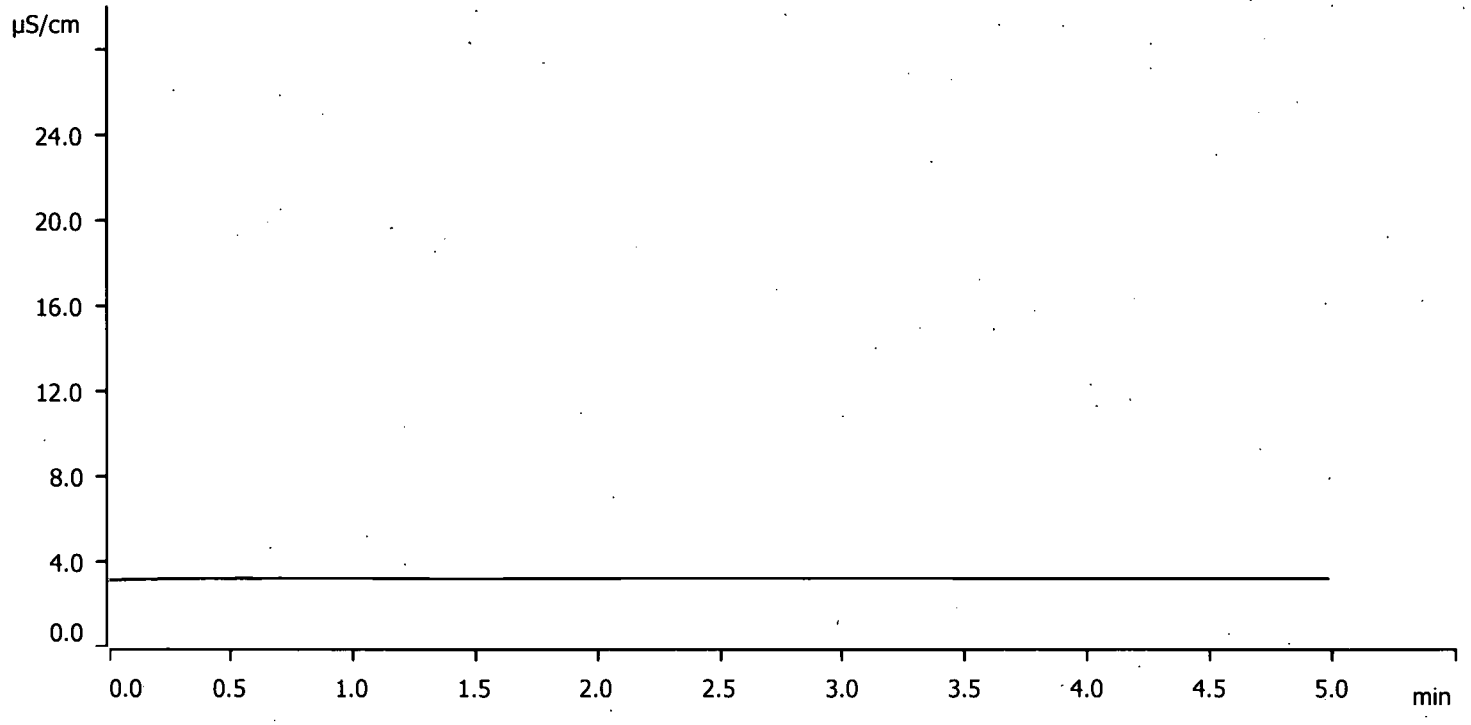
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.353	1.958	Fluoride	BB
2	1.92	0.429	4.065	Chloride	BB
3	2.23	0.505	2.014	Nitrite	BB
4	2.57	0.076	1.977	Bromide	BB
5	2.83	0.529	1.968	Nitrate	BB
6	4.31	0.284	3.953	Sulfate	BB

Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-08-23 15:45:12 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90616
Sample Position	2
Comment 1	300.0/9056A
Comment 2	

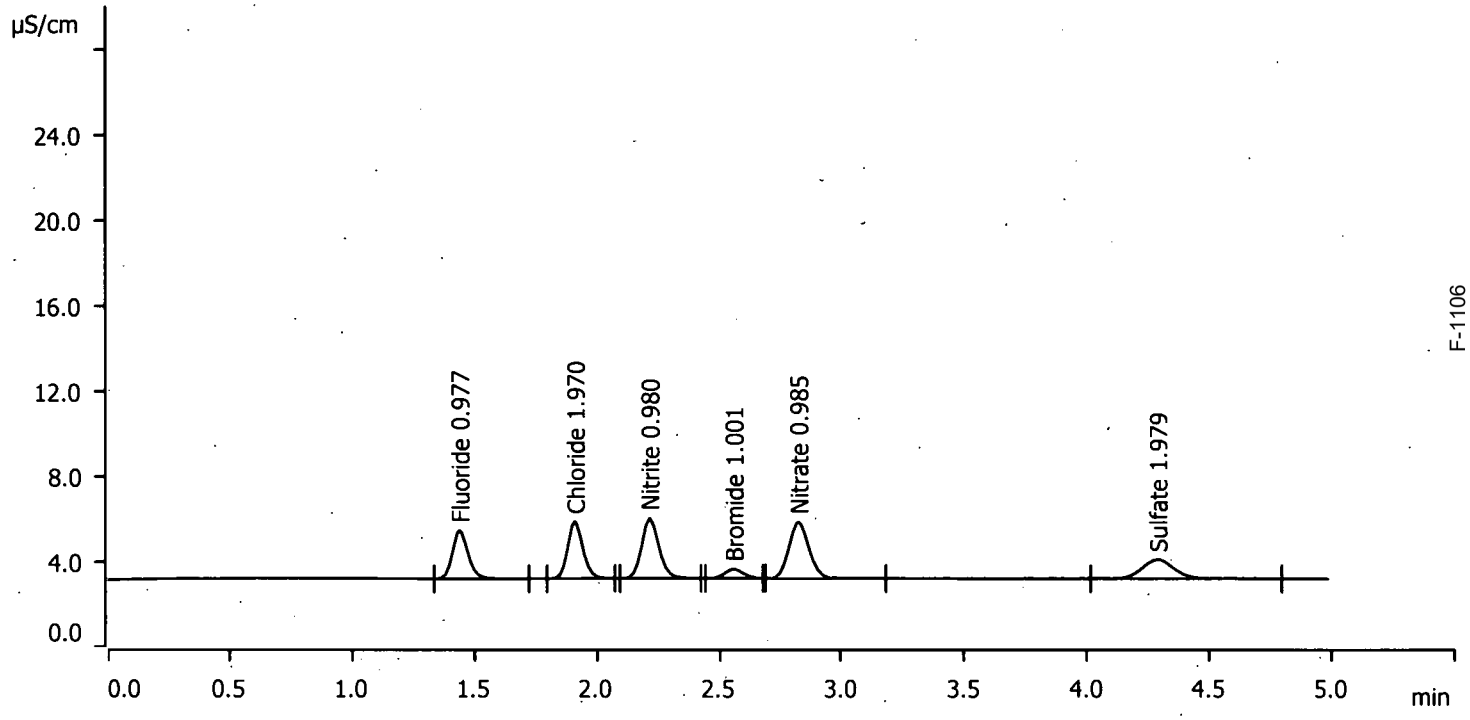
Anions



Sample data

Ident	LCS
Sample type	Check standard 2
Determination start	2024-08-23 15:51:26 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90617
Sample Position	3
Comment 1	300.0/9056A
Comment 2	

Anions



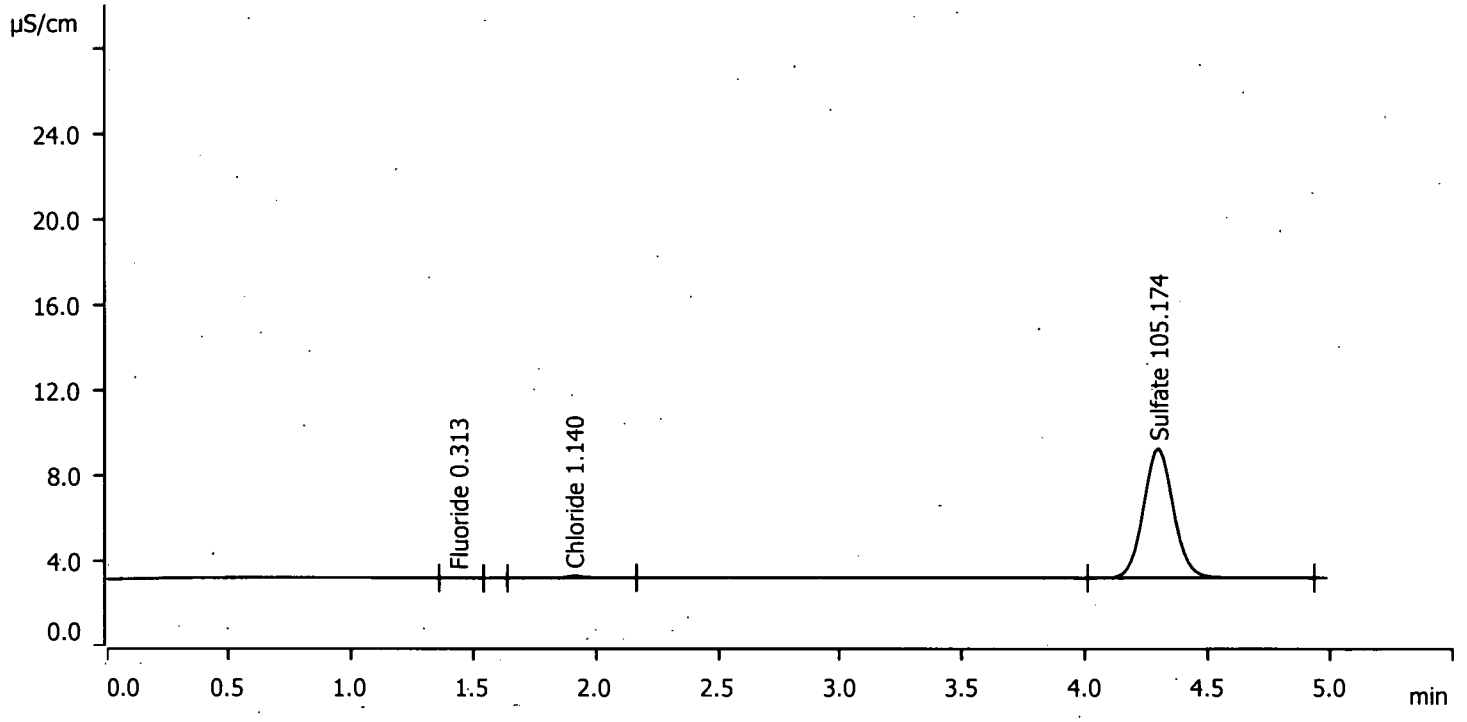
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.166	0.977	Fluoride	BB
2	1.91	0.194	1.970	Chloride	BB
3	2.22	0.232	0.980	Nitrite	BB
4	2.56	0.037	1.001	Bromide	BB
5	2.83	0.247	0.985	Nitrate	BB
6	4.29	0.136	1.979	Sulfate	BB

Sample data

Ident	R2408138-004
Sample type	Sample
Determination start	2024-08-23 15:57:43 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90618
Sample Position	4
Comment 1	300.0 CBN
Comment 2	MWVBR

Anions



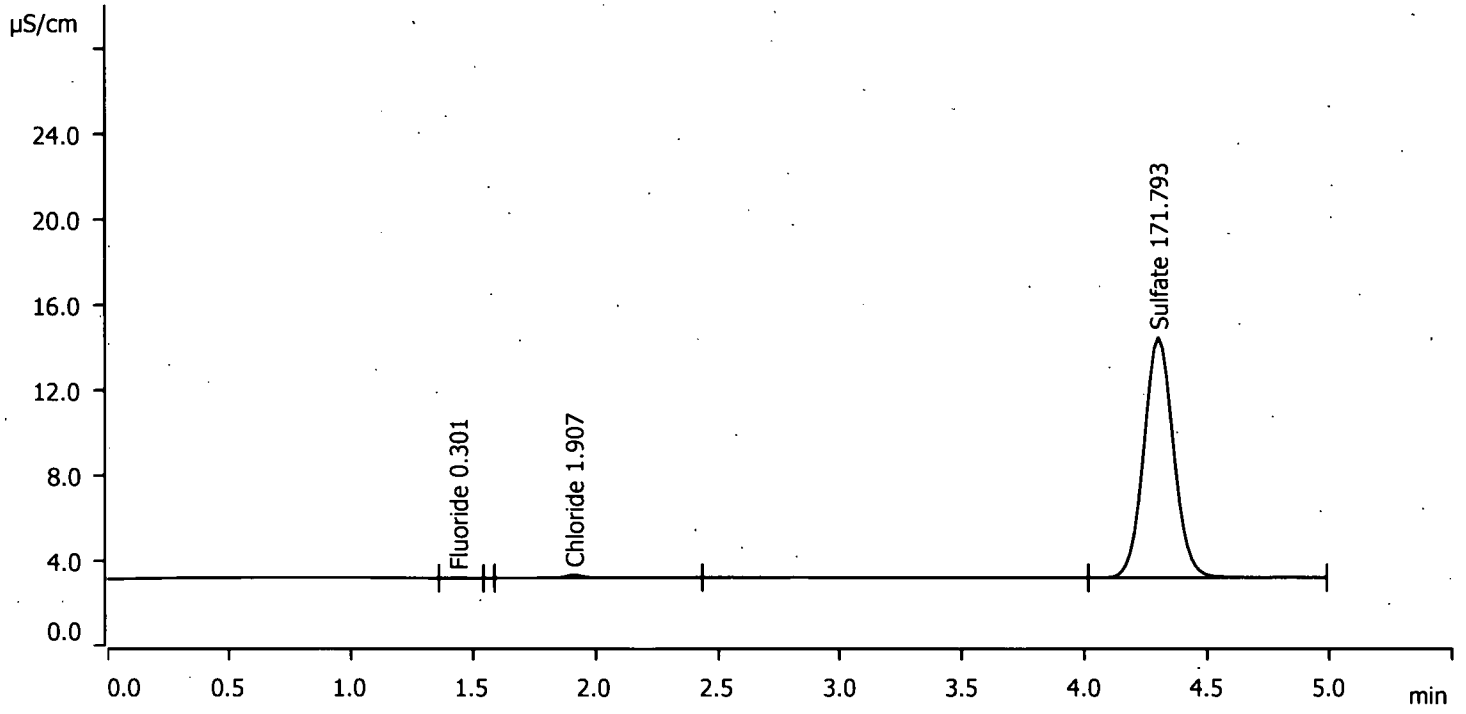
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.002	0.313	Fluoride	BB
2	1.91	0.008	1.140	Chloride	BB
3	4.30	0.860	105.174	Sulfate	BB

Sample data

Ident	R2408138-005
Sample type	Sample
Determination start	2024-08-23 16:03:58 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90619
Sample Position	5
Comment 1	300.0 CBN
Comment 2	MWV

Anions



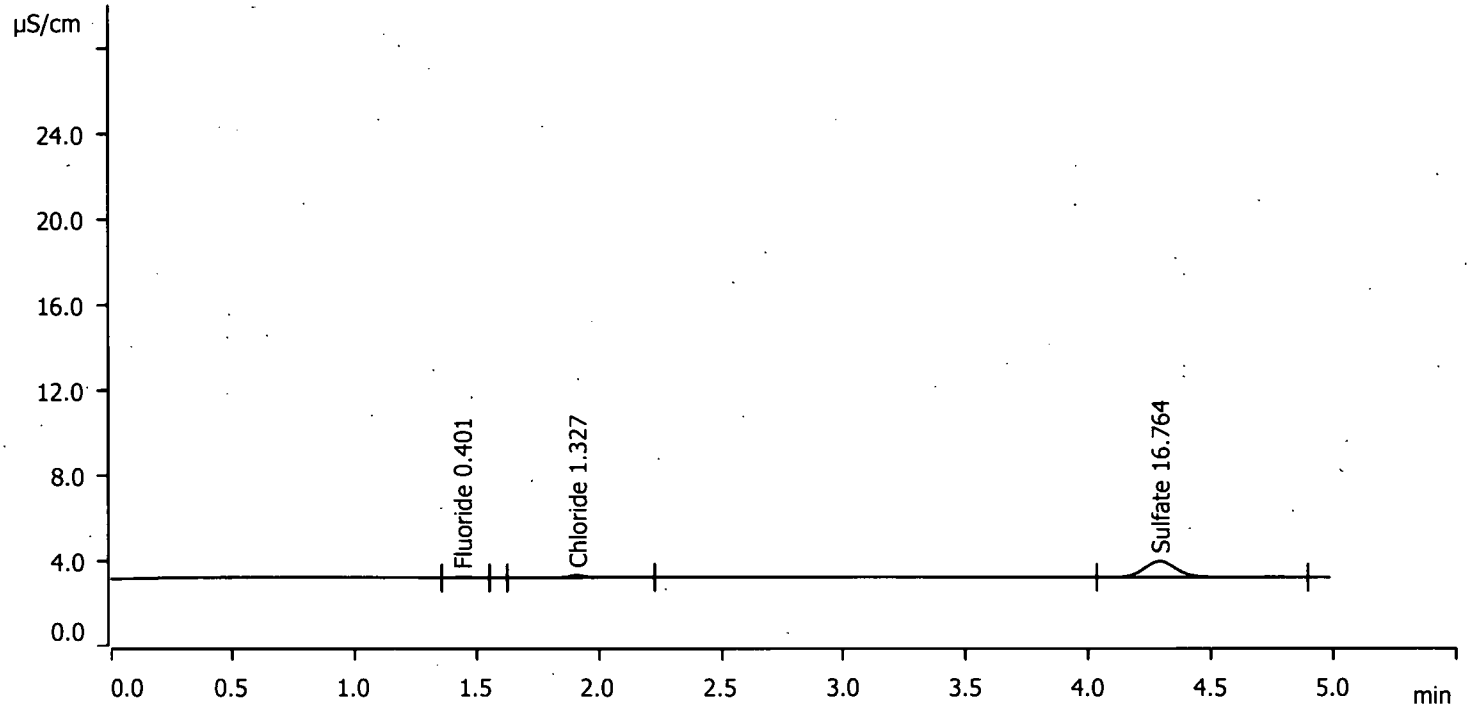
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.001	0.301	Fluoride	BB
2	1.92	0.015	1.907	Chloride	BB
3	4.30	1.578	171.793	Sulfate	BB

Sample data

Ident	R2408138-006
Sample type	Sample
Determination start	2024-08-23 16:10:15 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90620
Sample Position	6
Comment 1	300.0 CBNS
Comment 2	MWU (MWUBR ON CHAIN)

Anions



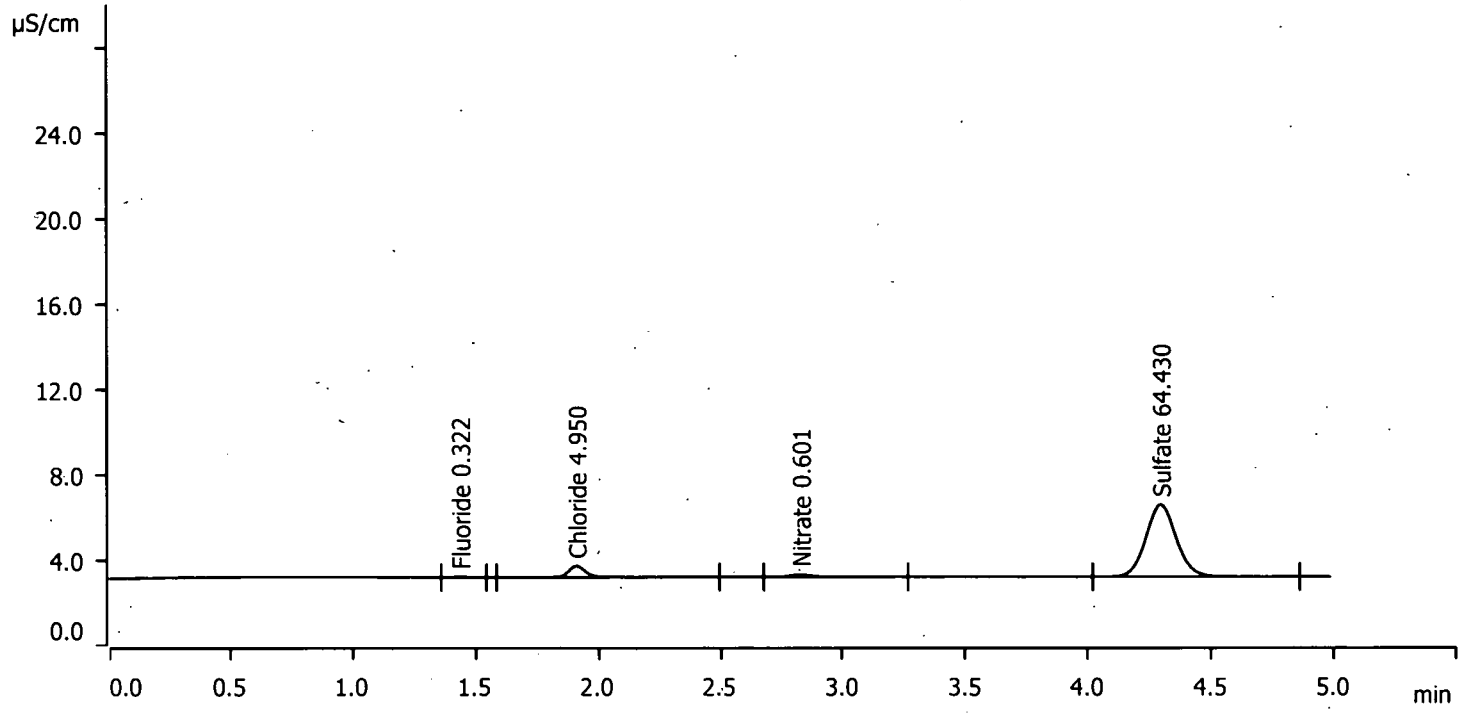
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.003	0.401	Fluoride	BB
2	1.91	0.010	1.327	Chloride	BB
3	4.29	0.115	16.764	Sulfate	BB

Sample data

Ident	R2408138-007
Sample type	Sample
Determination start	2024-08-23 16:16:30 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90621
Sample Position	7
Comment 1	300.0 CBNS
Comment 2	MWE

Anions



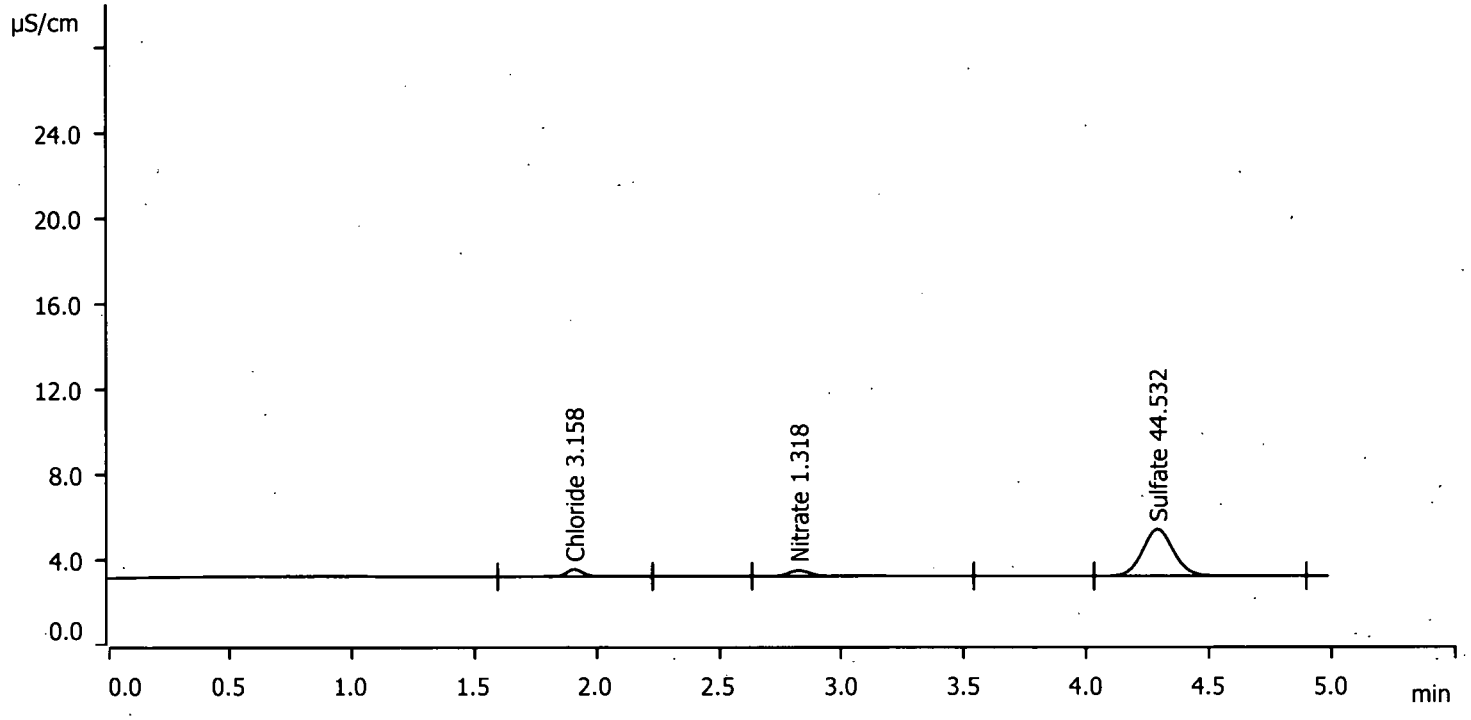
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.002	0.322	Fluoride	BB
2	1.91	0.044	4.950	Chloride	BB
3	2.83	0.011	0.601	Nitrate	BB
4	4.30	0.487	64.430	Sulfate	BB

Sample data

Ident	R2408138-001
Sample type	Sample
Determination start	2024-08-23 16:22:45 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90622
Sample Position	8
Comment 1	300.0 CBNS
Comment 2	MWRBR

Anions



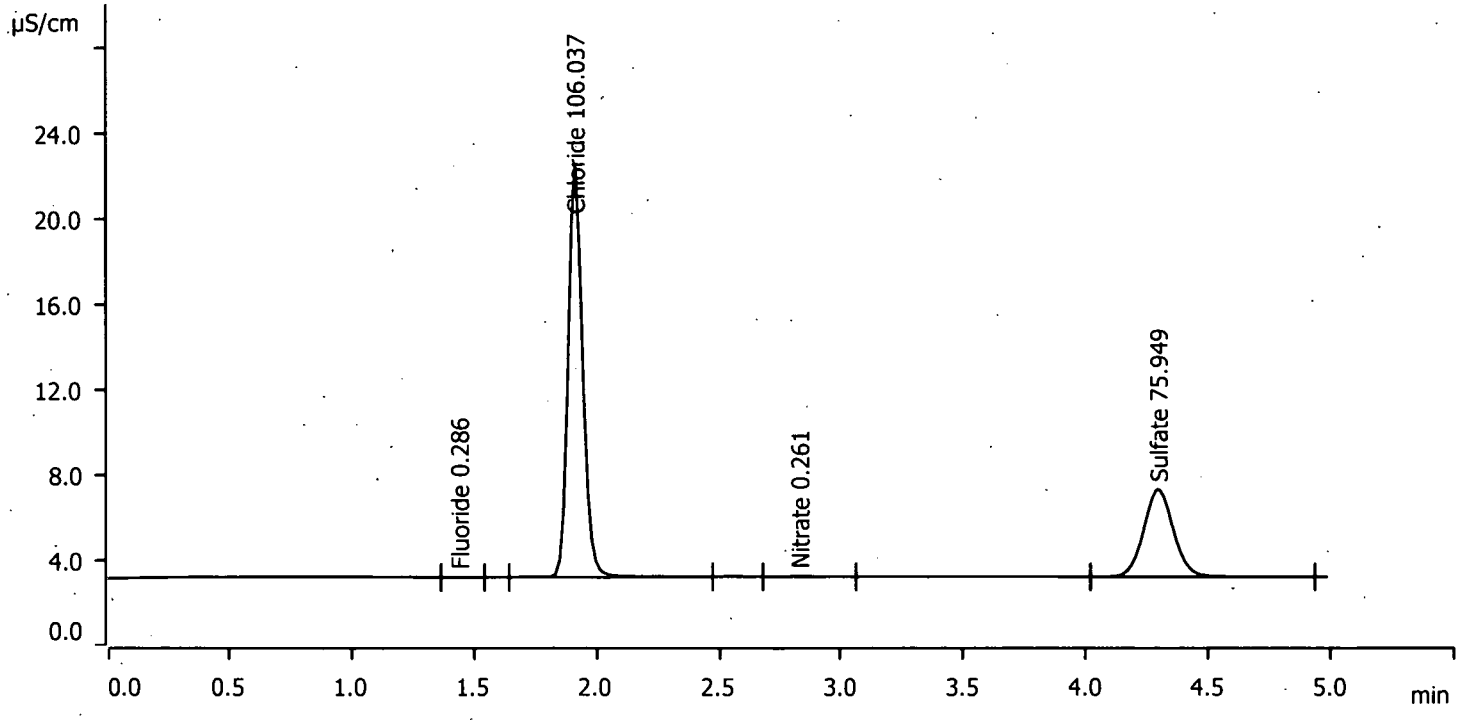
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.91	0.027	3.158	Chloride	BB
2	2.83	0.028	1.318	Nitrate	BB
3	4.29	0.323	44.532	Sulfate	BB

Sample data

Ident	R2408138-002
Sample type	Sample
Determination start	2024-08-23 16:29:00 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90623
Sample Position	9
Comment 1	300.0 BNS
Comment 2	MWJ

Anions



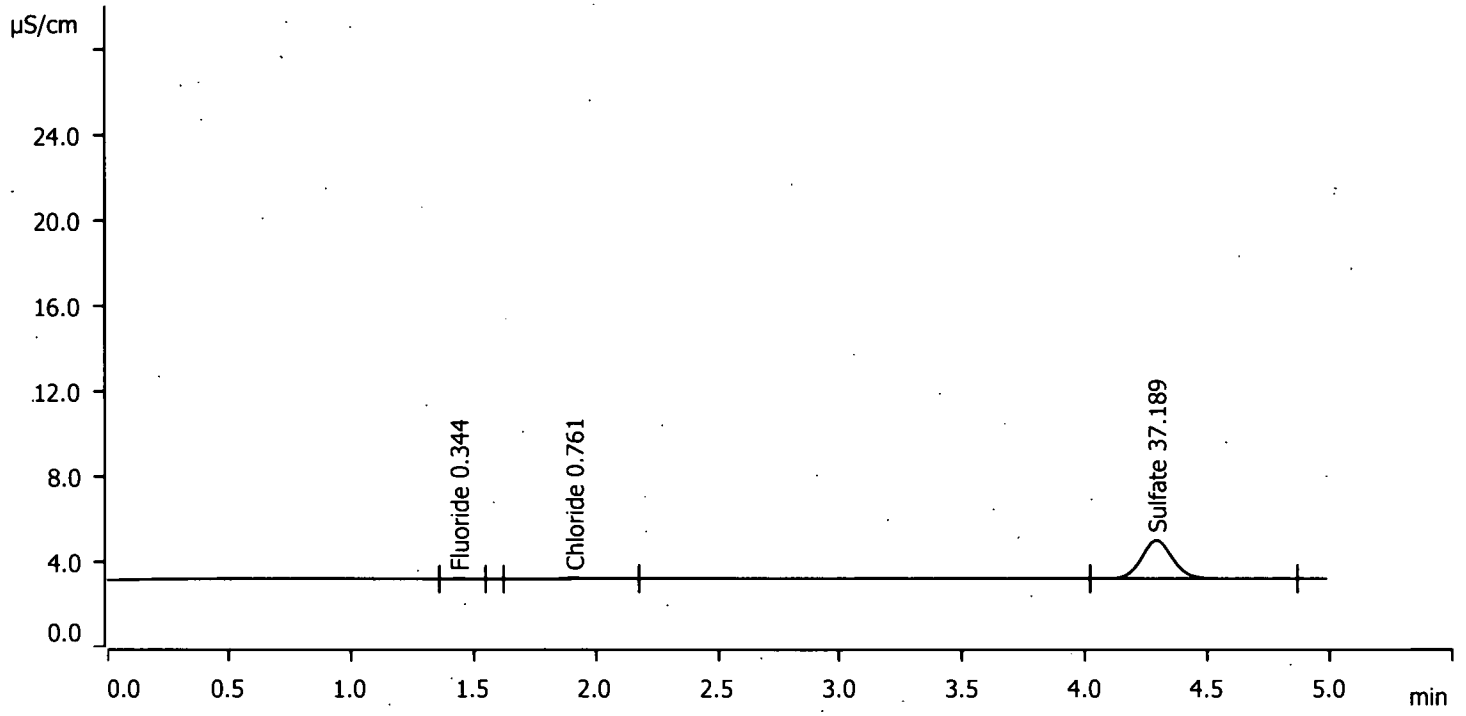
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.001	0.286	Fluoride	BB
2	1.92	1.337	106.037	Chloride	BB
3	2.83	0.002	0.261	Nitrate	BB
4	4.29	0.587	75.949	Sulfate	BB

Sample data

Ident	R2408138-003
Sample type	Sample
Determination start	2024-08-23 16:35:16 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90624
Sample Position	10
Comment 1	300.0 CBNS
Comment 2	MWSBR

Anions



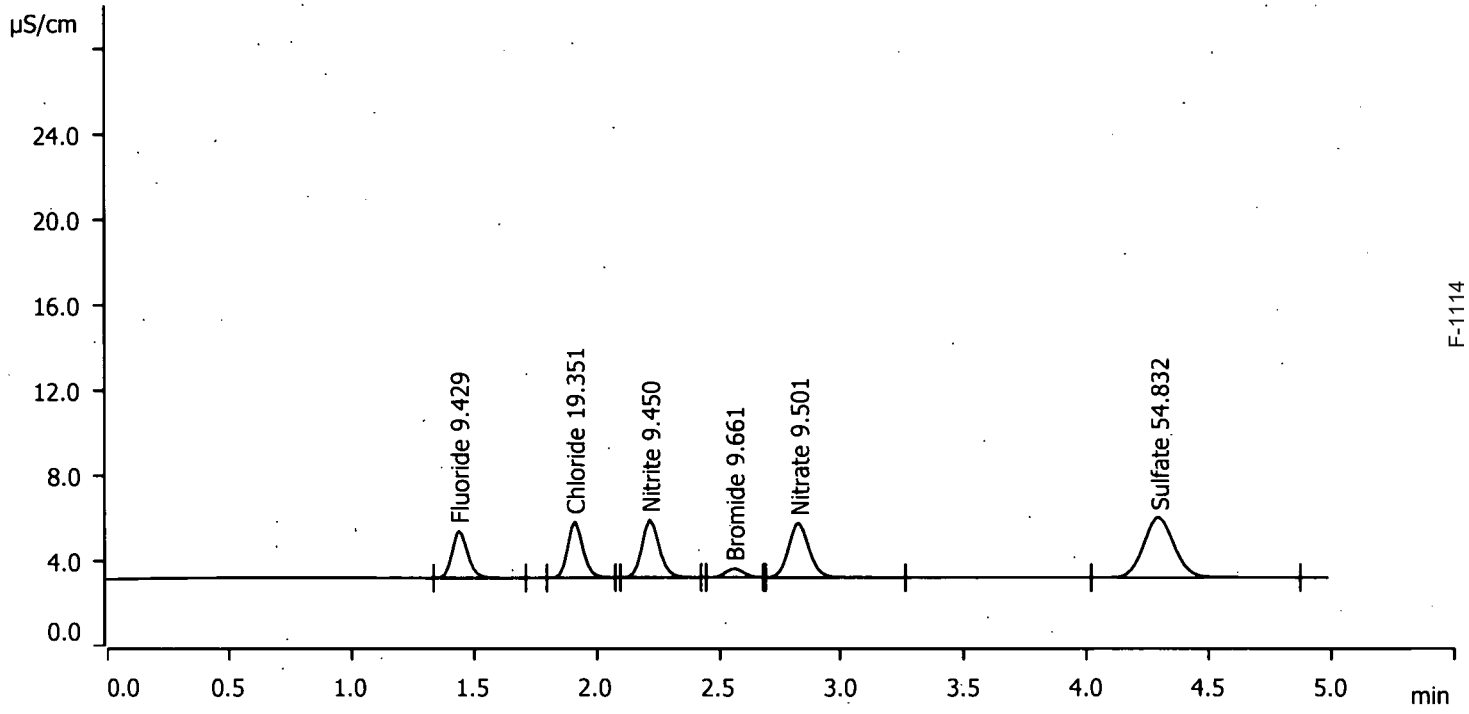
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.002	0.344	Fluoride	BB
2	1.91	0.004	0.761	Chloride	BB
3	4.29	0.266	37.189	Sulfate	BB

Sample data

Ident	R2408138-003 MS
Sample type	Sample
Determination start	2024-08-23 16:41:34 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90625
Sample Position	11
Comment 1	300.0 CBNS
Comment 2	MWSBR MS

Anions



Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.160	9.429	Fluoride	BB
2	1.92	0.190	19.351	Chloride	BB
3	2.22	0.223	9.450	Nitrite	BB
4	2.56	0.036	9.661	Bromide	BB
5	2.83	0.238	9.501	Nitrate	BB
6	4.30	0.406	54.832	Sulfate	BB

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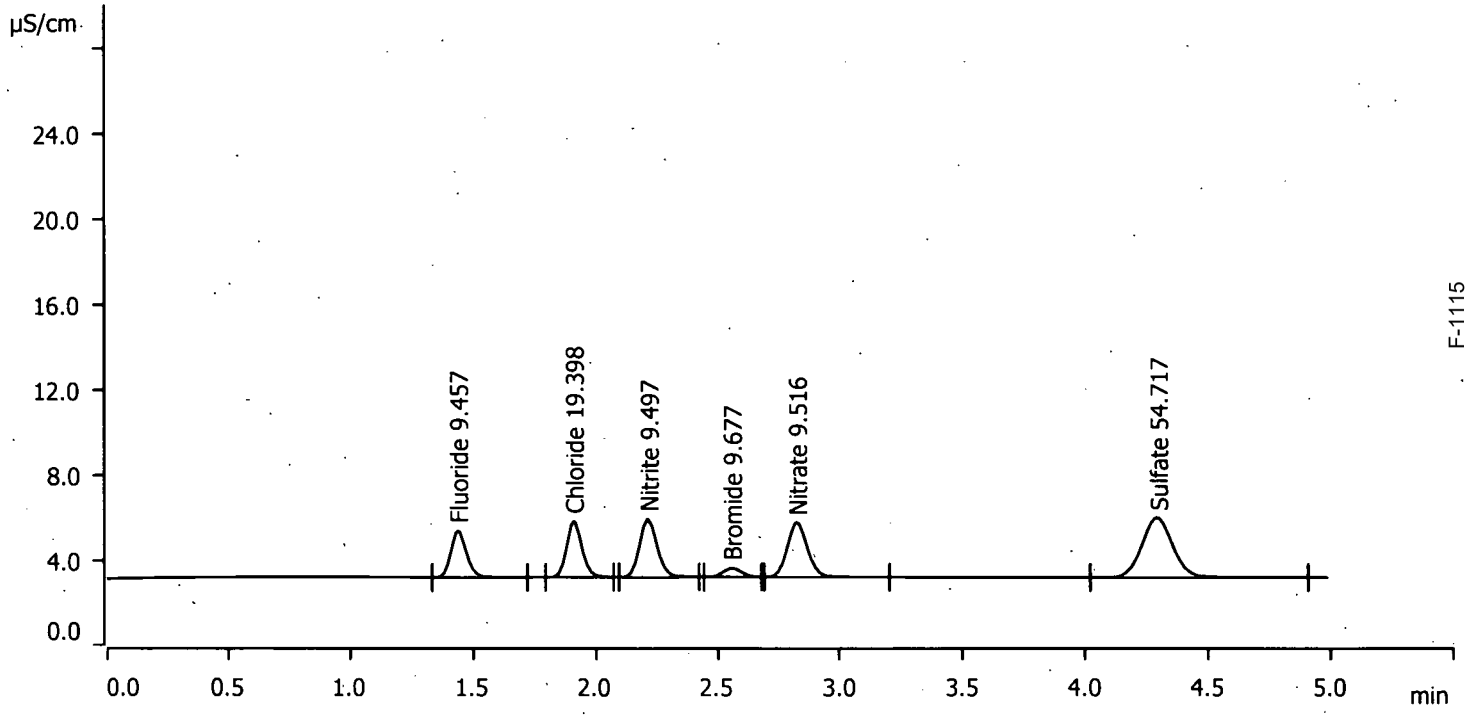
Sample data

Ident	R2408138-003 MSD
Sample type	Sample
Determination start	2024-08-23 16:47:50 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90626
Sample Position	12
Comment 1	300.0 CBNS
Comment 2	MWSBR MSD

Anions



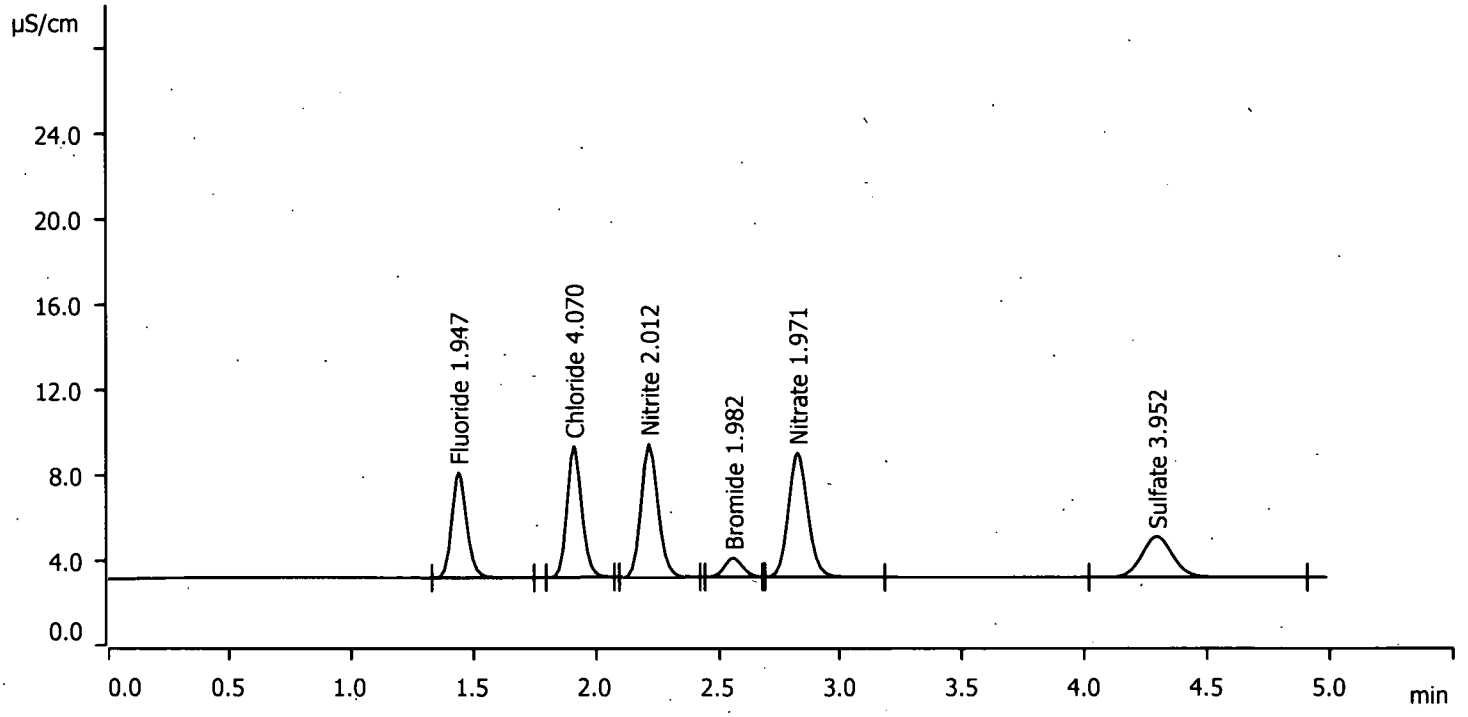
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.161	9.457	Fluoride	BB
2	1.91	0.190	19.398	Chloride	BB
3	2.22	0.224	9.497	Nitrite	BB
4	2.56	0.036	9.677	Bromide	BB
5	2.83	0.238	9.516	Nitrate	BB
6	4.29	0.405	54.717	Sulfate	BB

Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-08-23 16:54:05 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90627
Sample Position	13
Comment 1	300.0/9056A
Comment 2	

Anions



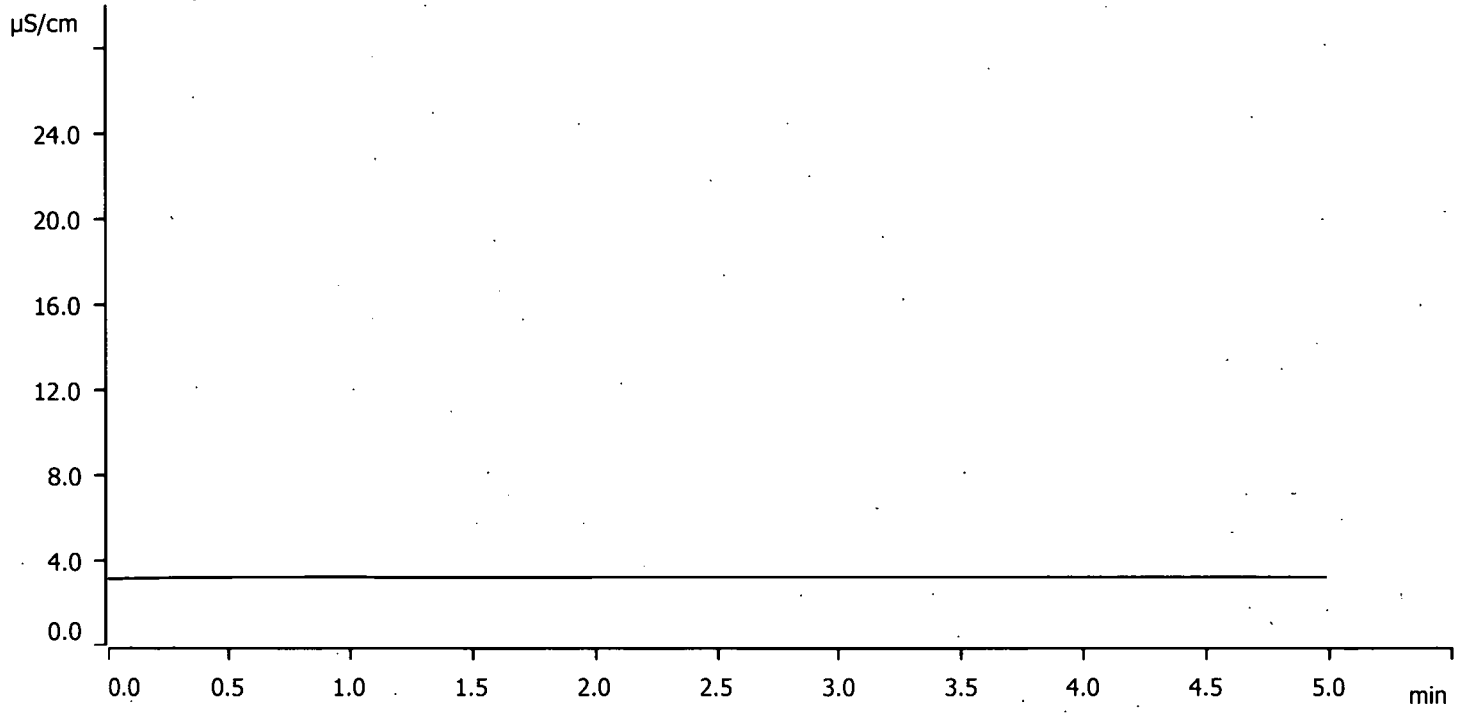
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.350	1.947	Fluoride	BB
2	1.91	0.429	4.070	Chloride	BB
3	2.22	0.504	2.012	Nitrite	BB
4	2.56	0.076	1.982	Bromide	BB
5	2.83	0.530	1.971	Nitrate	BB
6	4.29	0.284	3.952	Sulfate	BB

Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-08-23 17:00:22 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90628
Sample Position	14
Comment 1	300.0/9056A
Comment 2	

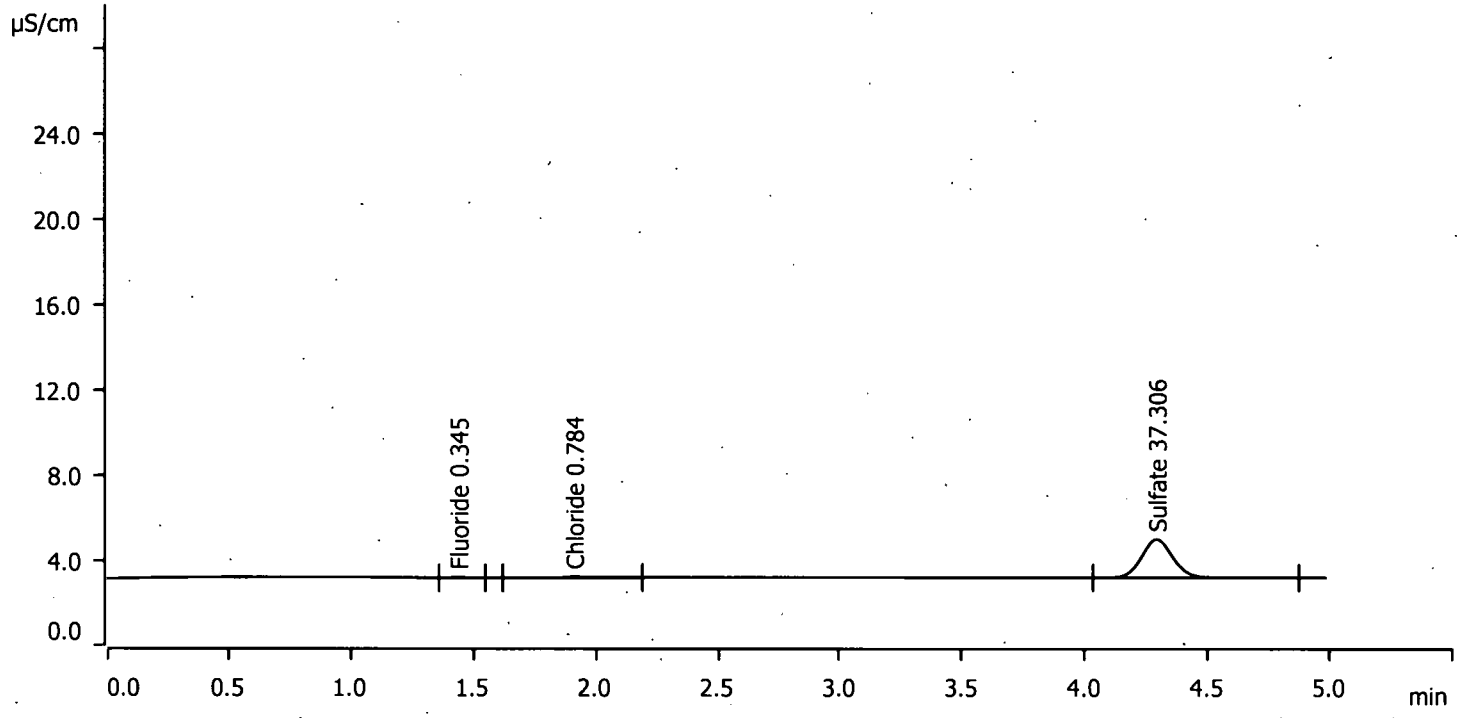
Anions



Sample data

Ident	DNR
Sample type	Sample
Determination start	2024-08-23 17:06:36 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90629
Sample Position	15
Comment 1	300.0 CBNS
Comment 2	MWSBR

Anions



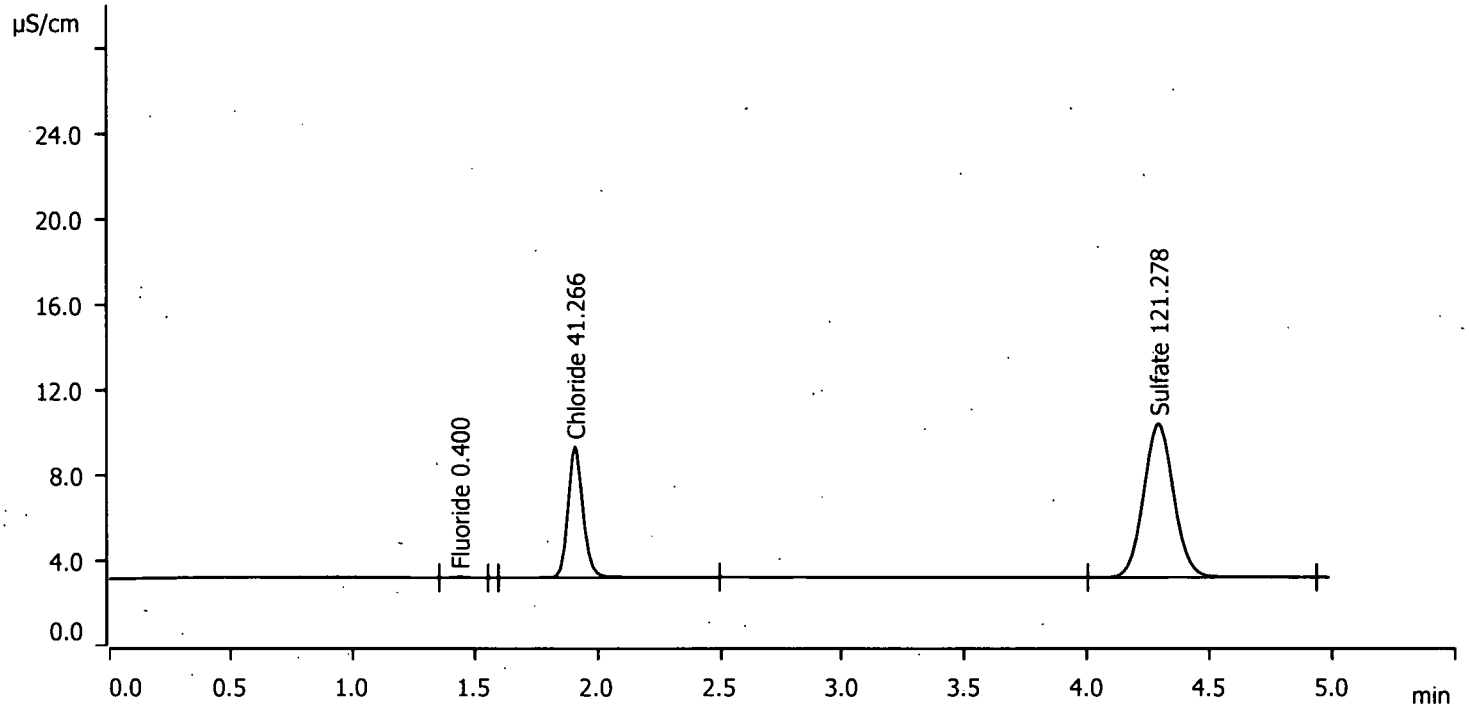
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.002	0.345	Fluoride	BB
2	1.92	0.005	0.784	Chloride	BB
3	4.29	0.267	37.306	Sulfate	BB

Sample data

Ident	R2408101-001
Sample type	Sample
Determination start	2024-08-23 17:12:51 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90630
Sample Position	16
Comment 1	300.0 CBN
Comment 2	

Anions



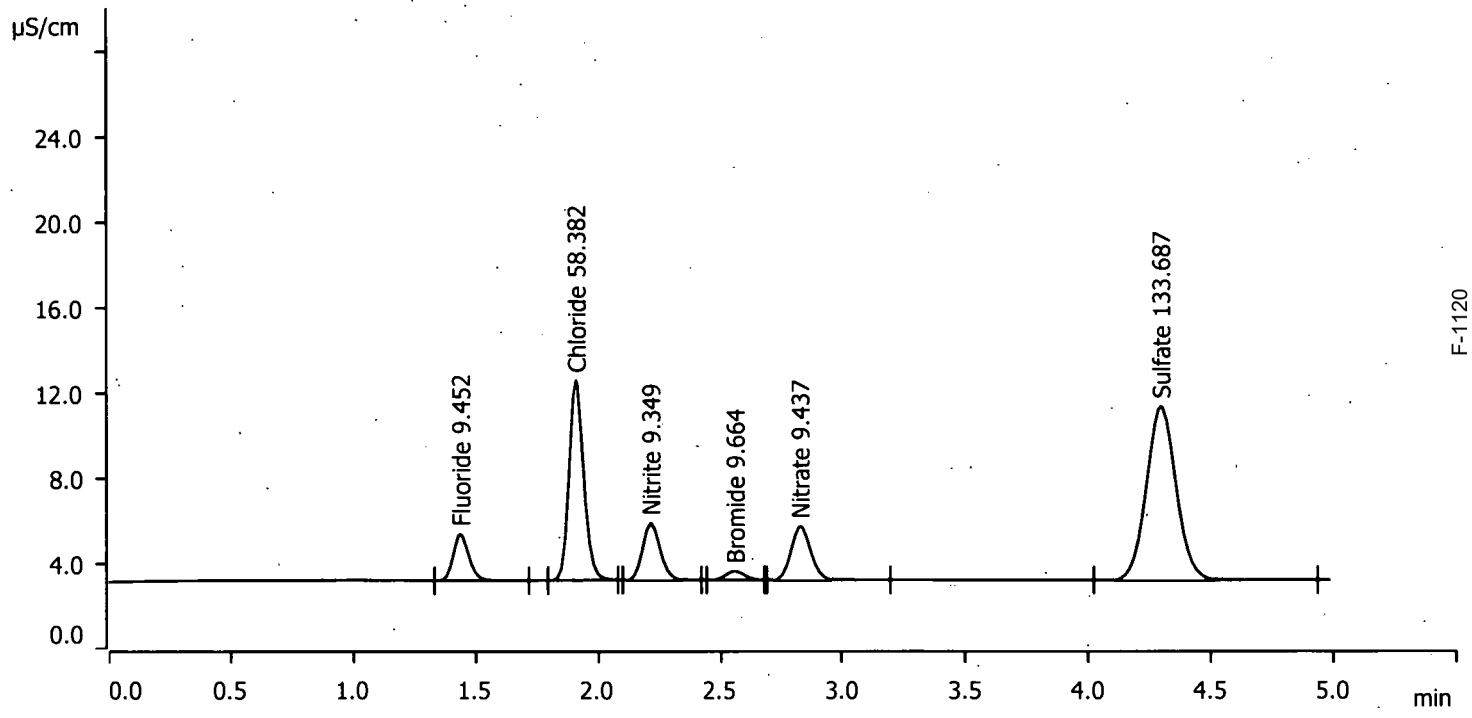
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.003	0.400	Fluoride	BB
2	1.91	0.436	41.266	Chloride	BB
3	4.29	1.021	121.278	Sulfate	BB

Sample data

Ident	R2408101-001 MS
Sample type	Sample
Determination start	2024-08-23 17:19:06 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90631
Sample Position	17
Comment 1	300.0 CBN
Comment 2	

Anions



Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.161	9.452	Fluoride	BB
2	1.91	0.649	58.382	Chloride	BB
3	2.22	0.221	9.349	Nitrite	BB
4	2.56	0.036	9.664	Bromide	BB
5	2.83	0.236	9.437	Nitrate	BB
6	4.29	1.150	133.687	Sulfate	BB

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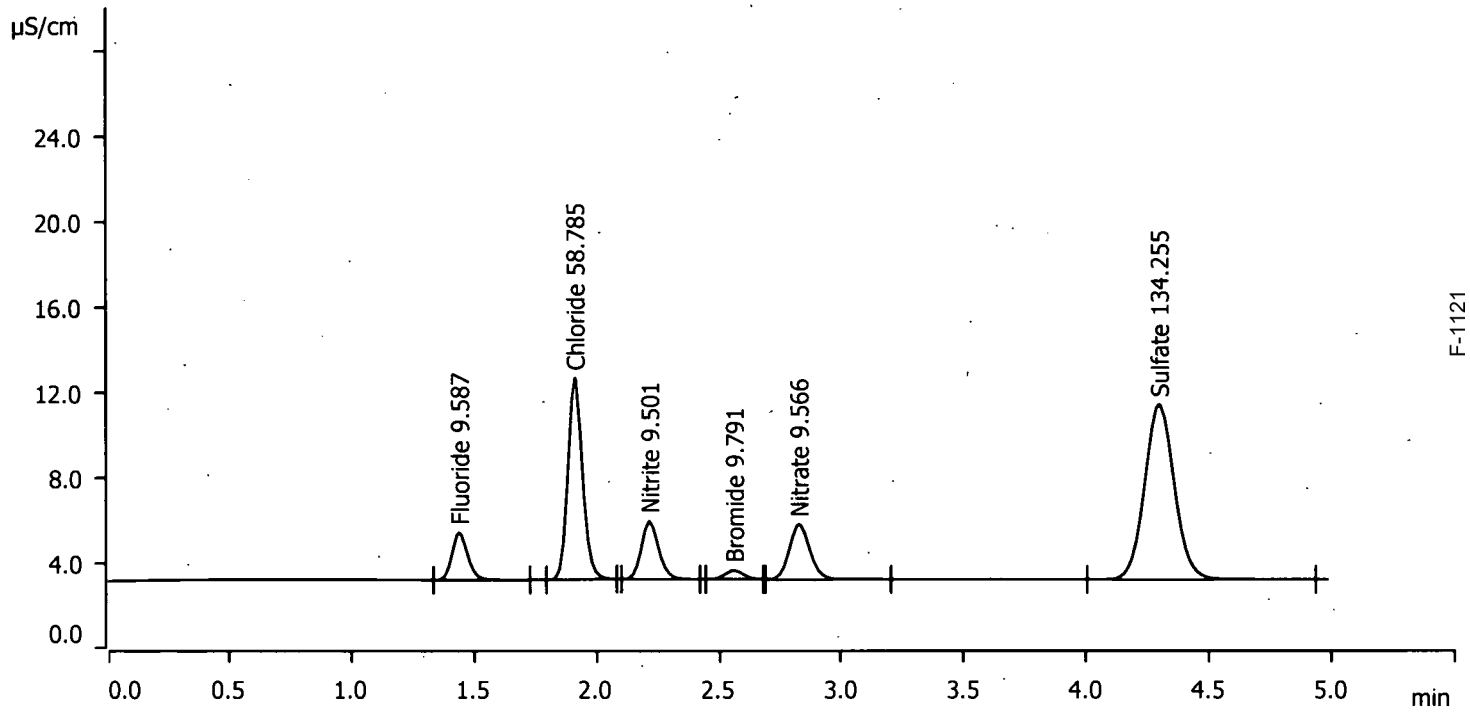
Sample data

Ident	R2408101-001 MSD
Sample type	Sample
Determination start	2024-08-23 17:25:21 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90632
Sample Position	18
Comment 1	300.0 CBN
Comment 2	

Anions



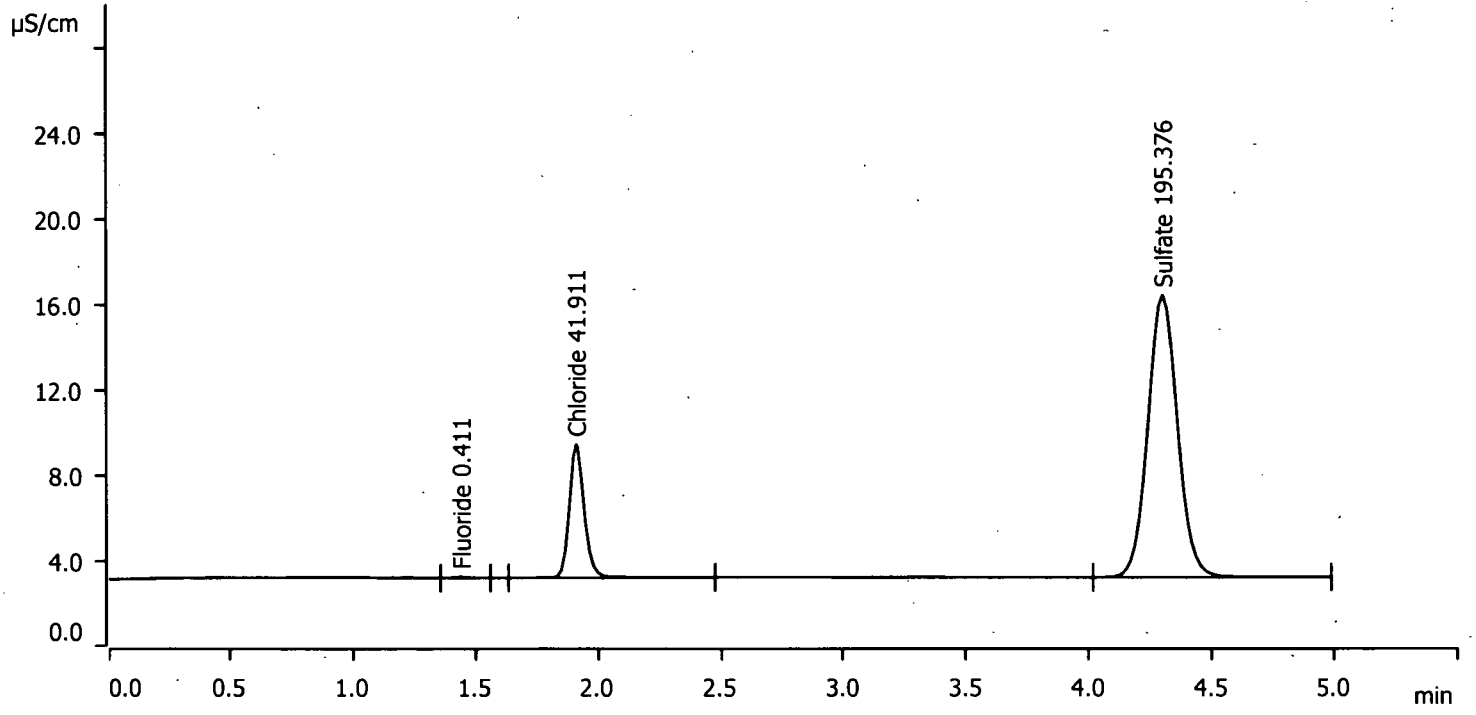
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.163	9.587	Fluoride	BB
2	1.92	0.654	58.785	Chloride	BB
3	2.22	0.224	9.501	Nitrite	BB
4	2.56	0.036	9.791	Bromide	BB
5	2.83	0.240	9.566	Nitrate	BB
6	4.30	1.156	134.255	Sulfate	BB

Sample data

Ident	R2408102-001
Sample type	Sample
Determination start	2024-08-23 17:31:37 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90633
Sample Position	19
Comment 1	300.0 CBN
Comment 2	

Anions



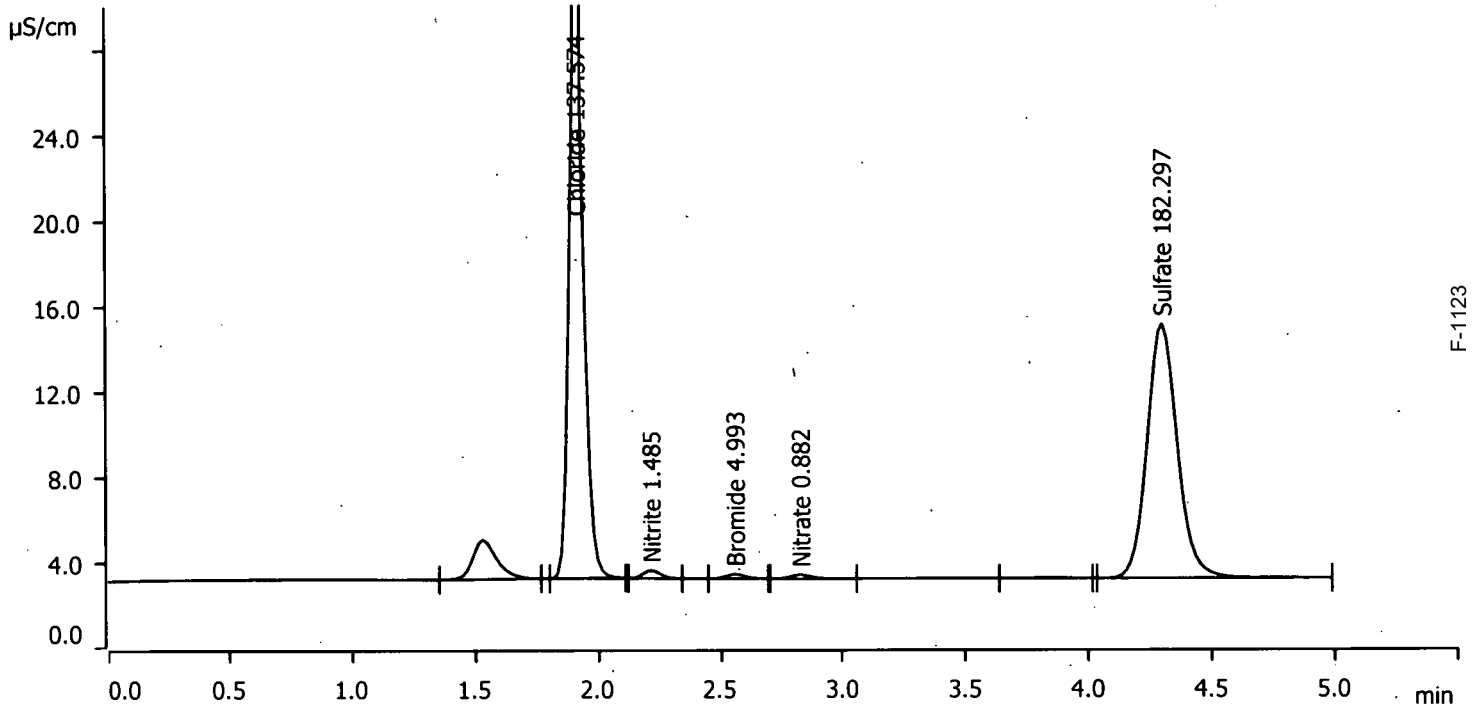
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.003	0.411	Fluoride	BB
2	1.91	0.444	41.911	Chloride	BB
3	4.30	1.864	195.376	Sulfate	BB

Sample data

Ident	R2408161-001
Sample type	Sample
Determination start	2024-08-23 17:37:52 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90634
Sample Position	20
Comment 1	300.0NN
Comment 2	TKP

Anions



Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
2	1.92	1.870	137.574	Chloride	BB
3	2.22	0.030	1.485	Nitrite	BB
4	2.56	0.018	4.993	Bromide	BB
5	2.83	0.017	0.882	Nitrate	BB
7	4.30	1.703	182.297	Sulfate	BB

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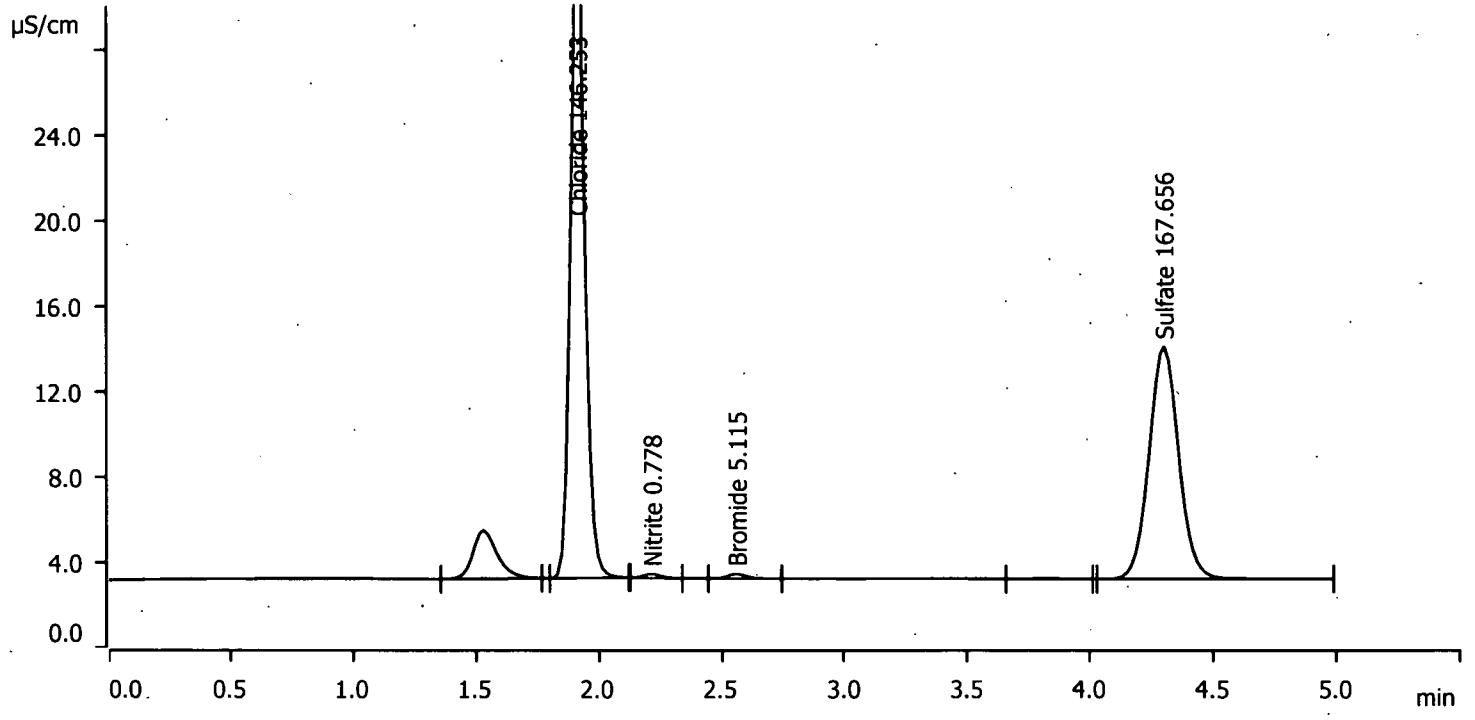
Sample data

Ident	R2408161-003
Sample type	Sample
Determination start	2024-08-23 17:44:08 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90635
Sample Position	21
Comment 1	300.0NN
Comment 2	PTP

Anions



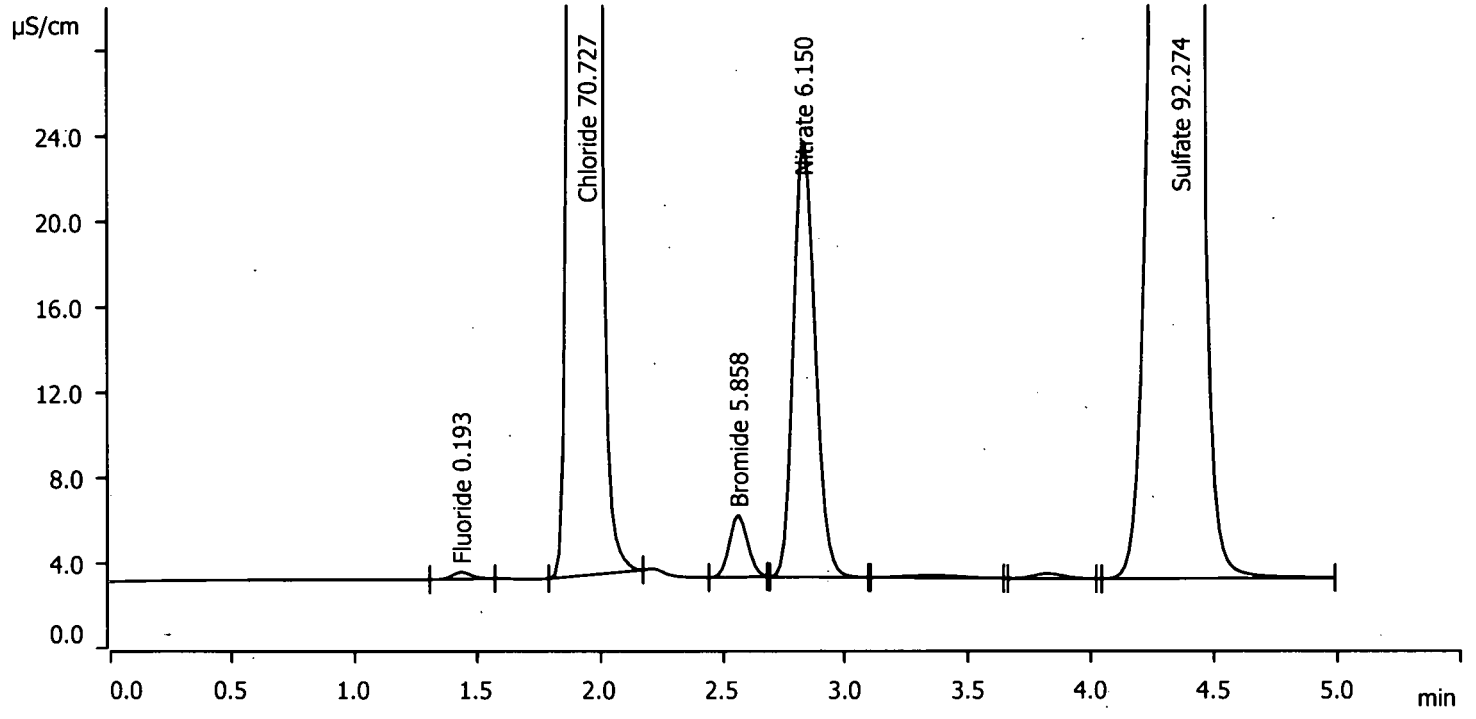
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
2	1.92	2.027	146.253	Chloride	BB
3	2.22	0.014	0.778	Nitrite	BB
4	2.56	0.019	5.115	Bromide	BB
6	4.30	1.529	167.656	Sulfate	BB

Sample data

Ident	R2408161-002
Sample type	Sample
Determination start	2024-08-23 17:50:23 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90636
Sample Position	22
Comment 1	300.0 F
Comment 2	STE

Anions



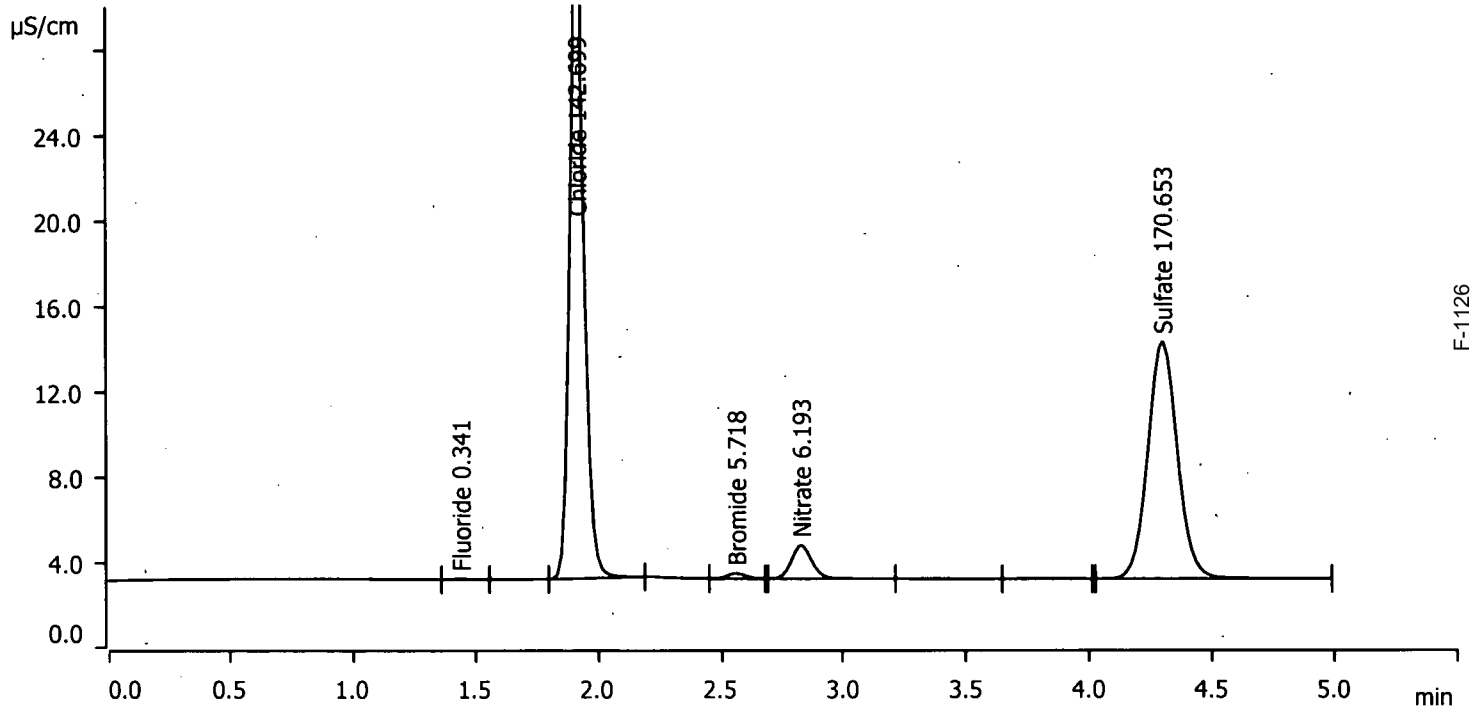
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.029	0.193	Fluoride	BB
2	1.95	22.099	70.727	Chloride	BB
3	2.57	0.251	5.858	Bromide	BB
4	2.83	2.078	6.150	Nitrate	BB
7	4.37	18.993	92.274	Sulfate	BB

Sample data

Ident	R2408161-002
Sample type	Sample
Determination start	2024-08-23 17:56:39 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90637
Sample Position	23
Comment 1	300.0 NN
Comment 2	STE

Anions



Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.002	0.341	Fluoride	BB
2	1.92	1.962	142.699	Chloride	BB
3	2.56	0.021	5.718	Bromide	BB
4	2.83	0.150	6.193	Nitrate	BB
6	4.30	1.564	170.653	Sulfate	BB

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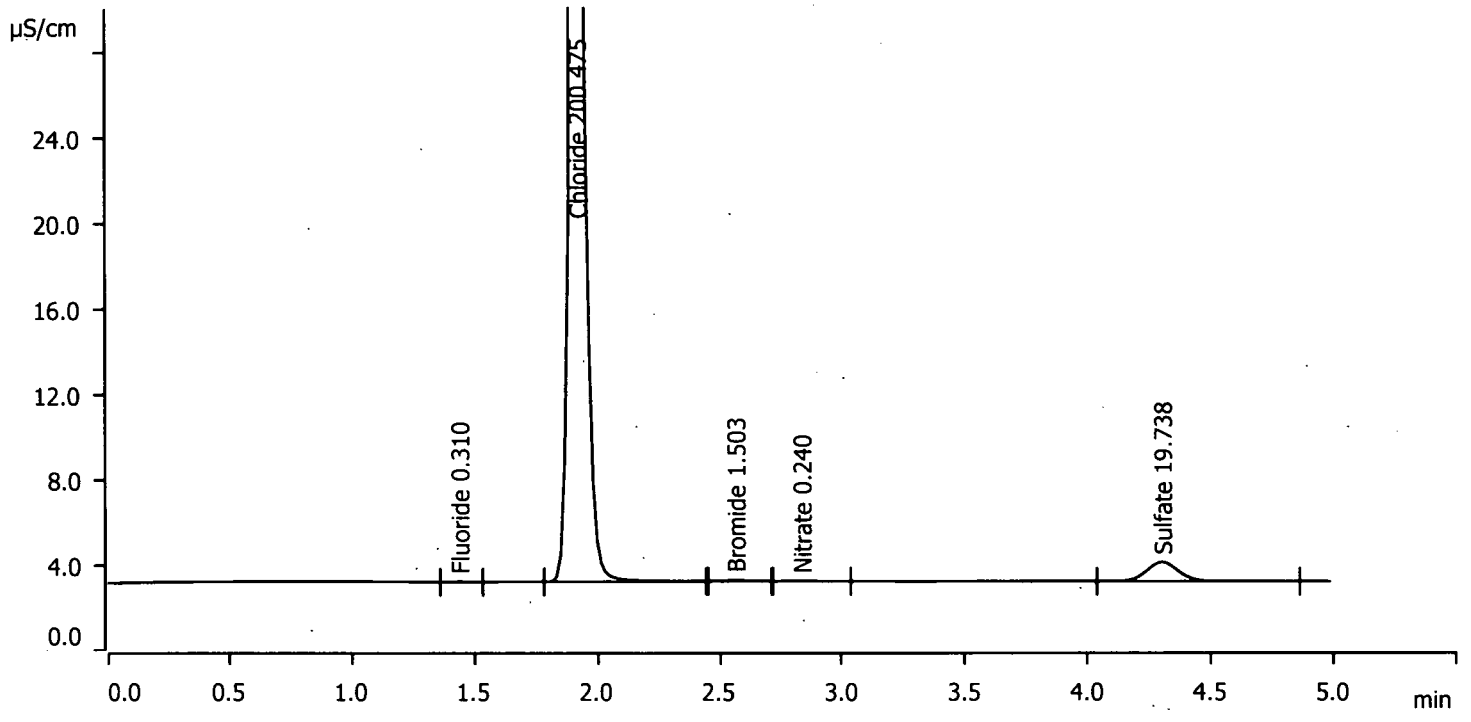
Sample data

Ident	R2408137-001
Sample type	Sample
Determination start	2024-08-23 18:02:55 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90638
Sample Position	24
Comment 1	300.0 BNS
Comment 2	MW203D2

Anions



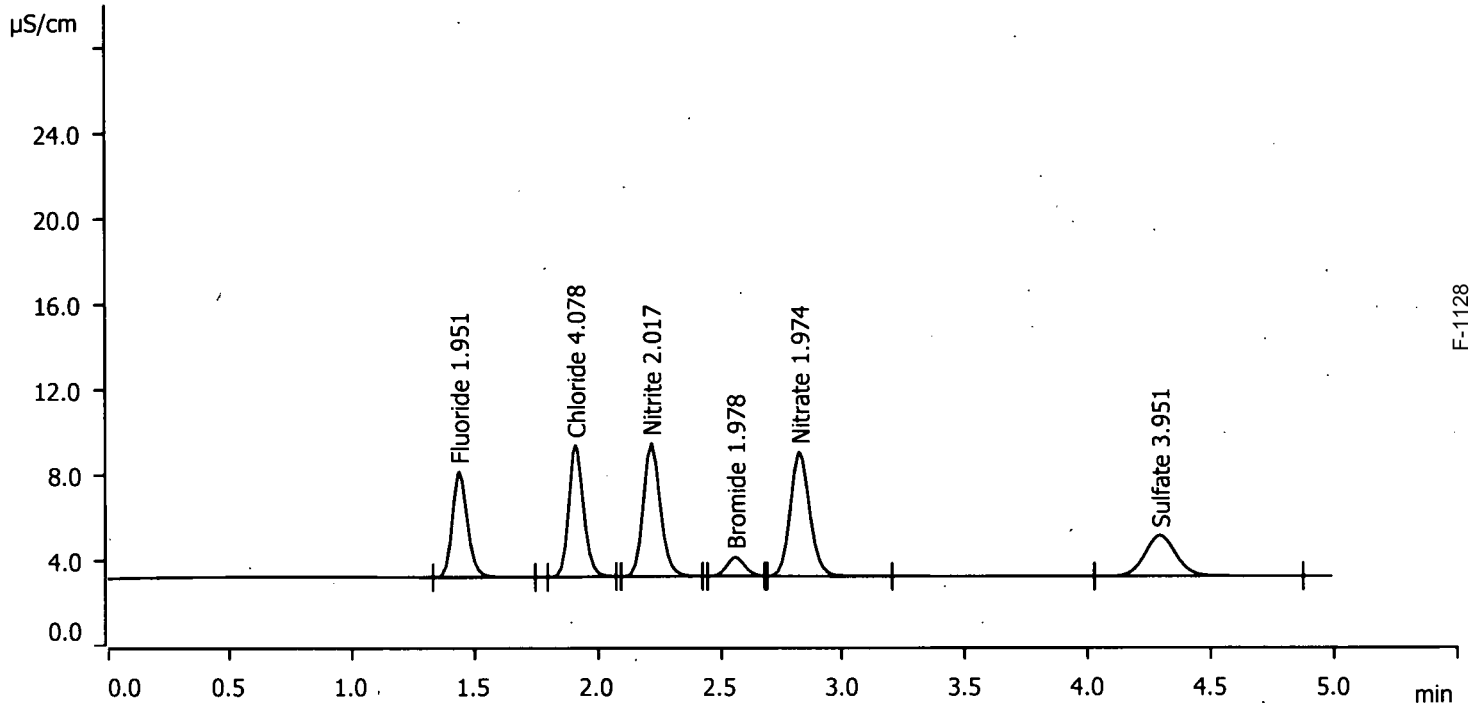
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.002	0.310	Fluoride	BB
2	1.92	3.117	200.475	Chloride	BB
3	2.57	0.005	1.503	Bromide	BB
4	2.83	0.002	0.240	Nitrate	BB
5	4.30	0.136	19.738	Sulfate	BB

Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-08-23 18:09:10 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90639
Sample Position	25
Comment 1	300.0/9056A
Comment 2	

Anions



Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.42	0.351	1.951	Fluoride	BB
2	1.89	0.430	4.078	Chloride	BB
3	2.20	0.505	2.017	Nitrite	BB
4	2.54	0.076	1.978	Bromide	BB
5	2.81	0.531	1.974	Nitrate	BB
6	4.27	0.284	3.951	Sulfate	BB

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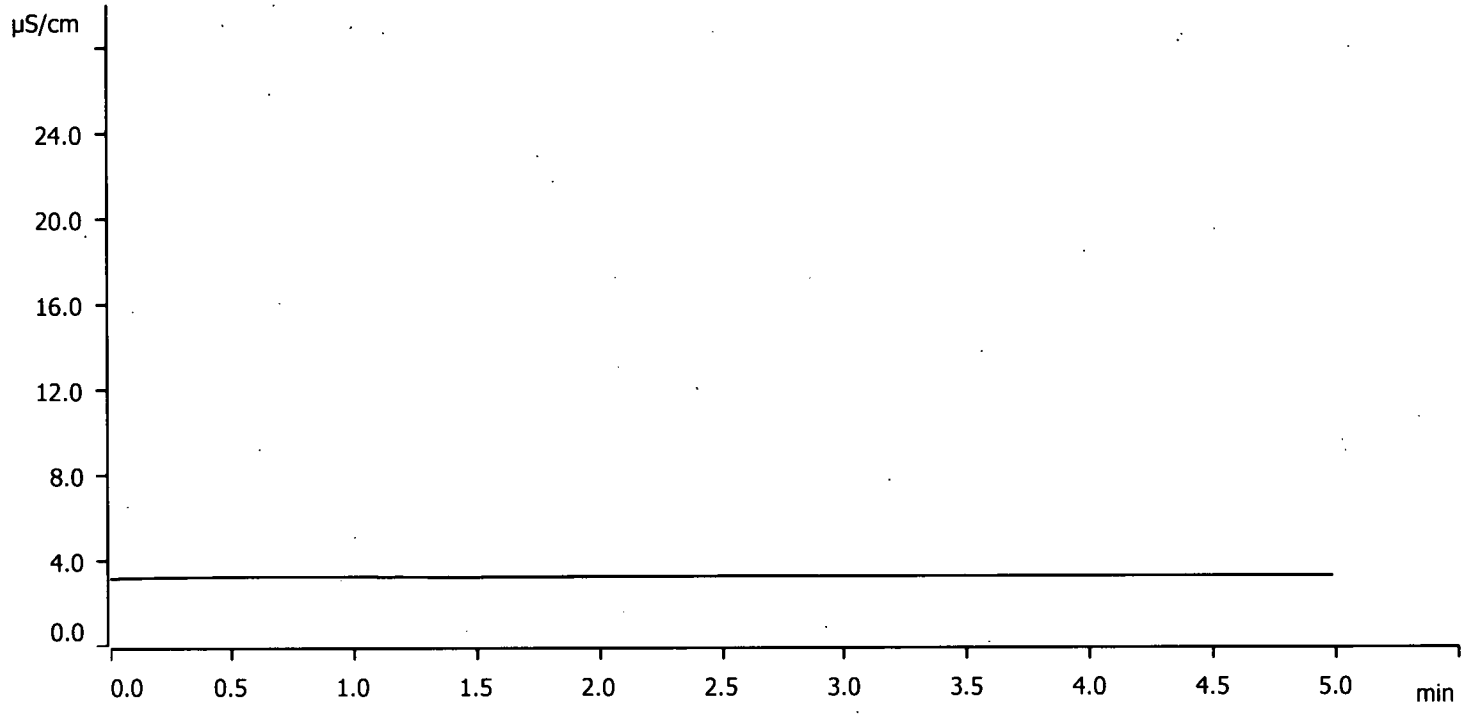
Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-08-23 18:15:26 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90640
Sample Position	26
Comment 1	300.0/9056A
Comment 2	

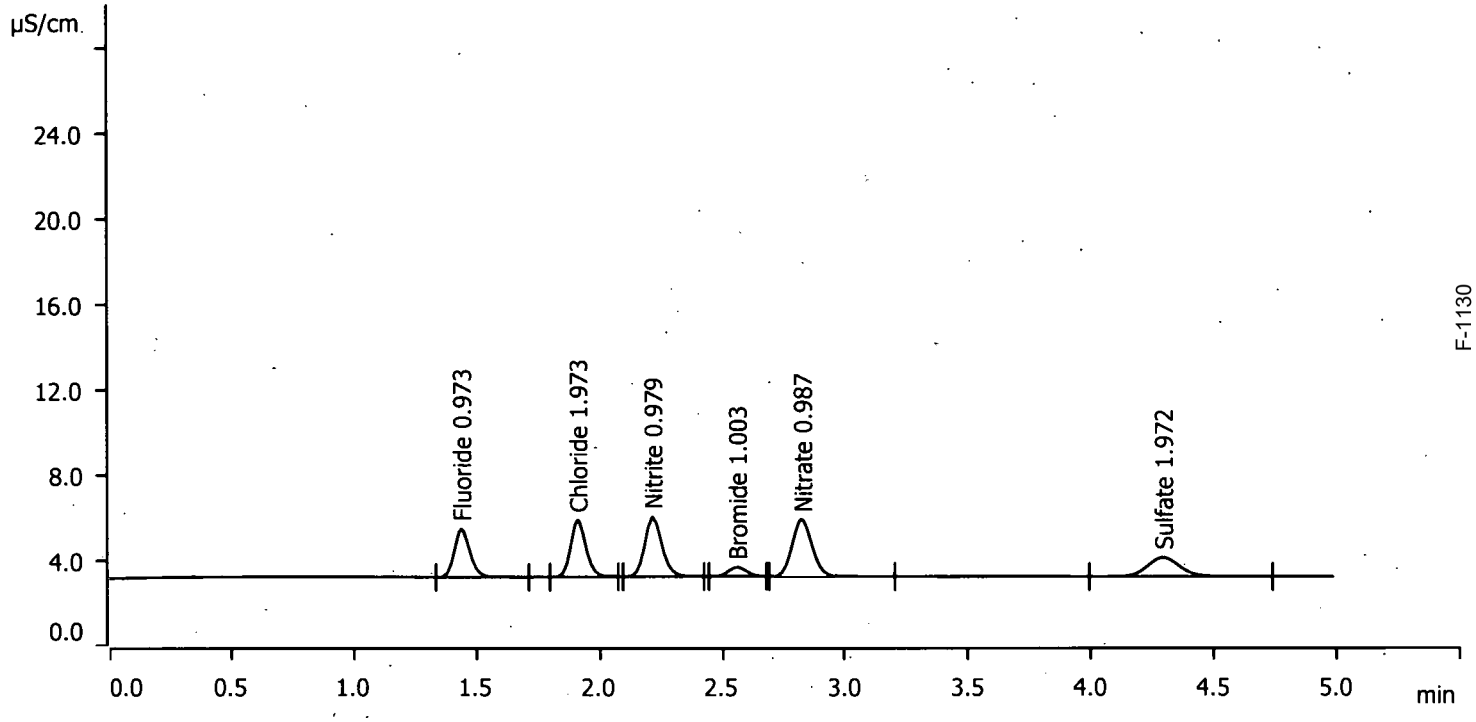
Anions



Sample data

Ident	LCS
Sample type	Check standard 2
Determination start	2024-08-23 18:21:40 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90641
Sample Position	27
Comment 1	300.0/9056A
Comment 2	

Anions



Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.166	0.973	Fluoride	BB
2	1.91	0.194	1.973	Chloride	BB
3	2.22	0.232	0.979	Nitrite	BB
4	2.56	0.037	1.003	Bromide	BB
5	2.83	0.248	0.987	Nitrate	BB
6	4.29	0.136	1.972	Sulfate	BB

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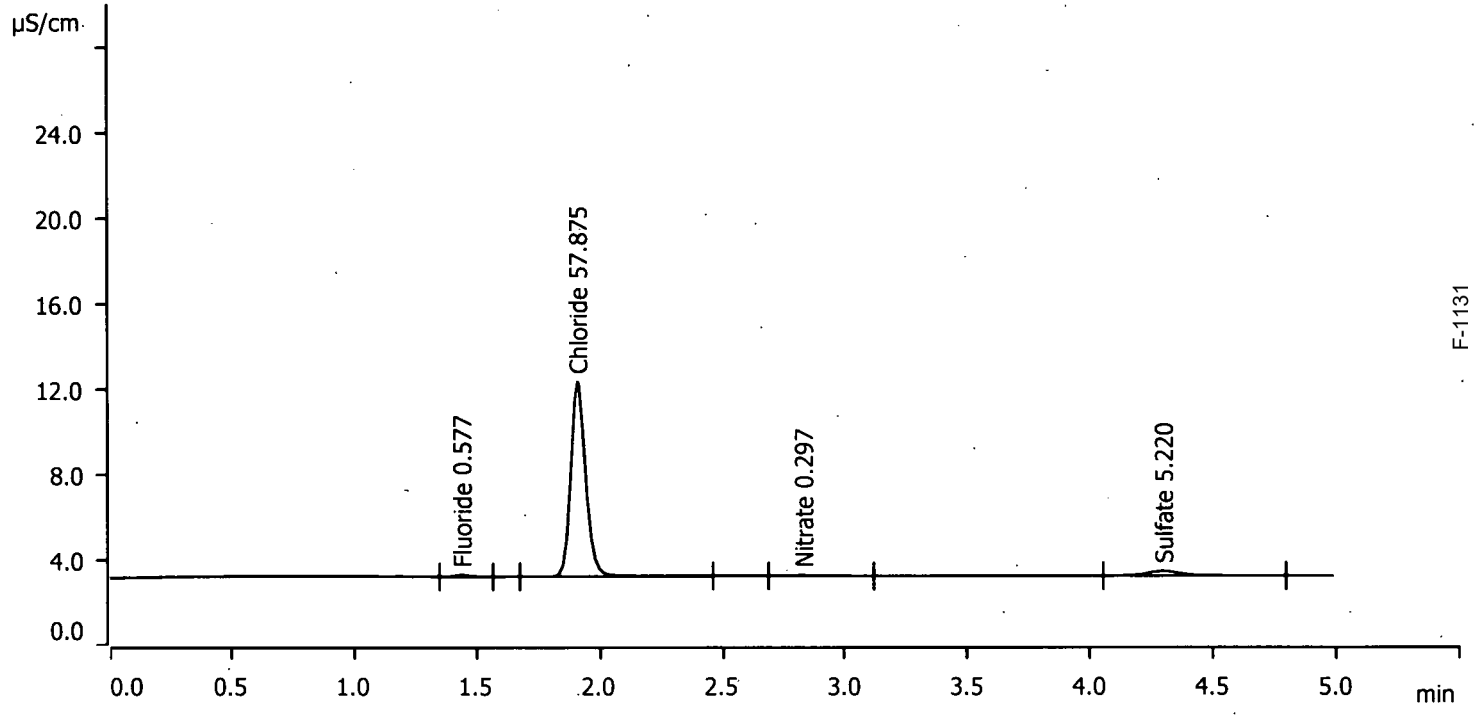
Sample data

Ident	R2408137-003
Sample type	Sample
Determination start	2024-08-23 18:27:56 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90642
Sample Position	28
Comment 1	300.0 CBNS
Comment 2	MW208D

Anions



Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.006	0.577	Fluoride	BB
2	1.91	0.642	57.875	Chloride	BB
3	2.83	0.003	0.297	Nitrate	BB
4	4.30	0.035	5.220	Sulfate	BB

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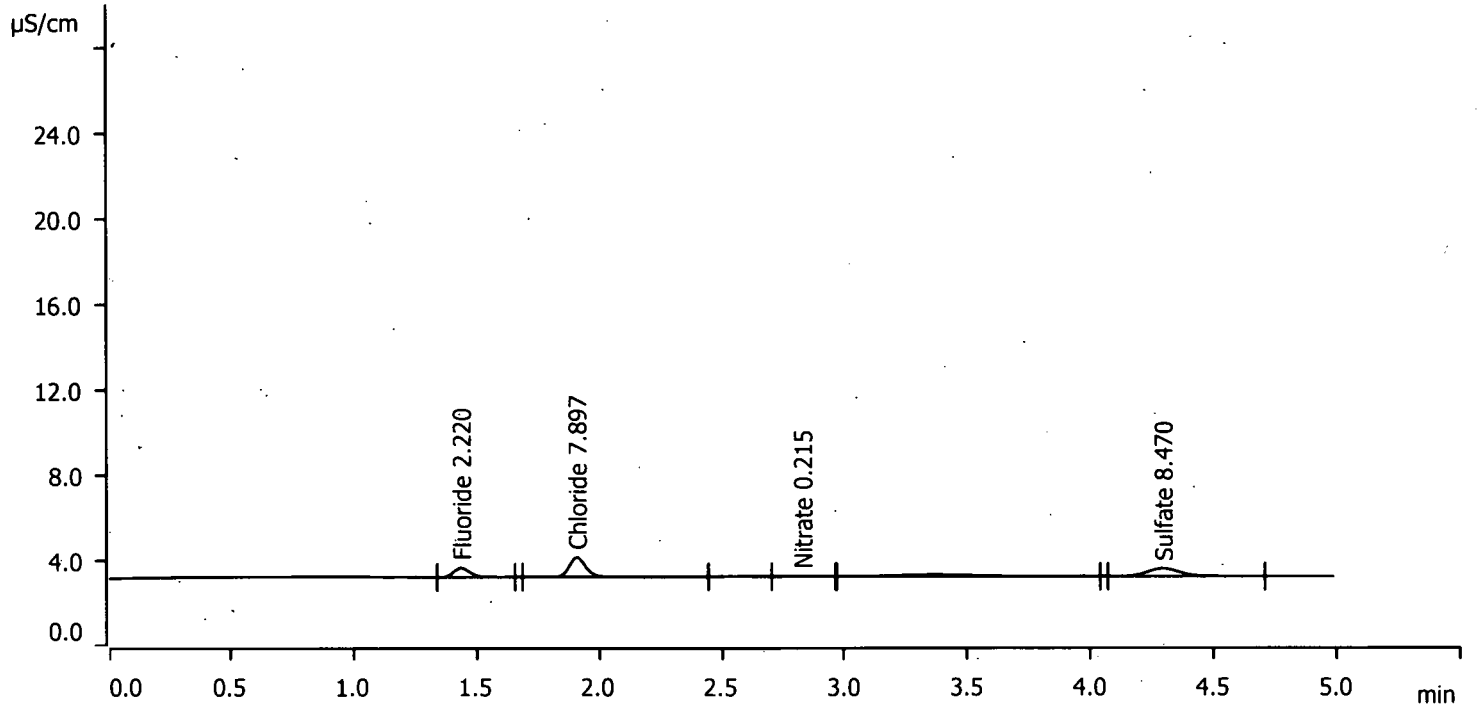
Sample data

Ident	R2408137-005
Sample type	Sample
Determination start	2024-08-23 18:34:11 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90643
Sample Position	29
Comment 1	300.0 CBNS
Comment 2	MW208D2

Anions



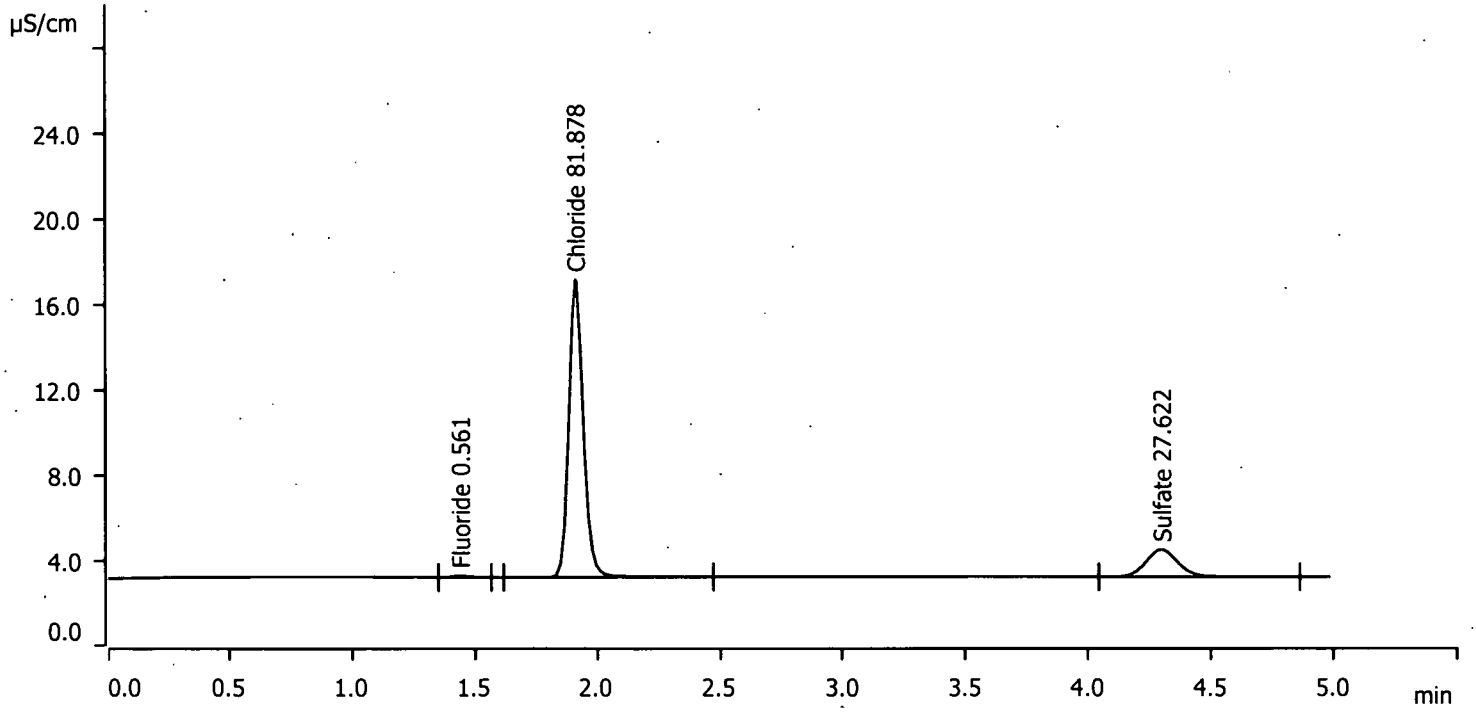
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.034	2.220	Fluoride	BB
2	1.91	0.073	7.897	Chloride	BB
3	2.83	0.001	0.215	Nitrate	BB
5	4.29	0.057	8.470	Sulfate	BB

Sample data

Ident	R2408137-007
Sample type	Sample
Determination start	2024-08-23 18:40:26 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90644
Sample Position	30
Comment 1	300.0 CBNS
Comment 2	MW209D

Anions



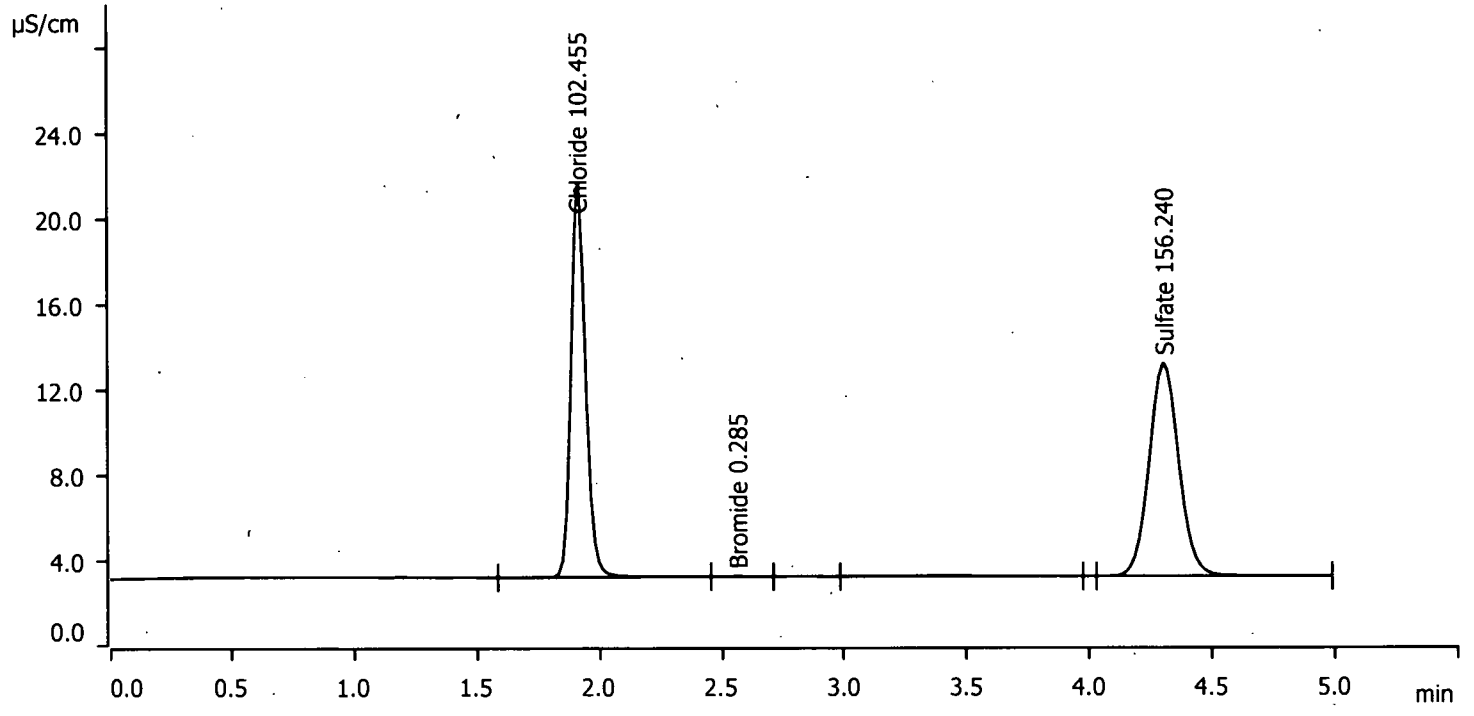
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.006	0.561	Fluoride	BB
2	1.92	0.971	81.878	Chloride	BB
3	4.30	0.193	27.622	Sulfate	BB

Sample data

Ident	R2408137-009
Sample type	Sample
Determination start	2024-08-23 18:46:41 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90645
Sample Position	31
Comment 1	300.0 BN
Comment 2	MW209S

Anions



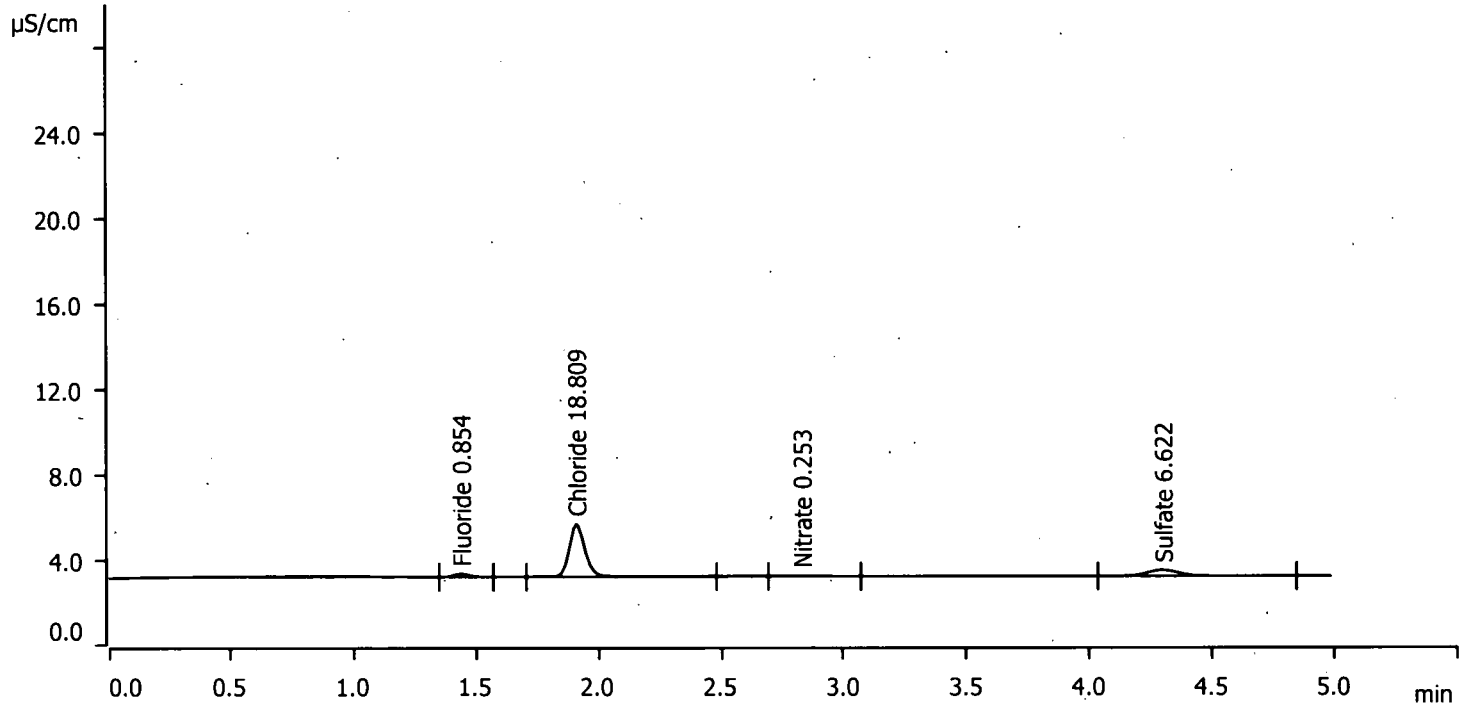
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.92	1.281	102.455	Chloride	BB
2	2.56	0.001	0.285	Bromide	BB
4	4.30	1.398	156.240	Sulfate	BB

Sample data

Ident	R2408137-011
Sample type	Sample
Determination start	2024-08-23 18:52:56 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90646
Sample Position	32
Comment 1	300.0 CBNS
Comment 2	MW204D

Anions



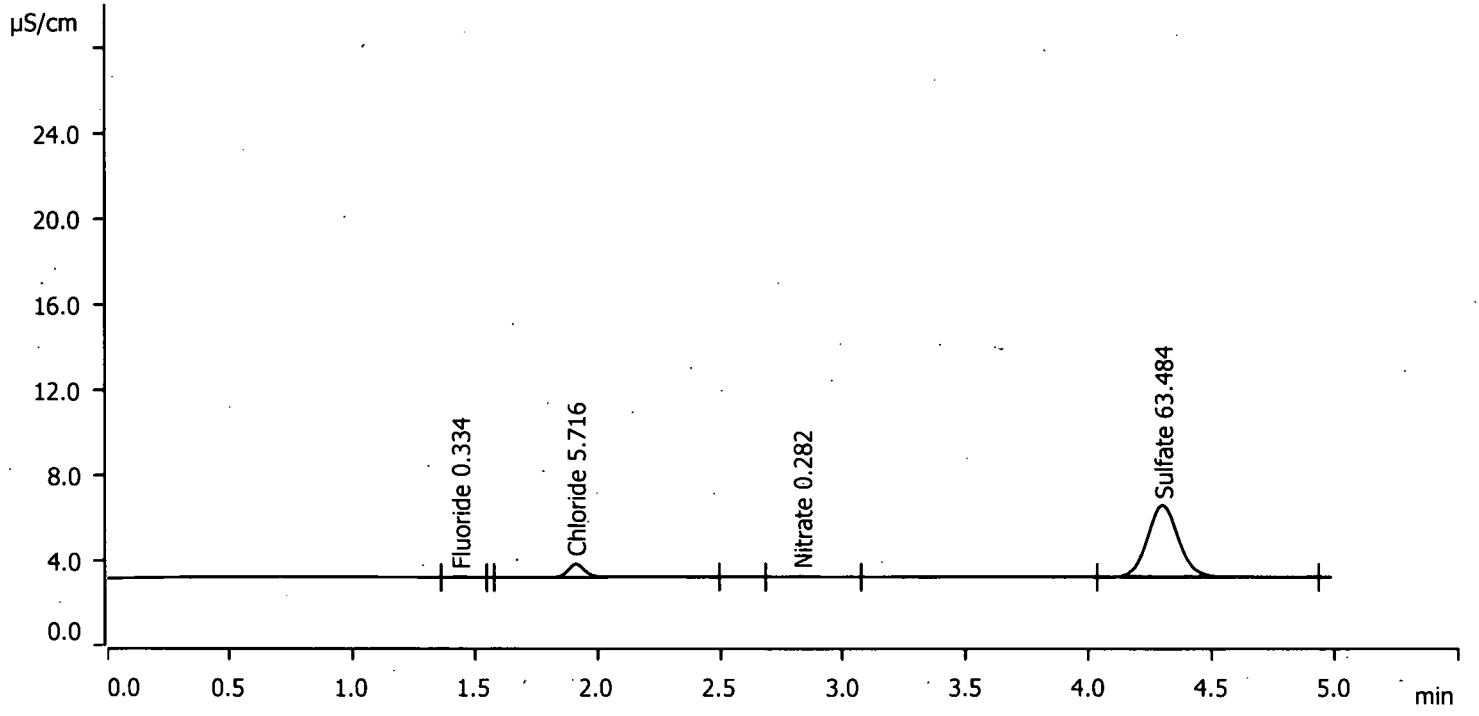
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.011	0.854	Fluoride	BB
2	1.91	0.184	18.809	Chloride	BB
3	2.83	0.002	0.253	Nitrate	BB
4	4.30	0.044	6.622	Sulfate	BB

Sample data

Ident	R2408137-013
Sample type	Sample
Determination start	2024-08-23 18:59:11 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90647
Sample Position	33
Comment 1	300.0 CBNS
Comment 2	MW204S

Anions



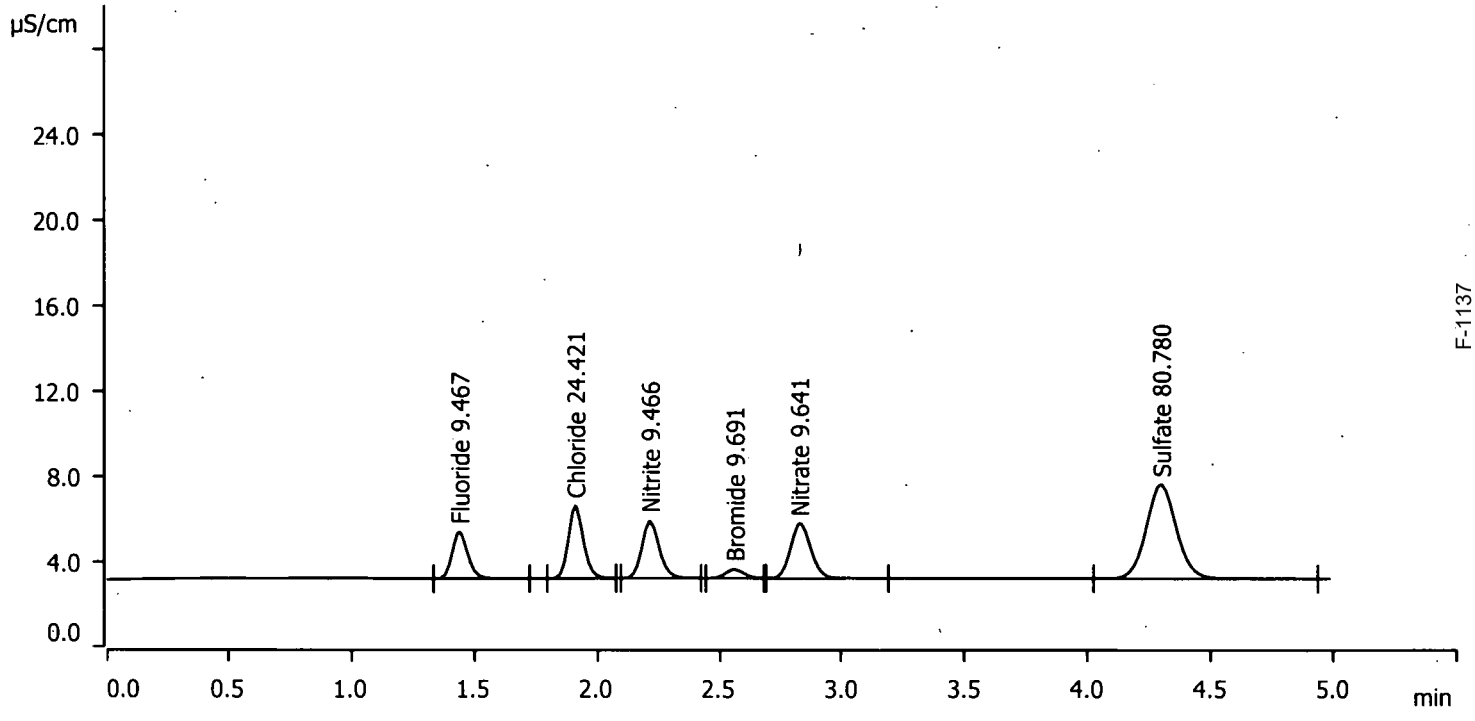
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.002	0.334	Fluoride	BB
2	1.92	0.052	5.716	Chloride	BB
3	2.83	0.003	0.282	Nitrate	BB
4	4.30	0.479	63.484	Sulfate	BB

Sample data

Ident	R2408137-013 MS
Sample type	Sample
Determination start	2024-08-23 19:05:26 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90648
Sample Position	34
Comment 1	300.0 CBNS
Comment 2	MW204S MS

Anions



Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.161	9.467	Fluoride	BB
2	1.91	0.244	24.421	Chloride	BB
3	2.22	0.223	9.466	Nitrite	BB
4	2.56	0.036	9.691	Bromide	BB
5	2.83	0.242	9.641	Nitrate	BB
6	4.30	0.630	80.780	Sulfate	BB

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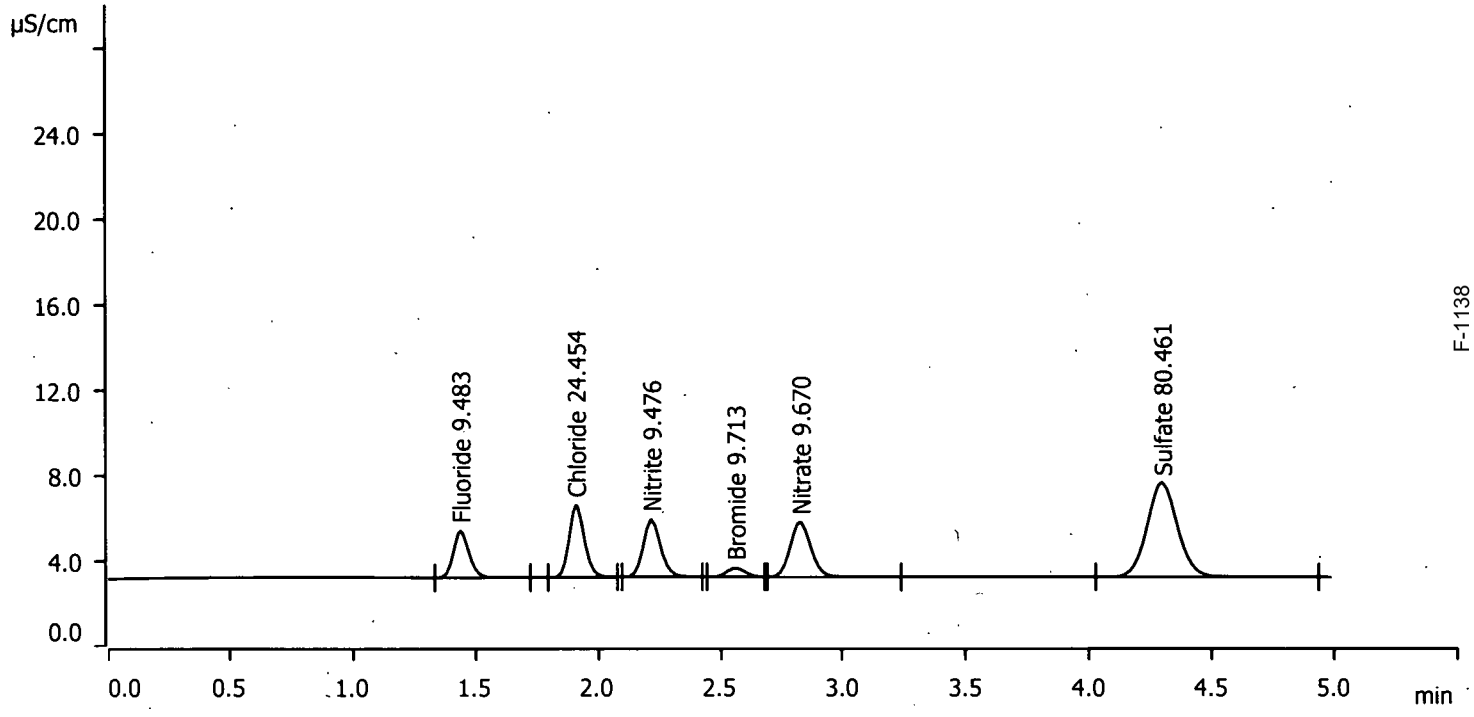
Sample data

Ident	R2408137-013 MSD
Sample type	Sample
Determination start	2024-08-23 19:11:42 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90649
Sample Position	35
Comment 1	300.0 CBNS
Comment 2	MW204S MSD

Anions



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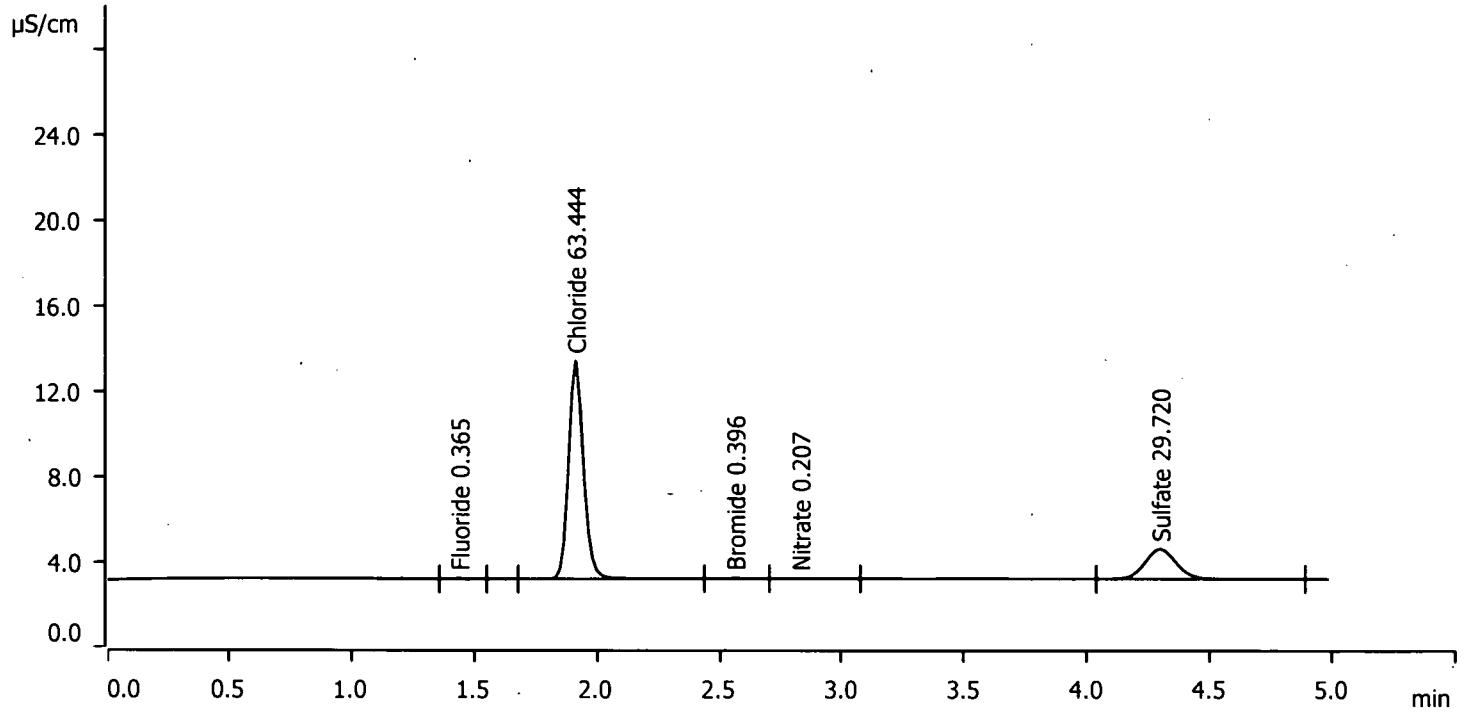
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.161	9.483	Fluoride	BB
2	1.91	0.245	24.454	Chloride	BB
3	2.22	0.224	9.476	Nitrite	BB
4	2.56	0.036	9.713	Bromide	BB
5	2.83	0.243	9.670	Nitrate	BB
6	4.30	0.627	80.461	Sulfate	BB

Sample data

Ident	R2408137-015
Sample type	Sample
Determination start	2024-08-23 19:17:57 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90650
Sample Position	36
Comment 1	300.0 CBNS
Comment 2	DUP X

Anions



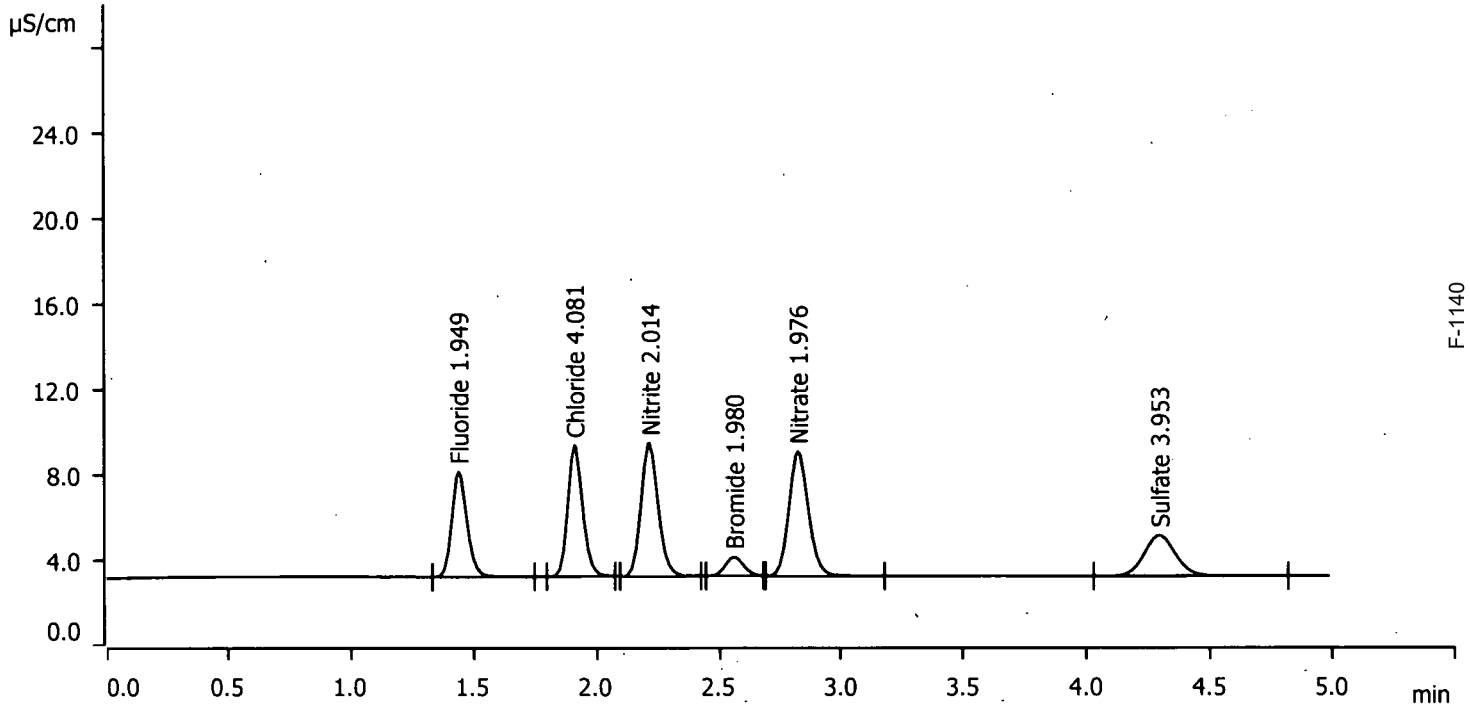
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.003	0.365	Fluoride	BB
2	1.92	0.715	63.444	Chloride	BB
3	2.57	0.001	0.396	Bromide	BB
4	2.83	0.001	0.207	Nitrate	BB
5	4.30	0.209	29.720	Sulfate	BB

Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-08-23 19:24:12 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90651
Sample Position	37
Comment 1	300.0/9056A
Comment 2	

Anions



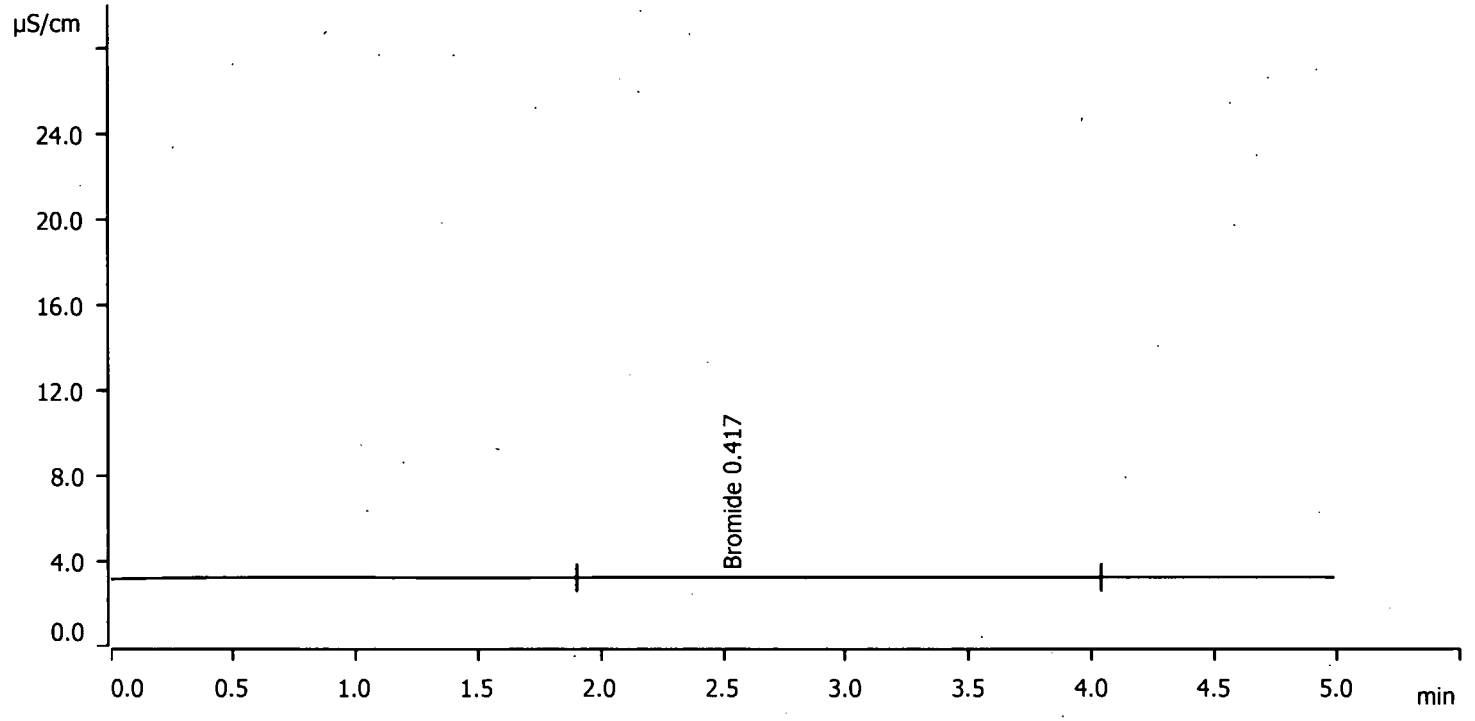
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.351	1.949	Fluoride	BB
2	1.92	0.431	4.081	Chloride	BB
3	2.22	0.505	2.014	Nitrite	BB
4	2.56	0.076	1.980	Bromide	BB
5	2.83	0.532	1.976	Nitrate	BB
6	4.29	0.284	3.953	Sulfate	BB

Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-08-23 19:30:28 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90652
Sample Position	38
Comment 1	300.0/9056A
Comment 2	

Anions



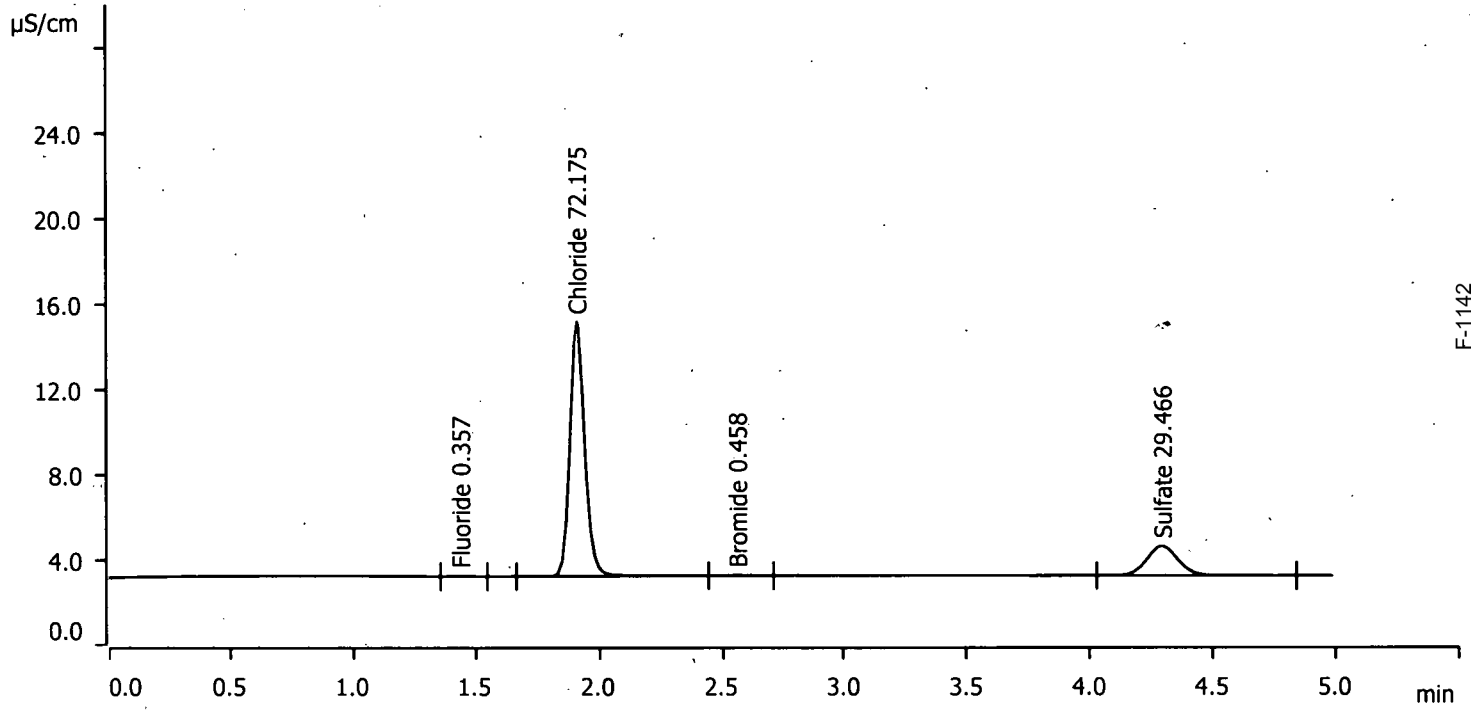
Anions

Peak number	Retention time	Area	Concentration	Component name	Type
	min	(µS/cm) x min	ppm		
1	2.60	0.015	0.417	Bromide	BB

Sample data

Ident	R2408137-017
Sample type	Sample
Determination start	2024-08-23 19:36:44 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90653
Sample Position	39
Comment 1	300.0 CBNS
Comment 2	MW203S

Anions



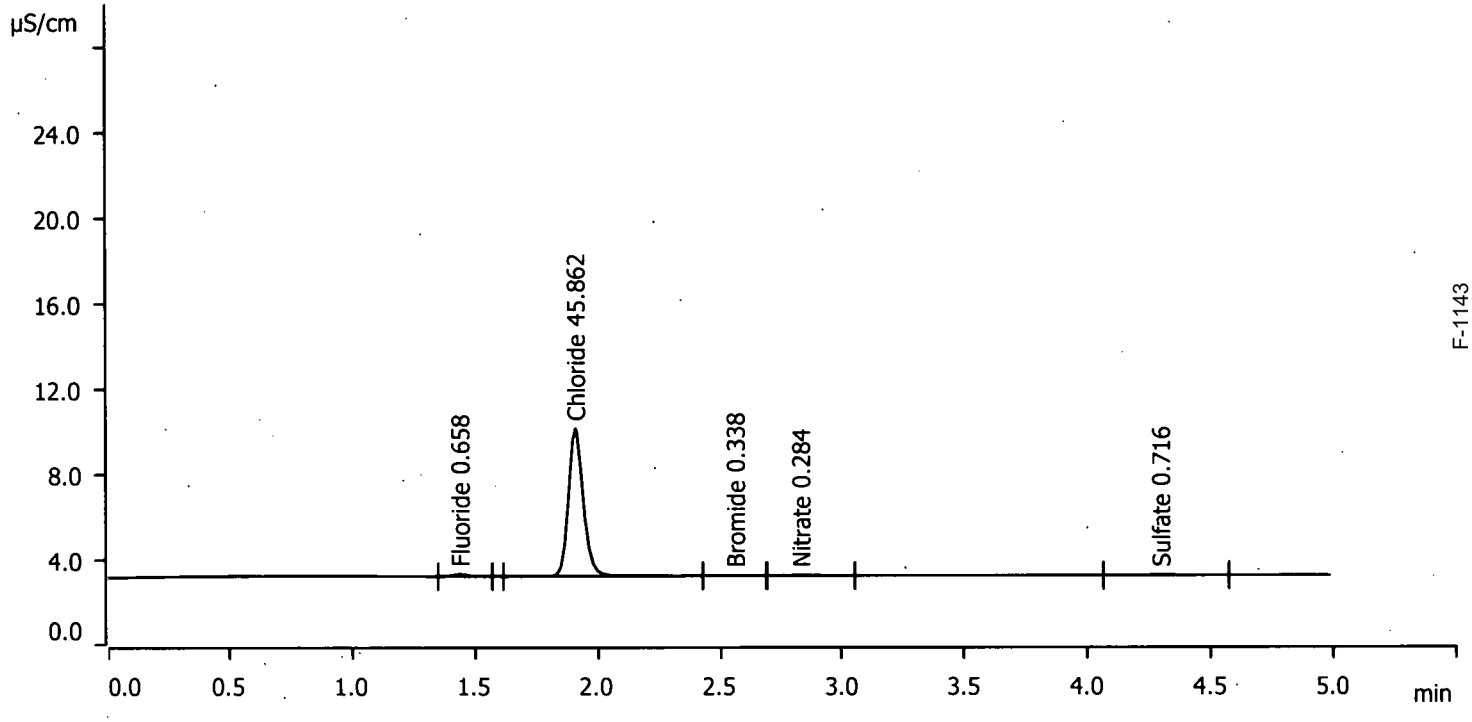
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.002	0.357	Fluoride	BB
2	1.91	0.834	72.175	Chloride	BB
3	2.56	0.002	0.458	Bromide	BB
4	4.29	0.207	29.466	Sulfate	BB

Sample data

Ident	R2408137-019
Sample type	Sample
Determination start	2024-08-23 19:42:59 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90654
Sample Position	40
Comment 1	300.0 CBNS
Comment 2	MW203D

Anions



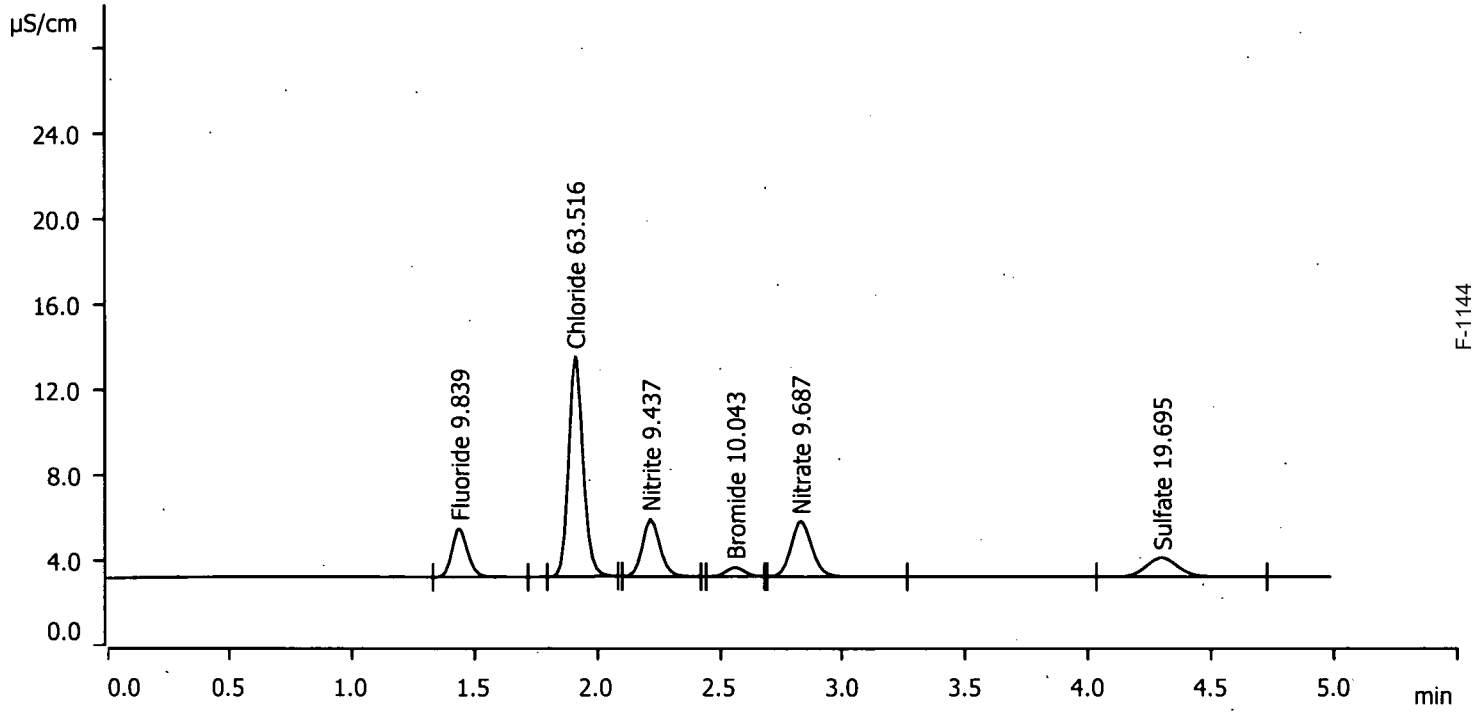
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.007	0.658	Fluoride	BB
2	1.91	0.491	45.862	Chloride	BB
3	2.56	0.001	0.338	Bromide	BB
4	2.83	0.003	0.284	Nitrate	BB
5	4.29	0.005	0.716	Sulfate	BB

Sample data

Ident	R2408137-019 MS!
Sample type	Sample
Determination start	2024-08-23 19:49:14 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90655
Sample Position	41
Comment 1	300.0 CBNS
Comment 2	MW203D MS!

Anions



Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.168	9.839	Fluoride	BB
2	1.91	0.716	63.516	Chloride	BB
3	2.22	0.223	9.437	Nitrite	BB
4	2.56	0.037	10.043	Bromide	BB
5	2.83	0.243	9.687	Nitrate	BB
6	4.30	0.136	19.695	Sulfate	BB

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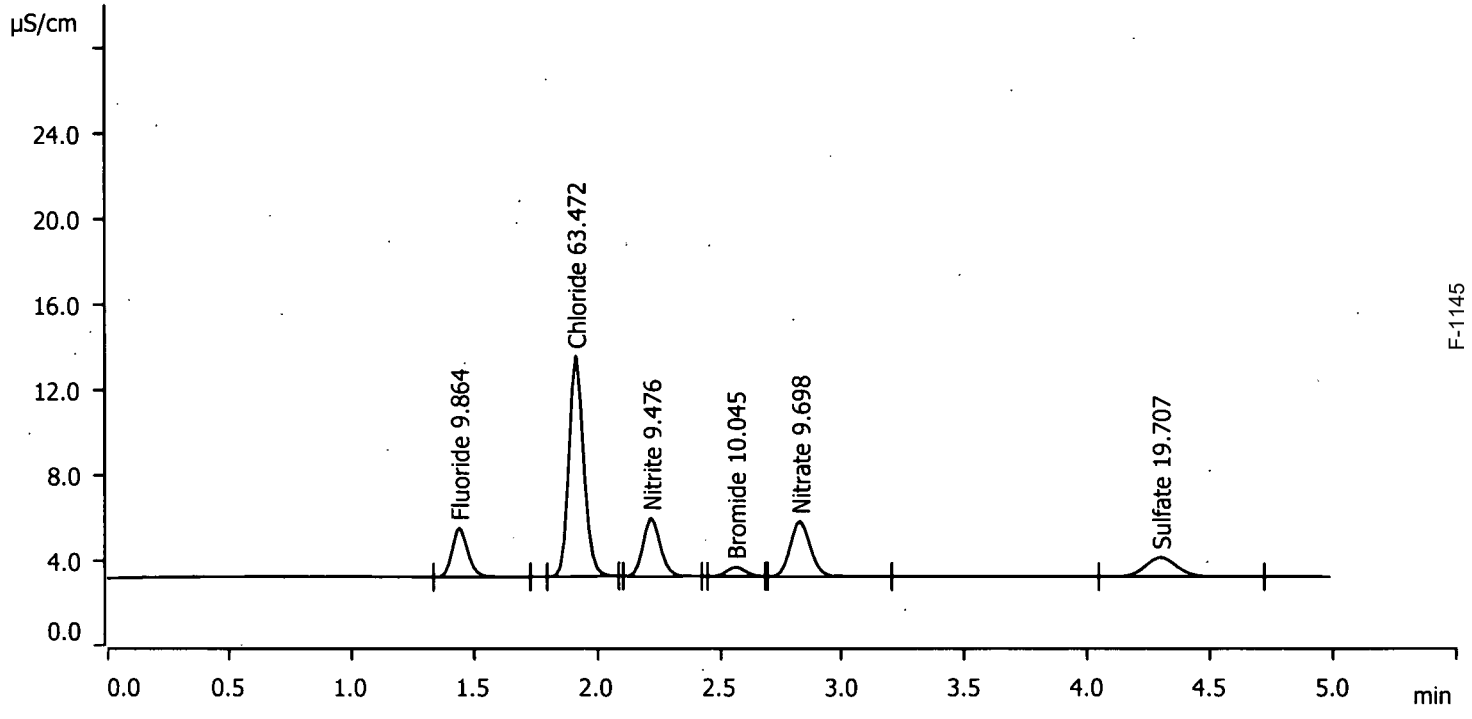
Sample data

Ident	R2408137-019 MSD!
Sample type	Sample
Determination start	2024-08-23 19:55:30 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90656
Sample Position	42
Comment 1	300.0 CBNS
Comment 2	MW203D MSD!

Anions



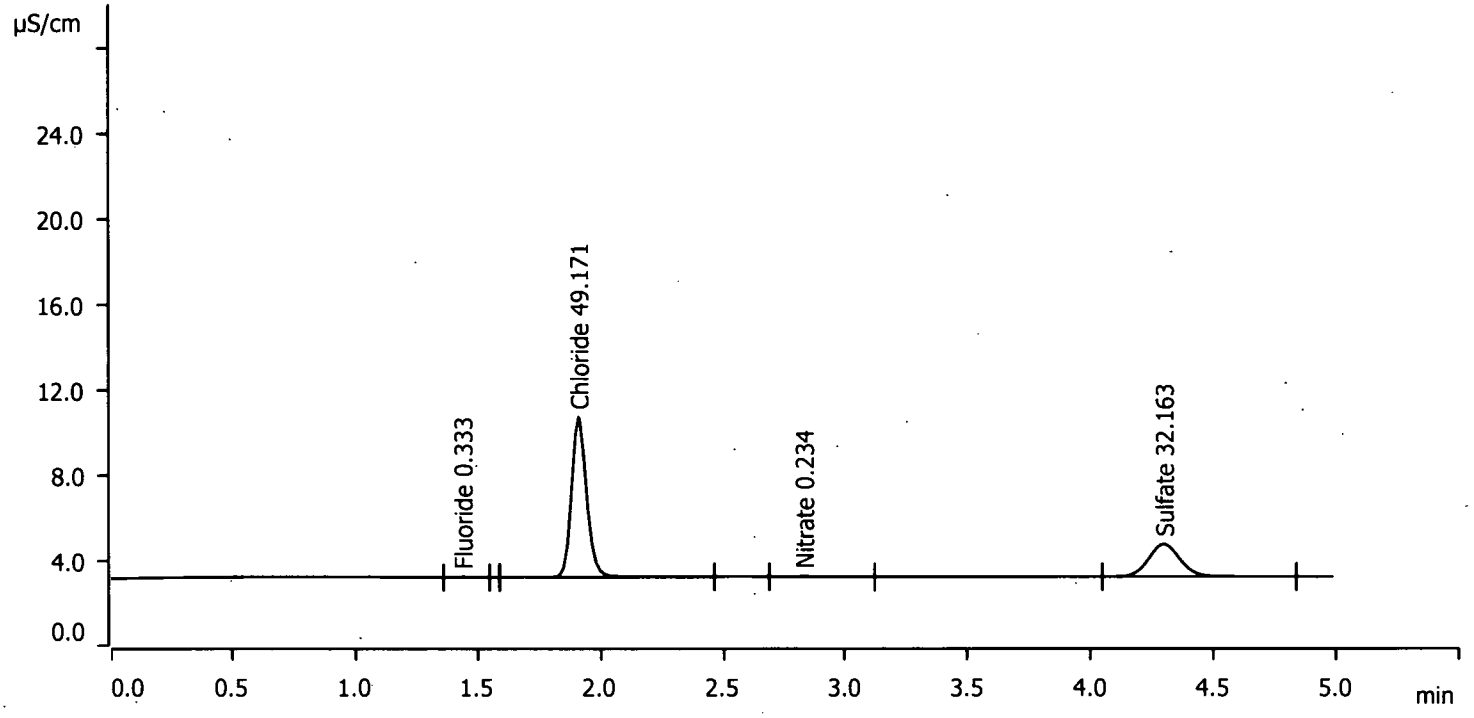
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.168	9.864	Fluoride	BB
2	1.92	0.716	63.472	Chloride	BB
3	2.22	0.224	9.476	Nitrite	BB
4	2.57	0.037	10.045	Bromide	BB
5	2.83	0.243	9.698	Nitrate	BB
6	4.30	0.136	19.707	Sulfate	BB

Sample data

Ident	R2408137-021
Sample type	Sample
Determination start	2024-08-23 20:01:45 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90657
Sample Position	43
Comment 1	300.0 CBNS
Comment 2	MW206S

Anions



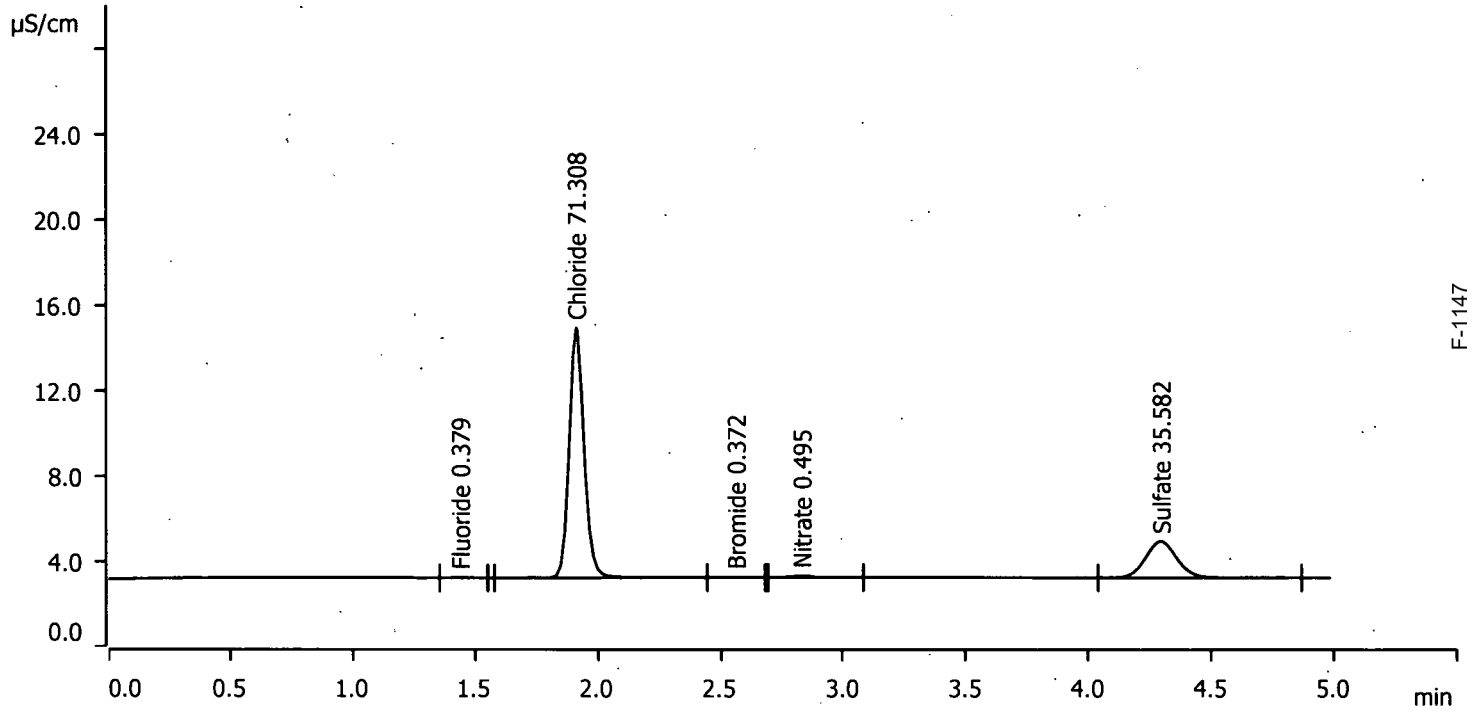
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.002	0.333	Fluoride	BB
2	1.92	0.532	49.171	Chloride	BB
3	2.83	0.002	0.234	Nitrate	BBI
4	4.30	0.227	32.163	Sulfate	BB

Sample data

Ident	R2408137-023
Sample type	Sample
Determination start	2024-08-23 20:08:00 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90658
Sample Position	44
Comment 1	300.0 CBNS
Comment 2	MW206D

Anions



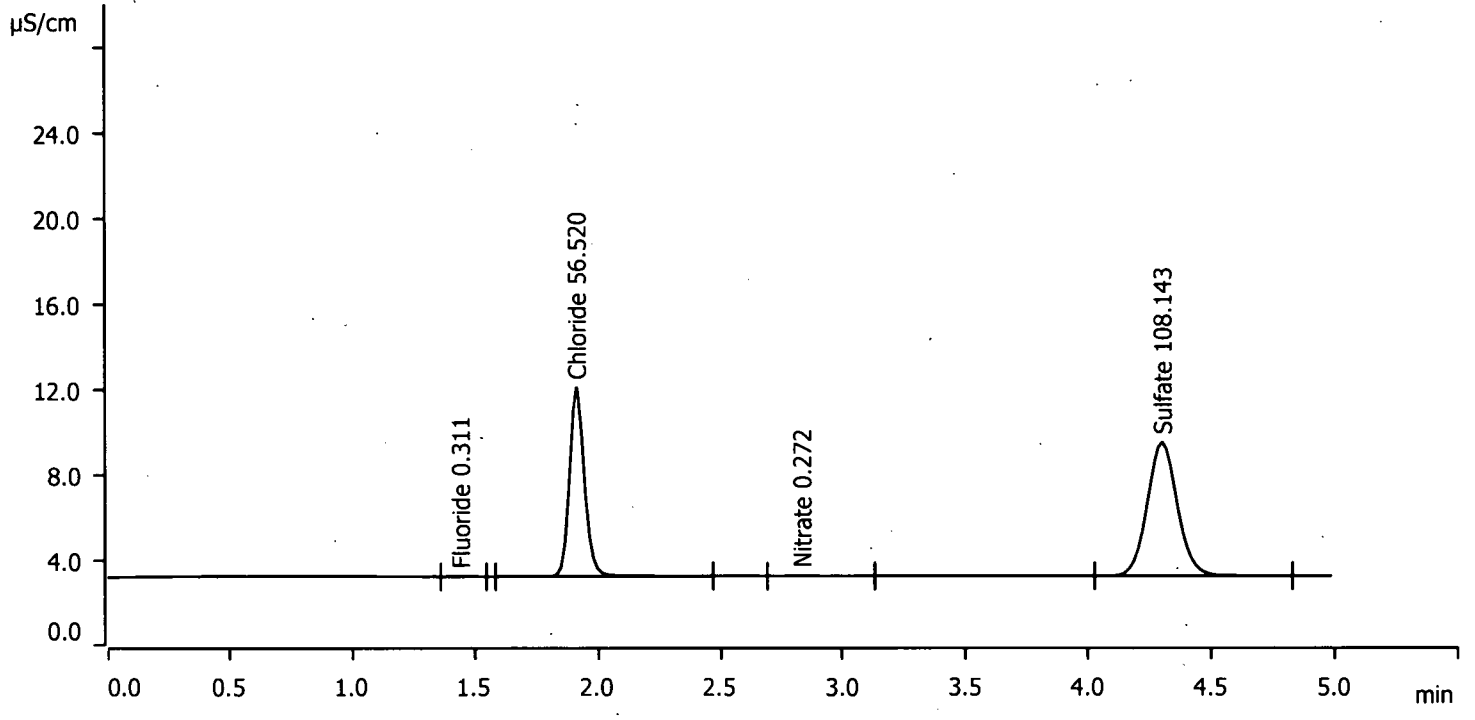
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.003	0.379	Fluoride	BB
2	1.92	0.822	71.308	Chloride	BB
3	2.56	0.001	0.372	Bromide	BB
4	2.83	0.008	0.495	Nitrate	BB
5	4.29	0.253	35.582	Sulfate	BB

Sample data

Ident	R2408137-025
Sample type	Sample
Determination start	2024-08-23 20:14:15 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90659
Sample Position	45
Comment 1	300.0 CBNS
Comment 2	MW207S

Anions



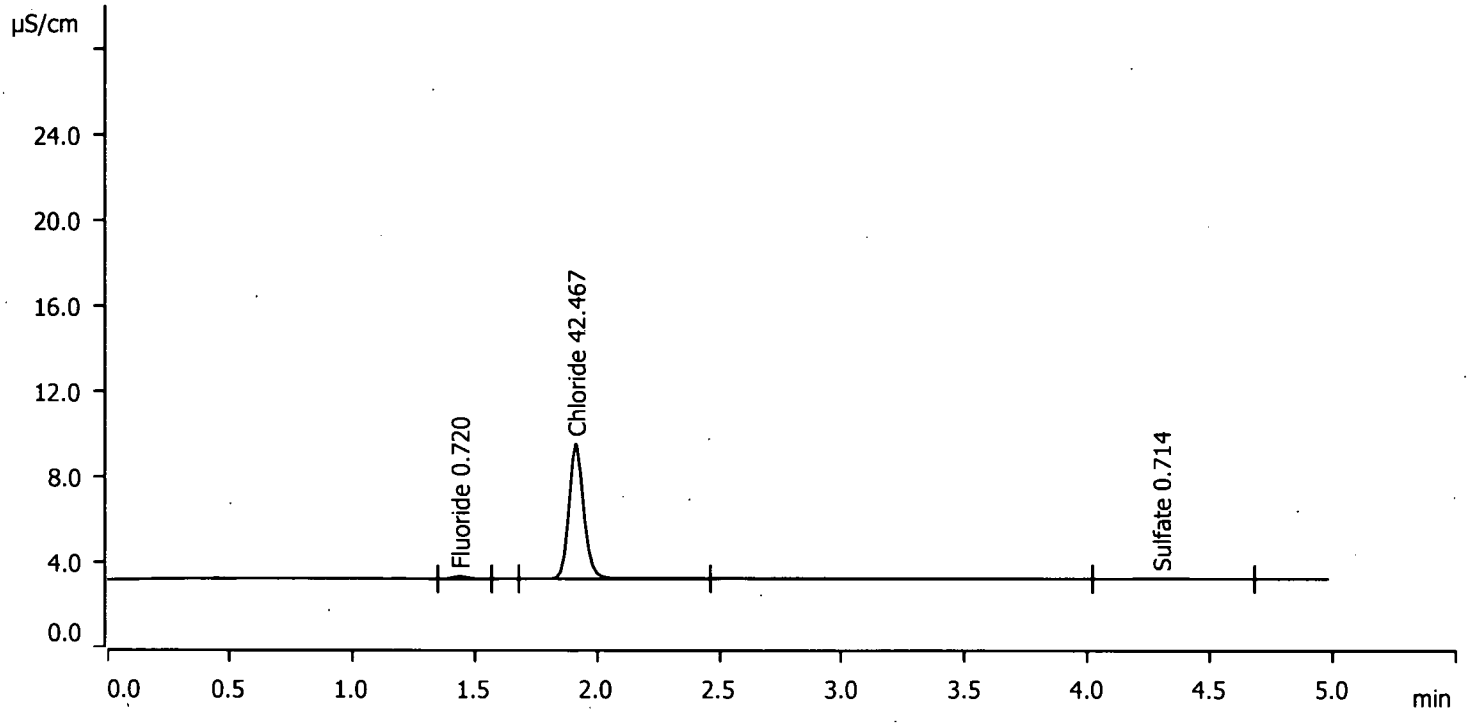
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.002	0.311	Fluoride	BB
2	1.92	0.625	56.520	Chloride	BB
3	2.83	0.003	0.272	Nitrate	BB
4	4.30	0.889	108.143	Sulfate	BB

Sample data

Ident	R2408137-027
Sample type	Sample
Determination start	2024-08-23 20:20:35 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90660
Sample Position	46
Comment 1	300.0 CBNS
Comment 2	MW207D

Anions



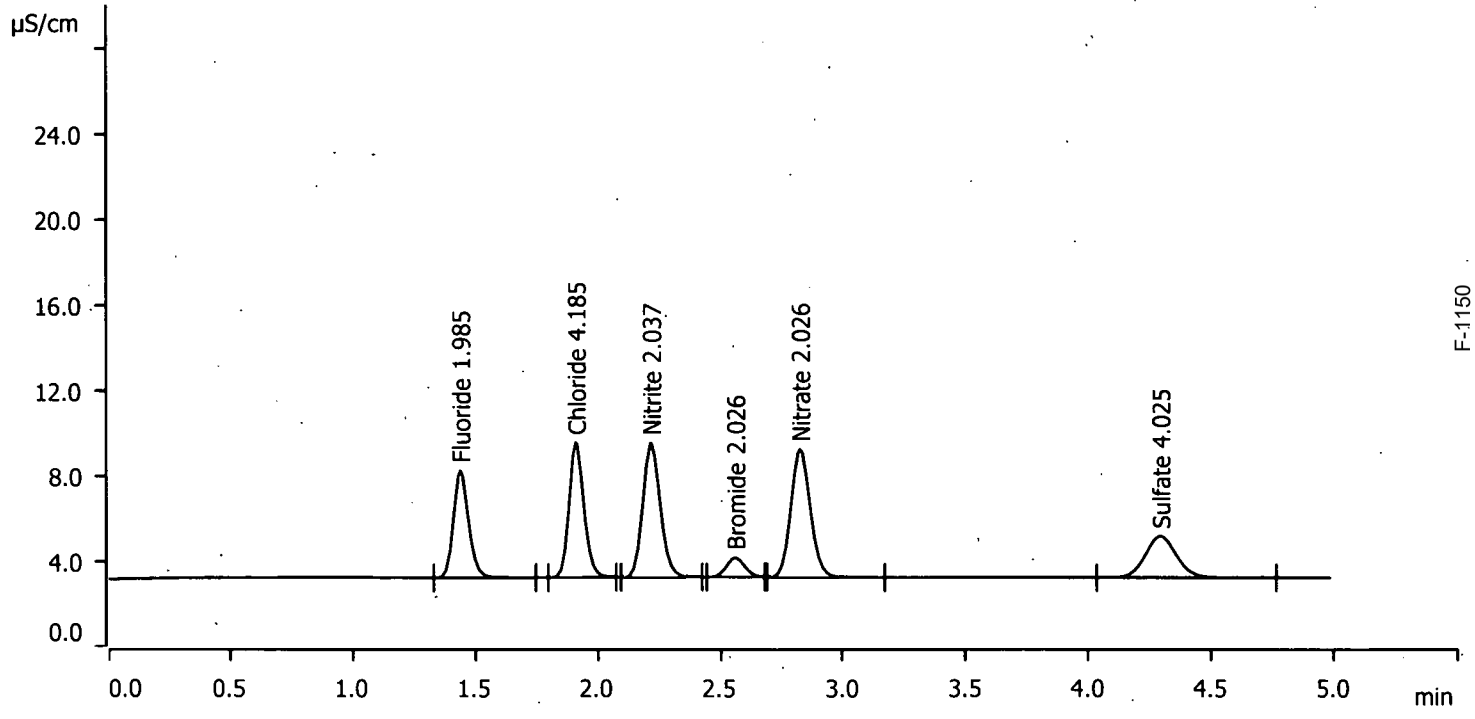
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.008	0.720	Fluoride	BB
2	1.92	0.450	42.467	Chloride	BB
3	4.30	0.005	0.714	Sulfate	BB

Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-08-23 20:26:49 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90661
Sample Position	47
Comment 1	300.0/9056A
Comment 2	

Anions



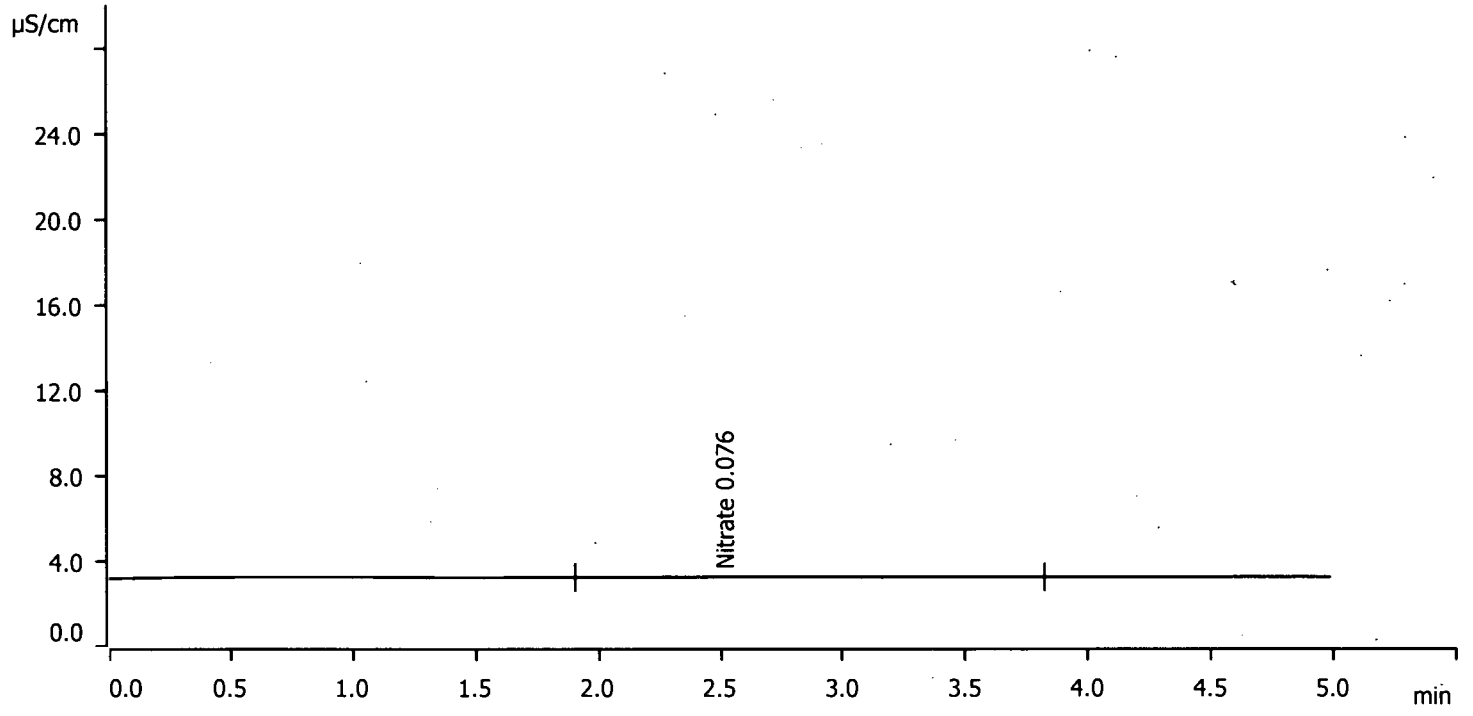
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.358	1.985	Fluoride	BB
2	1.91	0.443	4.185	Chloride	BB
3	2.22	0.511	2.037	Nitrite	BB
4	2.56	0.078	2.026	Bromide	BB
5	2.83	0.547	2.026	Nitrate	BB
6	4.29	0.289	4.025	Sulfate	BB

Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-08-23 20:33:05 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90662
Sample Position	48
Comment 1	300.0/9056A
Comment 2	

Anions



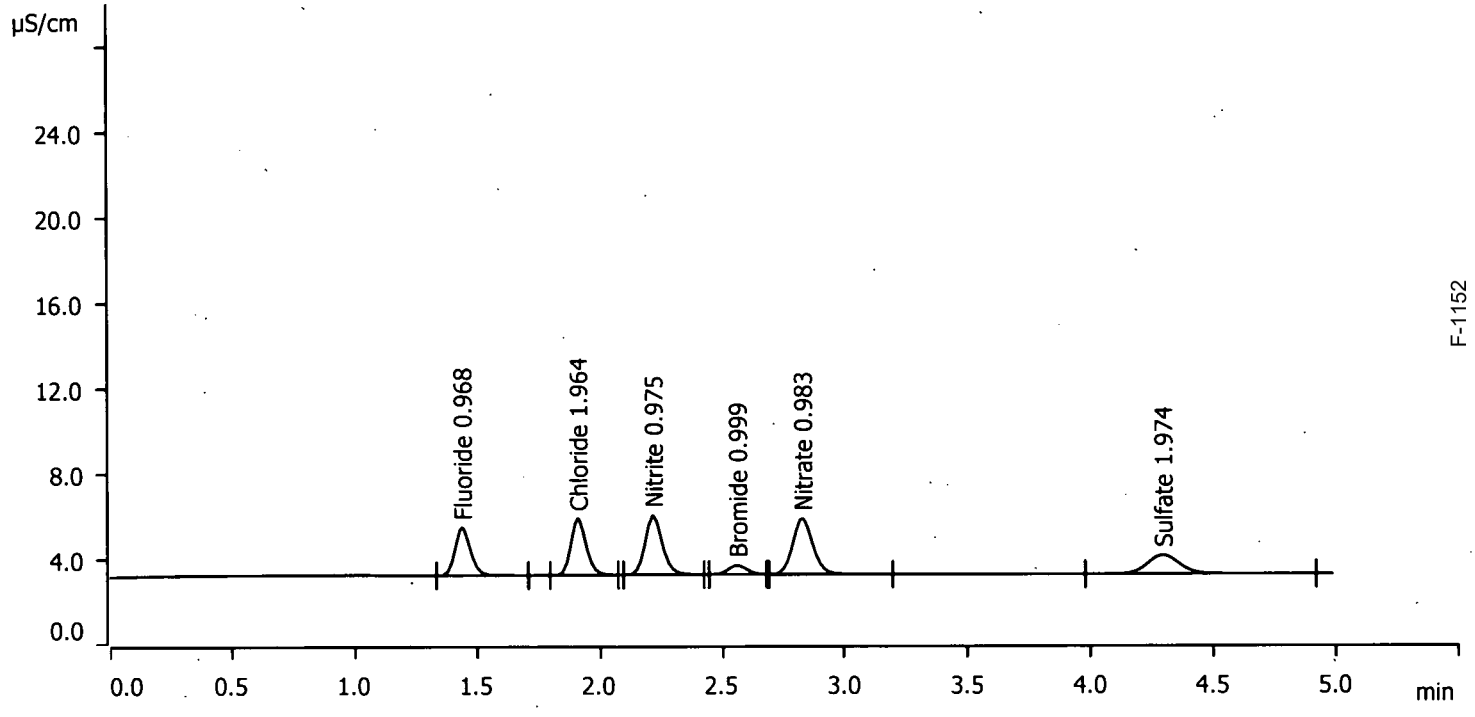
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	2.71	0.015	0.076	Nitrate	BB

Sample data

Ident	LCS
Sample type	Check standard 2
Determination start	2024-08-23 20:39:20 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90663
Sample Position	49
Comment 1	300.0/9056A
Comment 2	

Anions



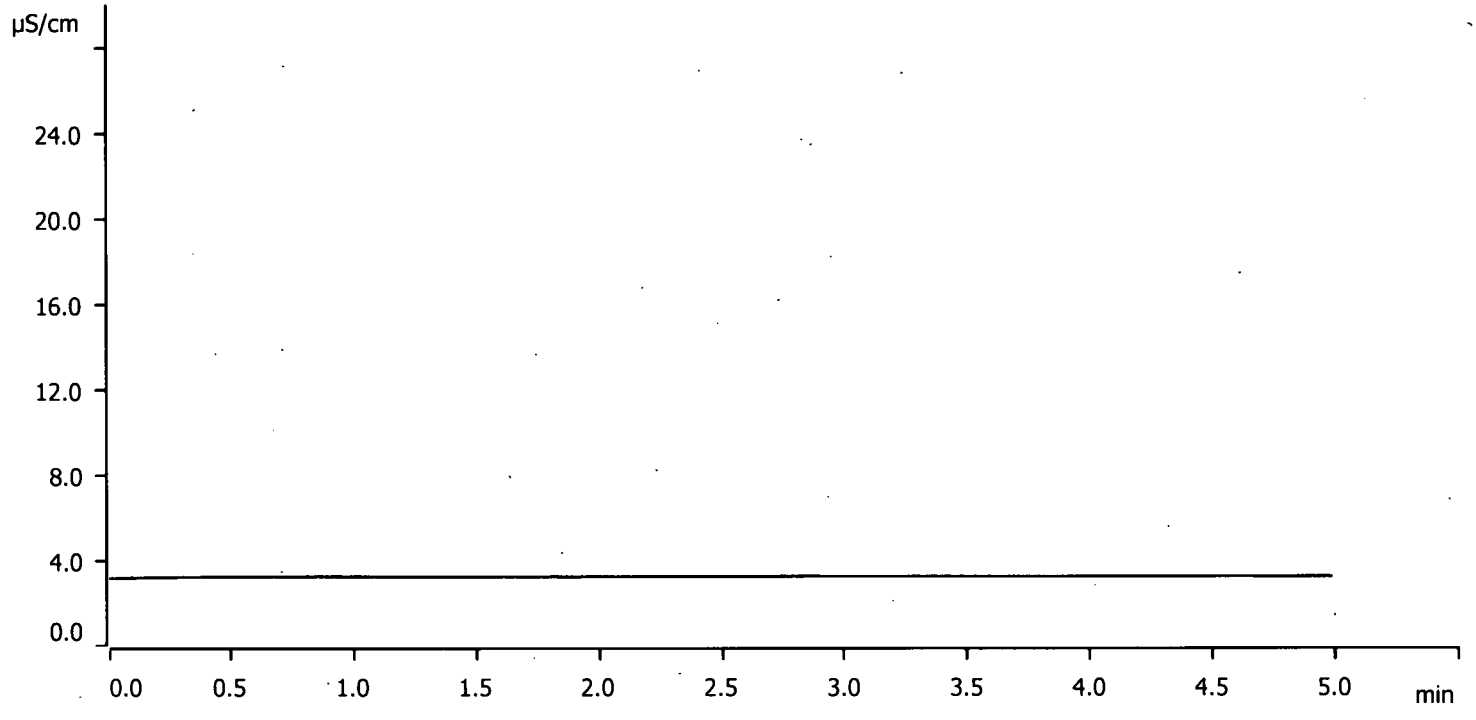
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.165	0.968	Fluoride	BB
2	1.91	0.193	1.964	Chloride	BB
3	2.22	0.231	0.975	Nitrite	BB
4	2.56	0.037	0.999	Bromide	BB
5	2.83	0.247	0.983	Nitrate	BB
6	4.29	0.136	1.974	Sulfate	BB

Sample data

Ident	R2407124-005
Sample type	Sample
Determination start	2024-08-23 20:45:36 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90664
Sample Position	50
Comment 1	300.0 CS
Comment 2	

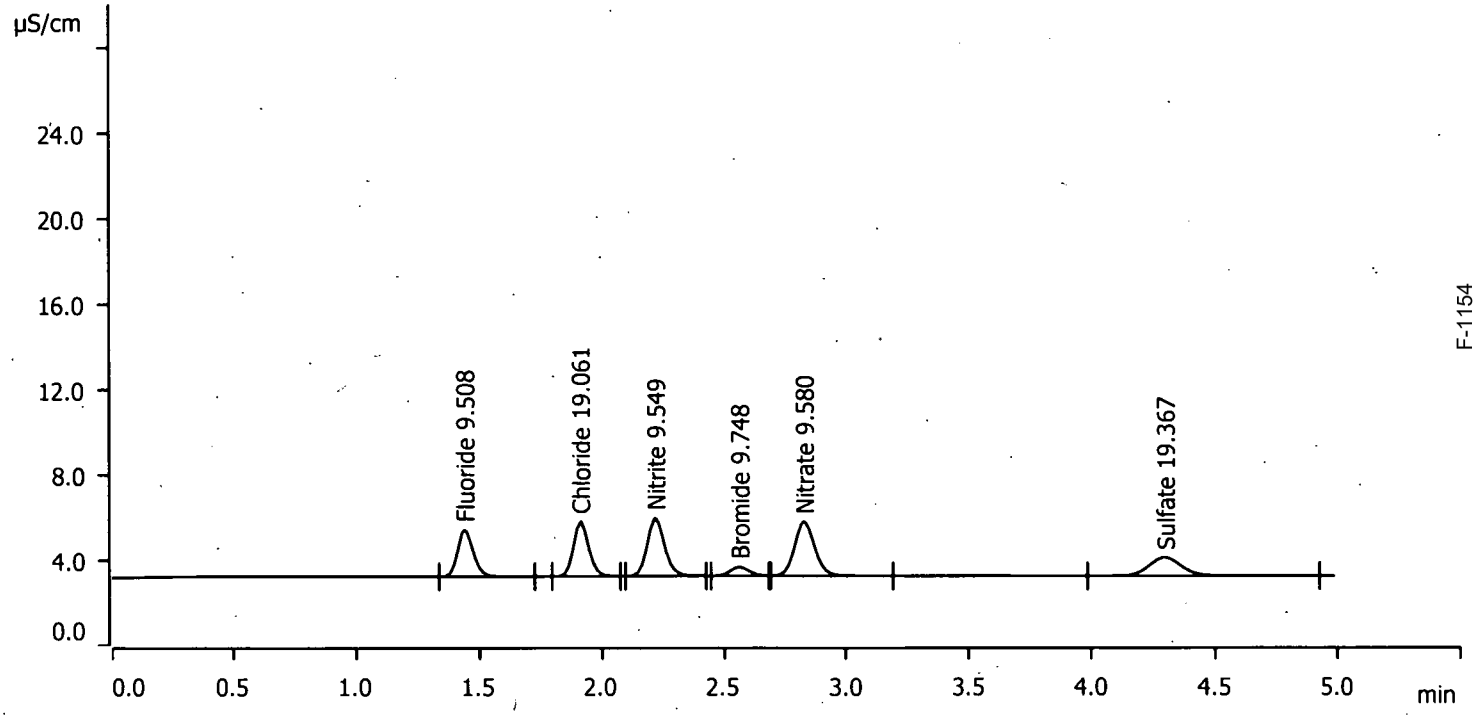
Anions



Sample data

Ident	R2407124-005 MS!
Sample type	Sample
Determination start	2024-08-23 20:51:51 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90665
Sample Position	51
Comment 1	300.0 CS
Comment 2	

Anions



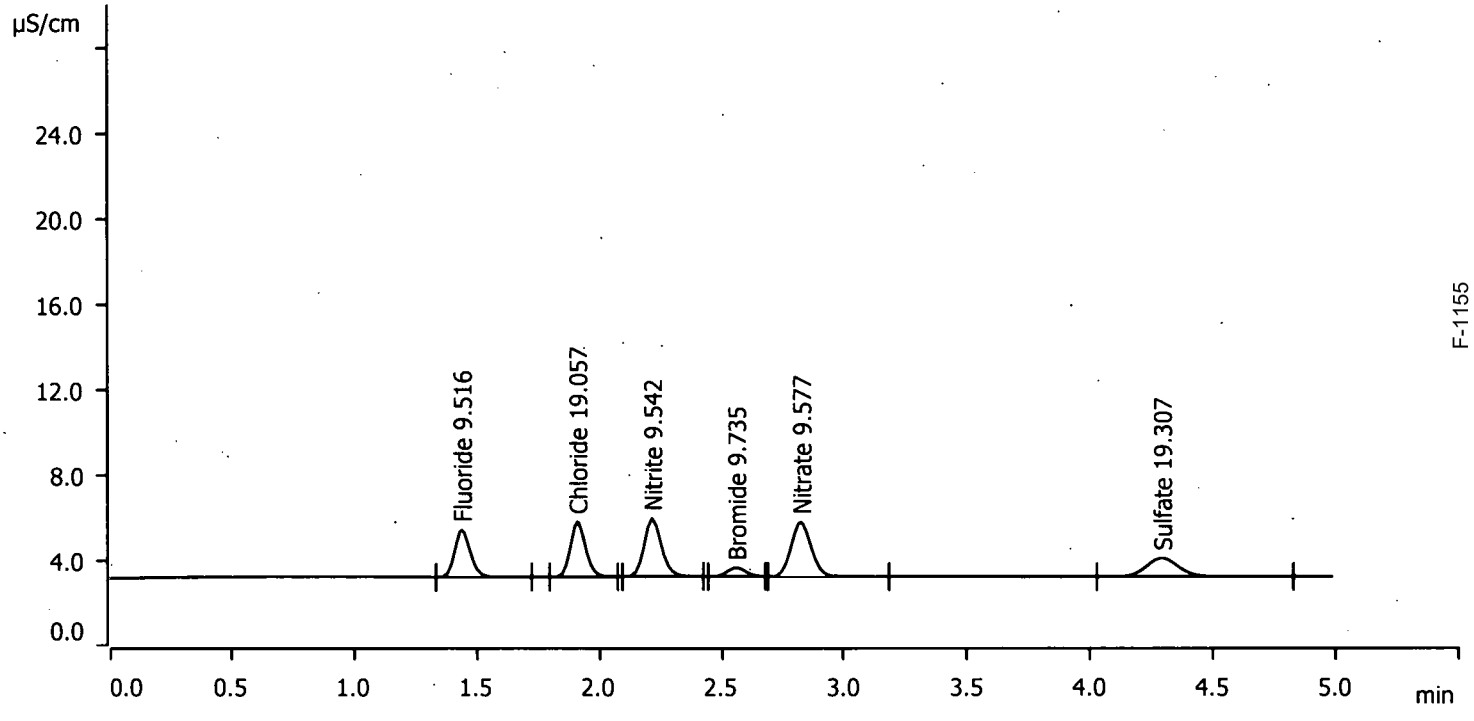
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.162	9.508	Fluoride	BB
2	1.92	0.187	19.061	Chloride	BB
3	2.22	0.226	9.549	Nitrite	BB
4	2.57	0.036	9.748	Bromide	BB
5	2.83	0.240	9.580	Nitrate	BB
6	4.30	0.133	19.367	Sulfate	BB

Sample data

Ident	R2407124-005 MSD!
Sample type	Sample
Determination start	2024-08-23 20:58:06 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90666
Sample Position	52
Comment 1	300.0 CS
Comment 2	

Anions



Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.162	9.516	Fluoride	BB
2	1.91	0.187	19.057	Chloride	BB
3	2.22	0.225	9.542	Nitrite	BB
4	2.56	0.036	9.735	Bromide	BB
5	2.83	0.240	9.577	Nitrate	BB
6	4.29	0.133	19.307	Sulfate	BB

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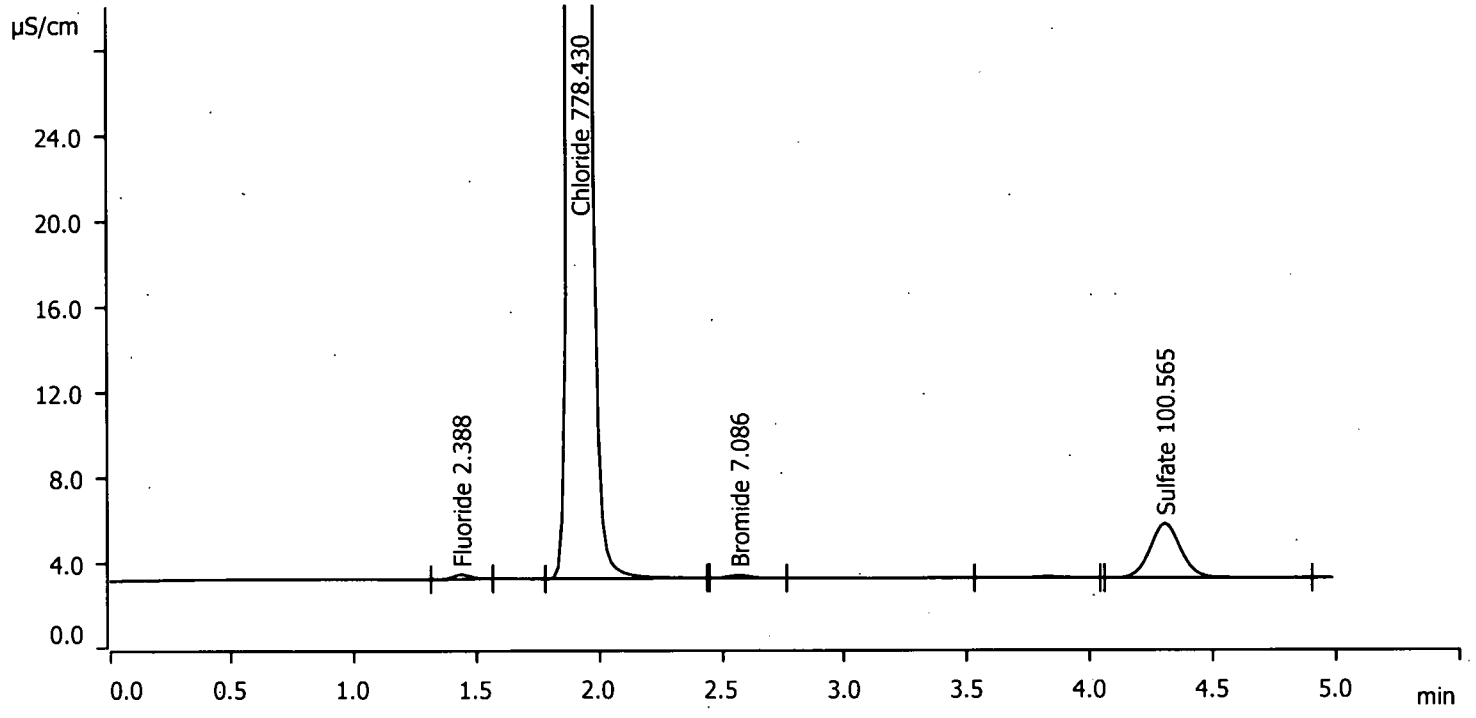
Sample data

Ident	R2407626-001
Sample type	Sample
Determination start	2024-08-23 21:04:21 UTC-4
Method	10-082224FAST
Dilution	20
Counter	90667
Sample Position	53
Comment 1	300.0 S
Comment 2	

Anions



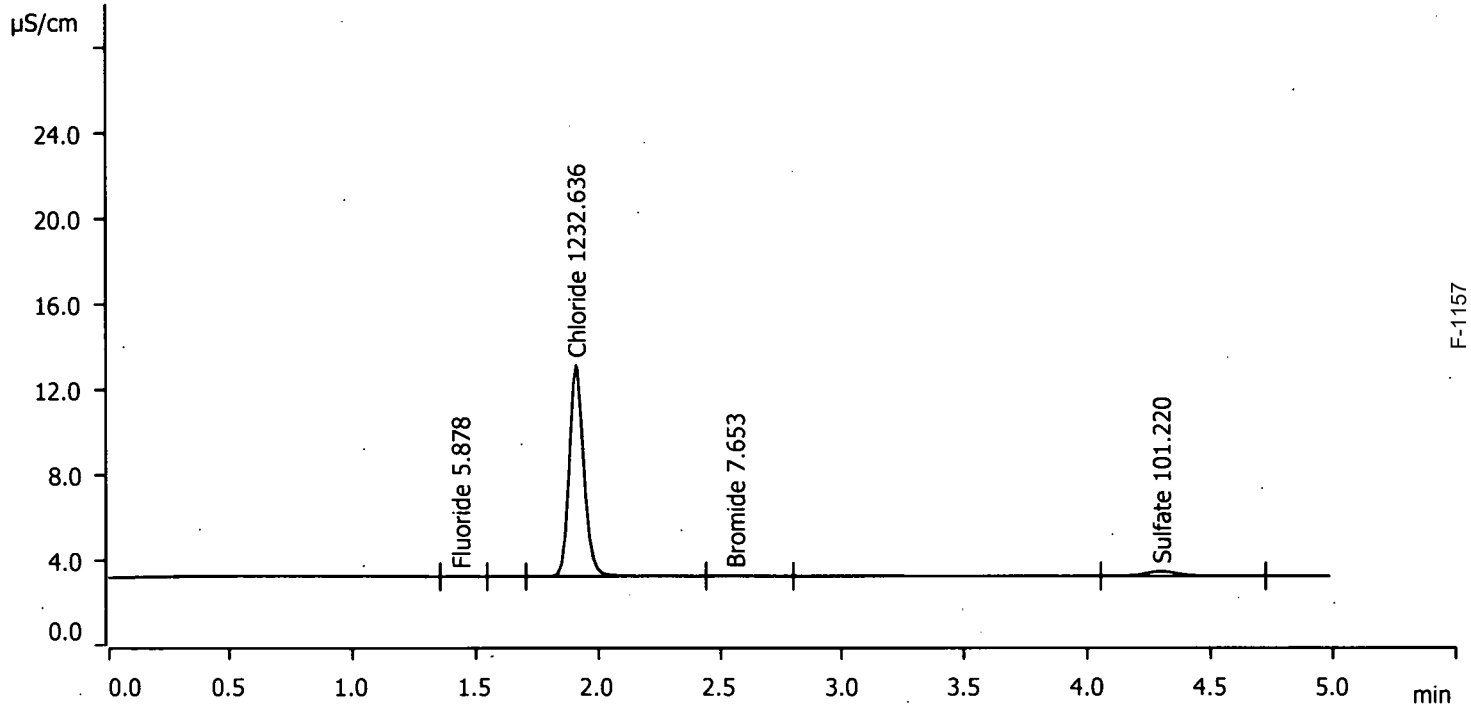
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.016	2.388	Fluoride	BB
2	1.93	8.327	778.430	Chloride	BB
3	2.57	0.013	7.086	Bromide	BB
5	4.30	0.369	100.565	Sulfate	BB

Sample data

Ident	R2407626-001
Sample type	Sample
Determination start	2024-08-23 21:10:37 UTC-4
Method	10-082224FAST
Dilution	200
Counter	90668
Sample Position	54
Comment 1	300.0 C
Comment 2	

Anions



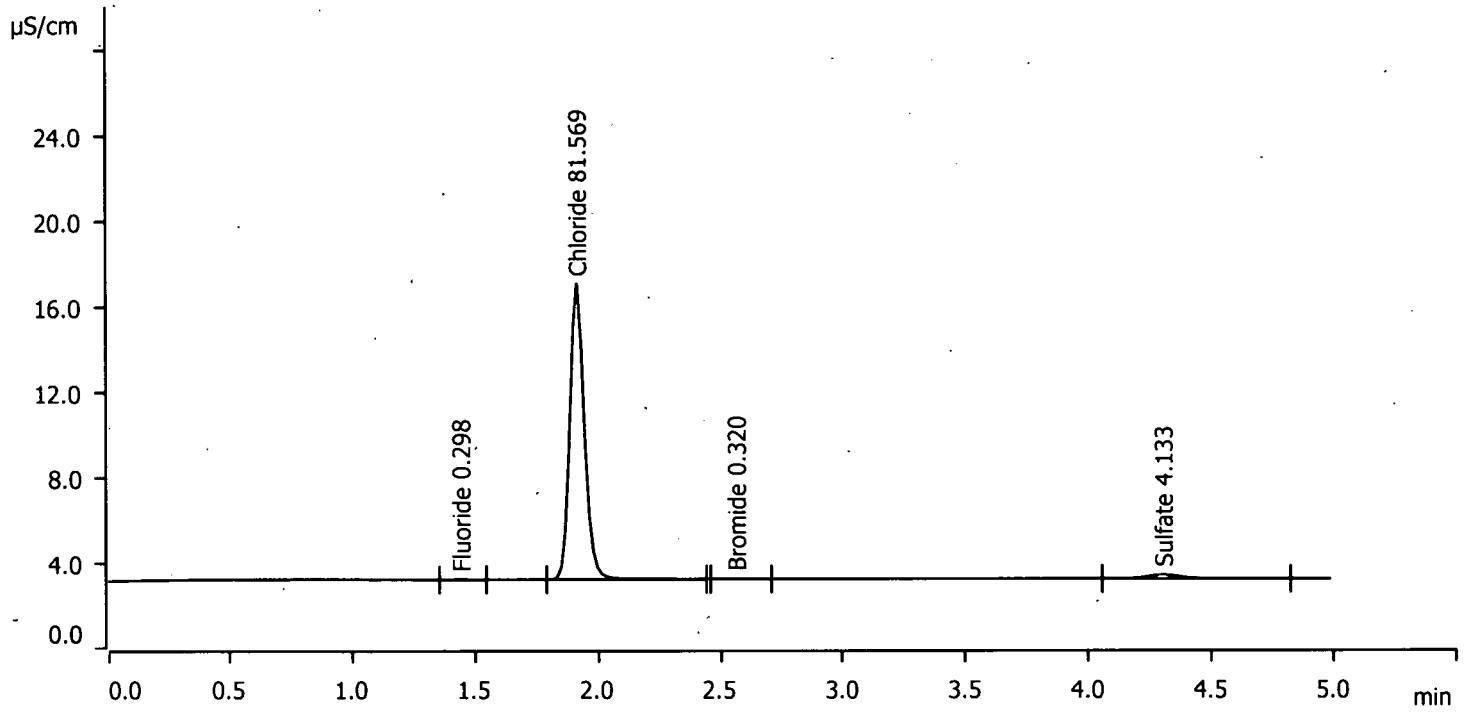
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.001	5.878	Fluoride	BB
2	1.91	0.691	1232.636	Chloride	BB
3	2.56	0.001	7.653	Bromide	BB
4	4.30	0.034	101.220	Sulfate	BB

Sample data

Ident	R2407627-001
Sample type	Sample
Determination start	2024-08-23 21:16:52 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90669
Sample Position	55
Comment 1	300.0 CS
Comment 2	

Anions



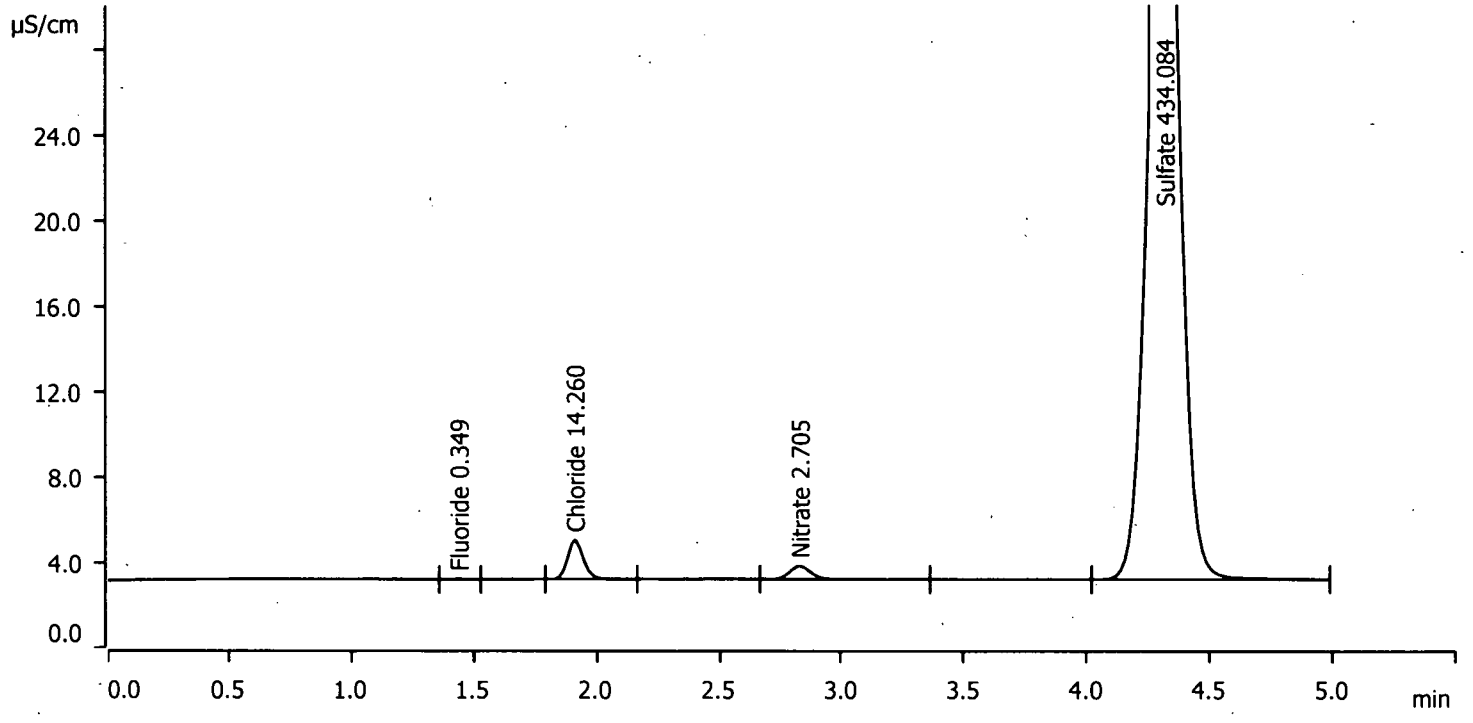
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.001	0.298	Fluoride	BB
2	1.92	0.966	81.569	Chloride	BB
3	2.57	0.001	0.320	Bromide	BB
4	4.30	0.028	4.133	Sulfate	BB

Sample data

Ident	R2407457-005
Sample type	Sample
Determination start	2024-08-23 21:23:07 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90670
Sample Position	56
Comment 1	300.0 C
Comment 2	

Anions



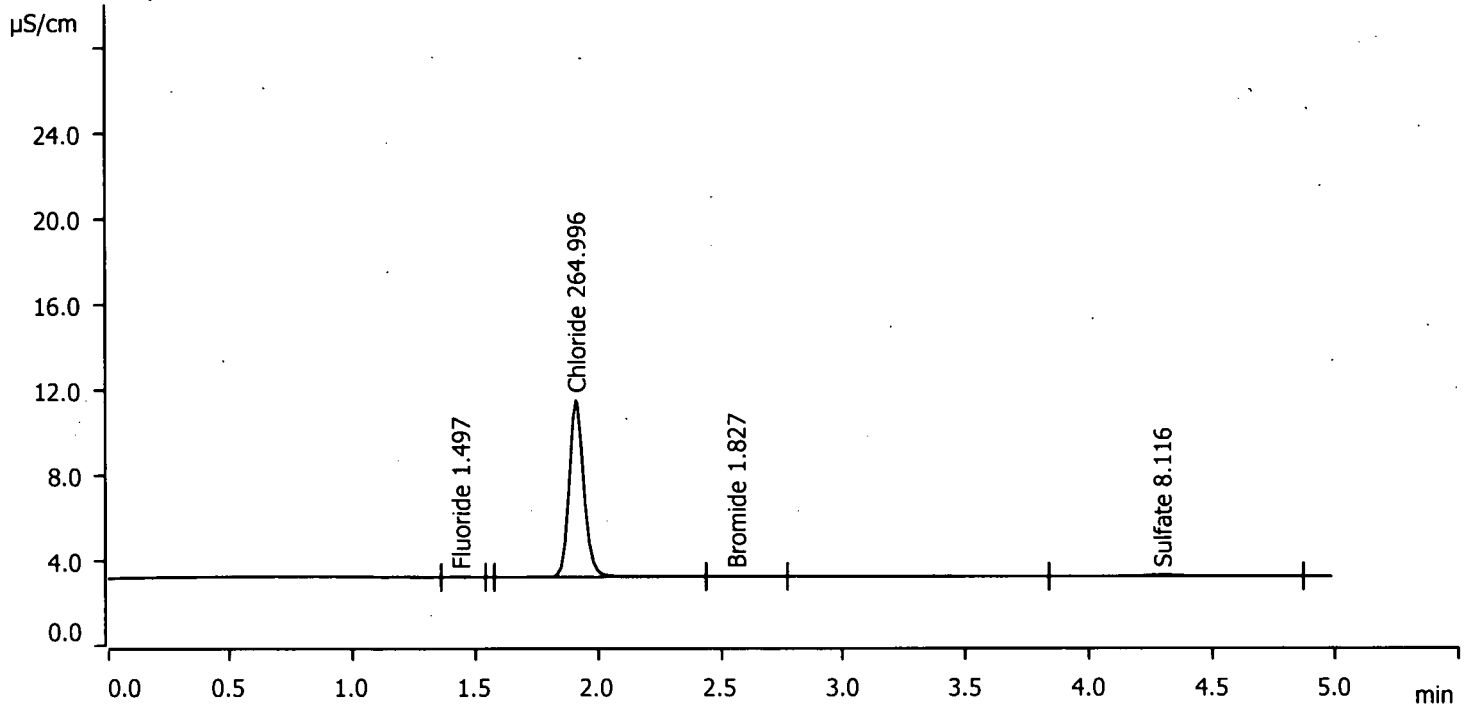
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.002	0.349	Fluoride	BB
2	1.91	0.137	14.260	Chloride	BB
3	2.83	0.062	2.705	Nitrate	BB
4	4.32	5.715	434.084	Sulfate	BB

Sample data

Ident	R2407457-007
Sample type	Sample
Determination start	2024-08-23 21:29:22 UTC-4
Method	10-082224FAST
Dilution	50
Counter	90671
Sample Position	57
Comment 1	300.0 C
Comment 2	

Anions



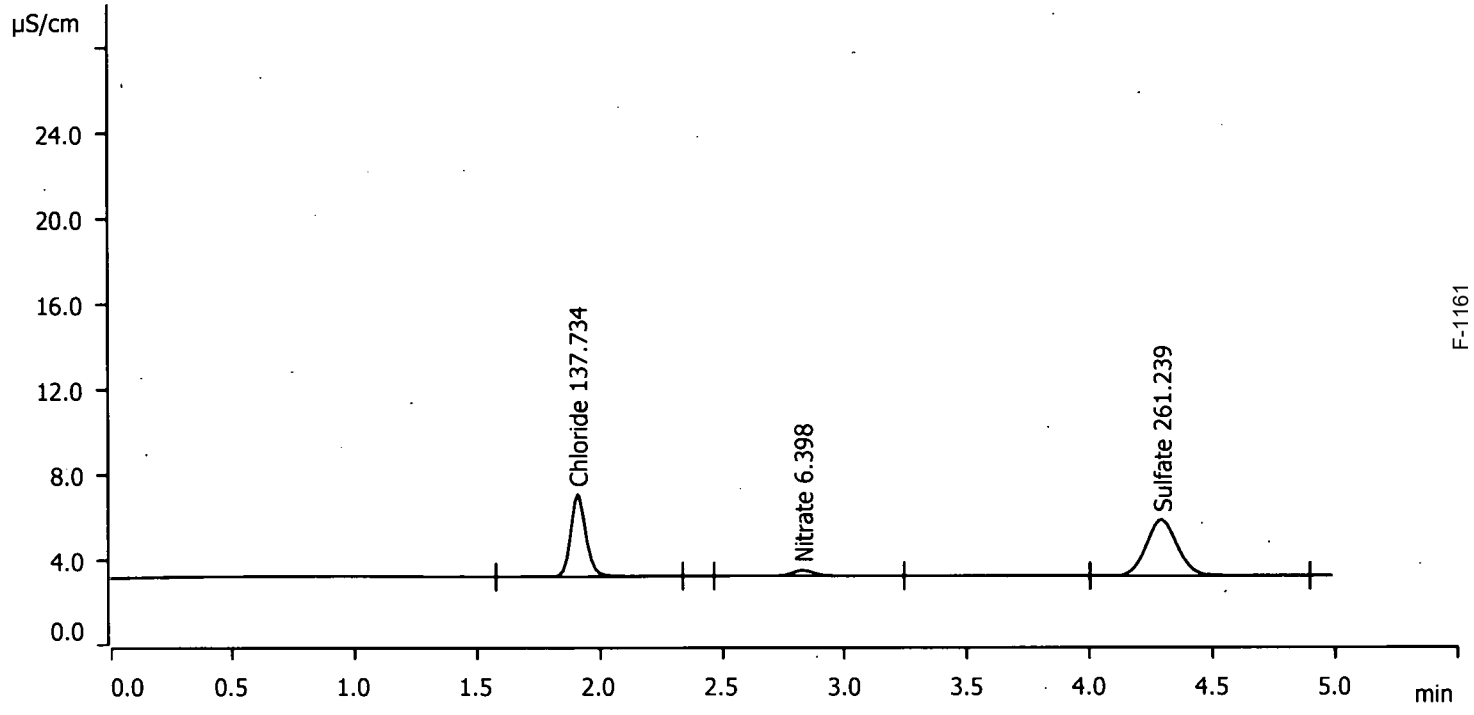
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.001	1.497	Fluoride	BB
2	1.91	0.580	264.996	Chloride	BB
3	2.56	0.001	1.827	Bromide	BB
4	4.29	0.011	8.116	Sulfate	BB

Sample data

Ident	R2407815-001
Sample type	Sample
Determination start	2024-08-23 21:35:38 UTC-4
Method	10-082224FAST
Dilution	50
Counter	90672
Sample Position	58
Comment 1	300.0 CS
Comment 2	

Anions



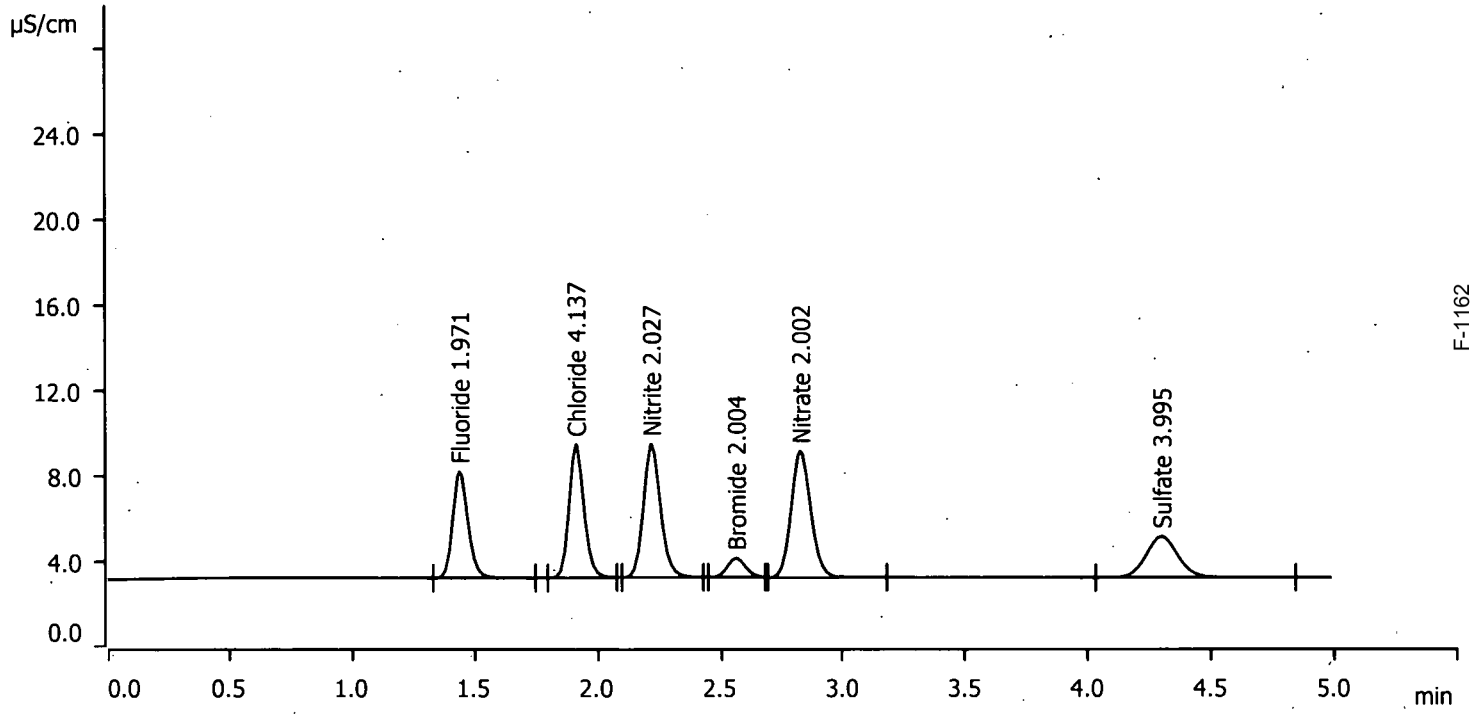
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.91	0.278	137.734	Chloride	BB
2	2.83	0.027	6.398	Nitrate	BB
3	4.29	0.385	261.239	Sulfate	BB

Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-08-23 21:41:53 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90673
Sample Position	59
Comment 1	300.0/9056A
Comment 2	

Anions



Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.355	1.971	Fluoride	BB
2	1.92	0.437	4.137	Chloride	BB
3	2.22	0.508	2.027	Nitrite	BB
4	2.56	0.077	2.004	Bromide	BB
5	2.83	0.540	2.002	Nitrate	BB
6	4.30	0.287	3.995	Sulfate	BB

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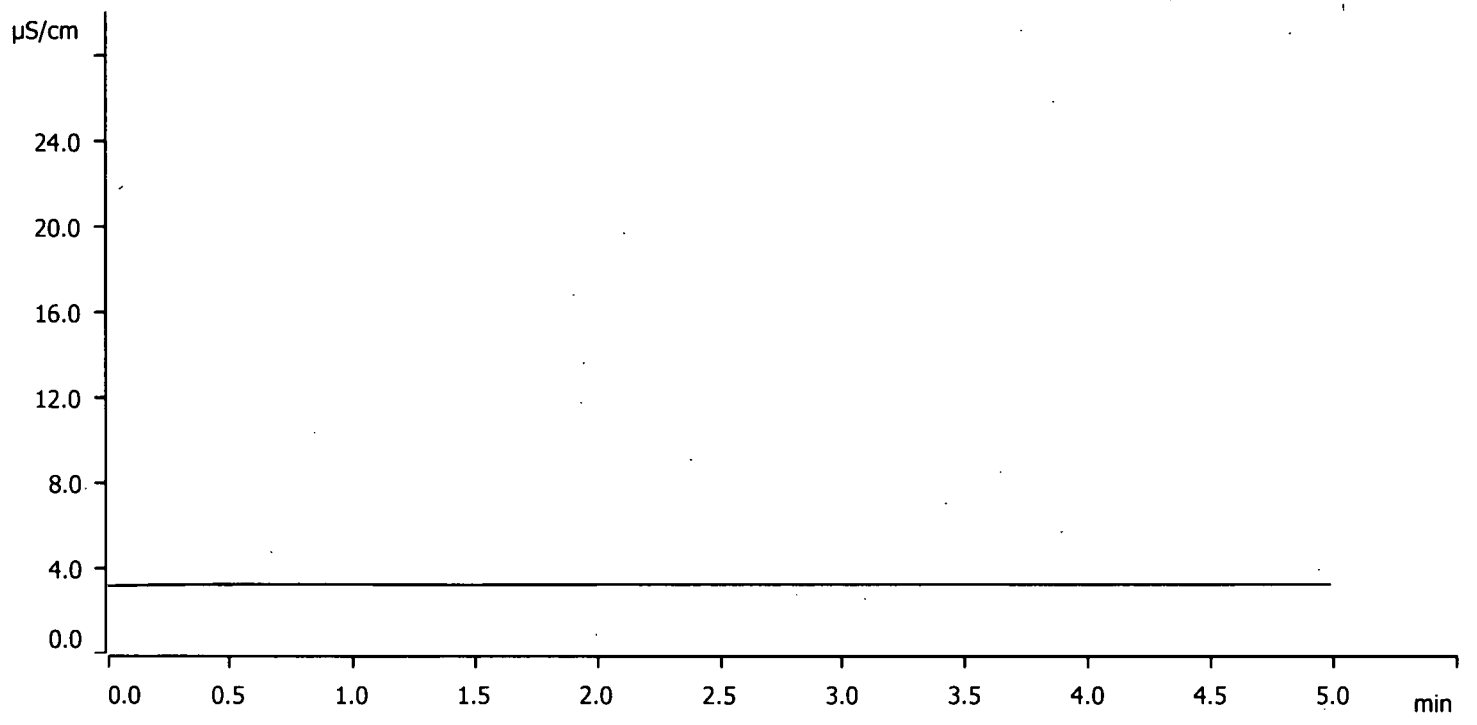
Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-08-23 21:48:08 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90674
Sample Position	60
Comment 1	300.0/9056A
Comment 2	

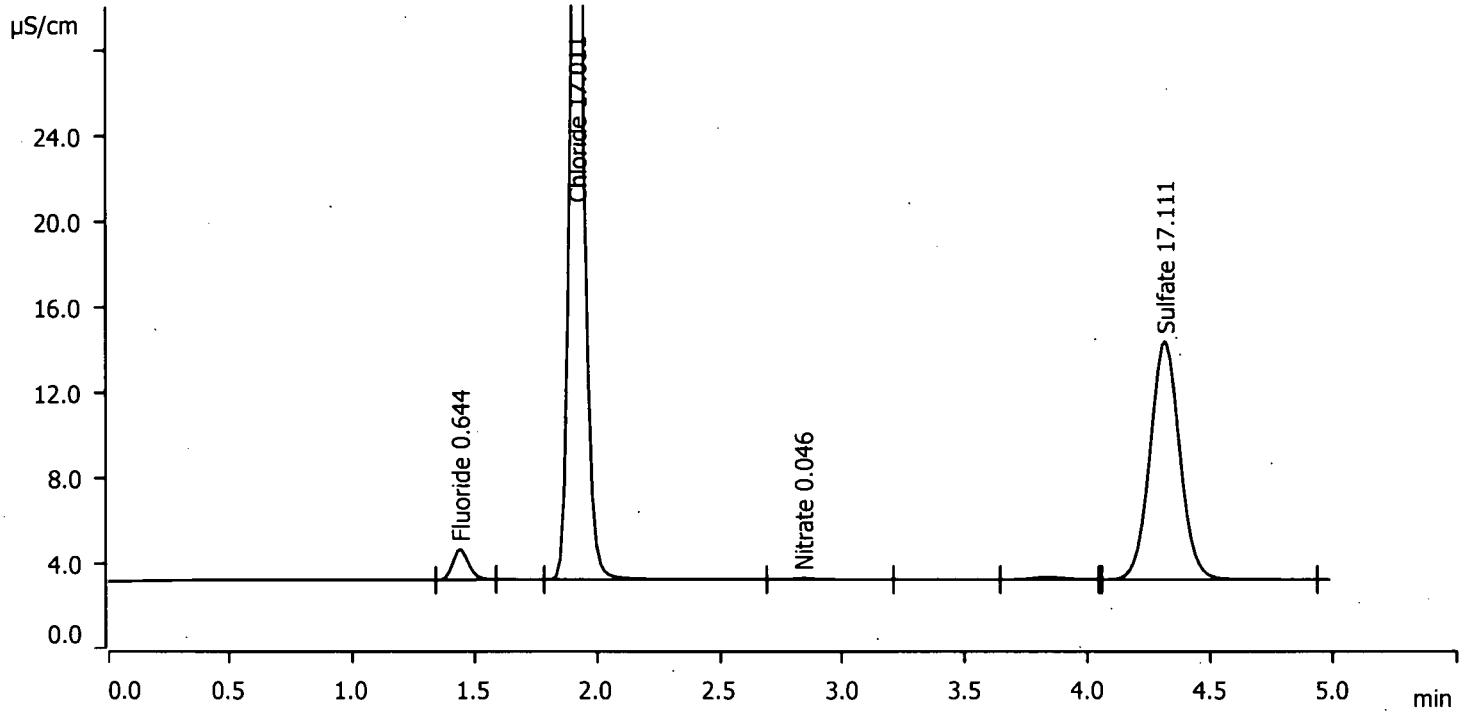
Anions



Sample data

Ident	R2407667-001
Sample type	Sample
Determination start	2024-08-23 21:54:23 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90675
Sample Position	61
Comment 1	300.0 F
Comment 2	

Anions



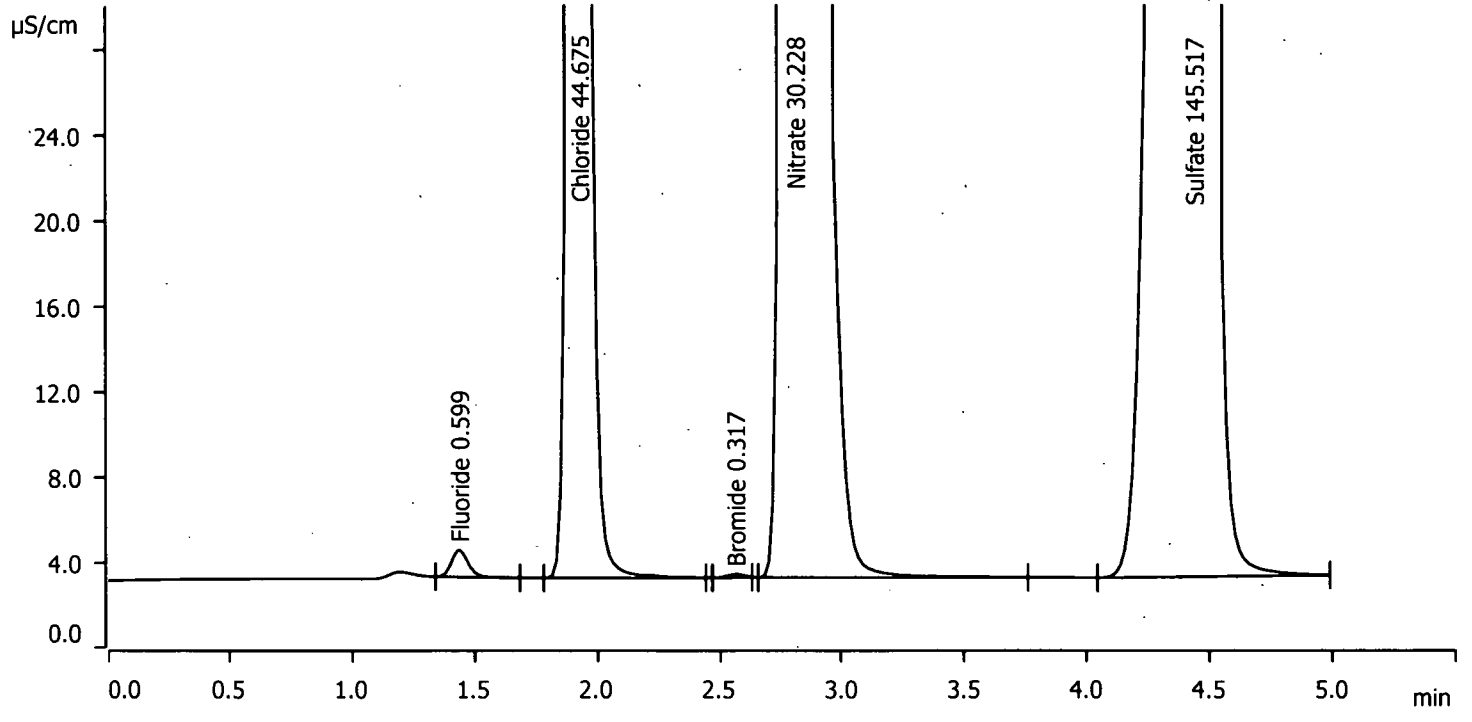
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.107	0.644	Fluoride	BB
2	1.92	2.484	17.011	Chloride	BB
3	2.84	0.007	0.046	Nitrate	BBI
5	4.31	1.570	17.111	Sulfate	BB

Sample data

Ident	R2407792-004
Sample type	Sample
Determination start	2024-08-23 22:00:38 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90676
Sample Position	62
Comment 1	300.0 F
Comment 2	

Anions



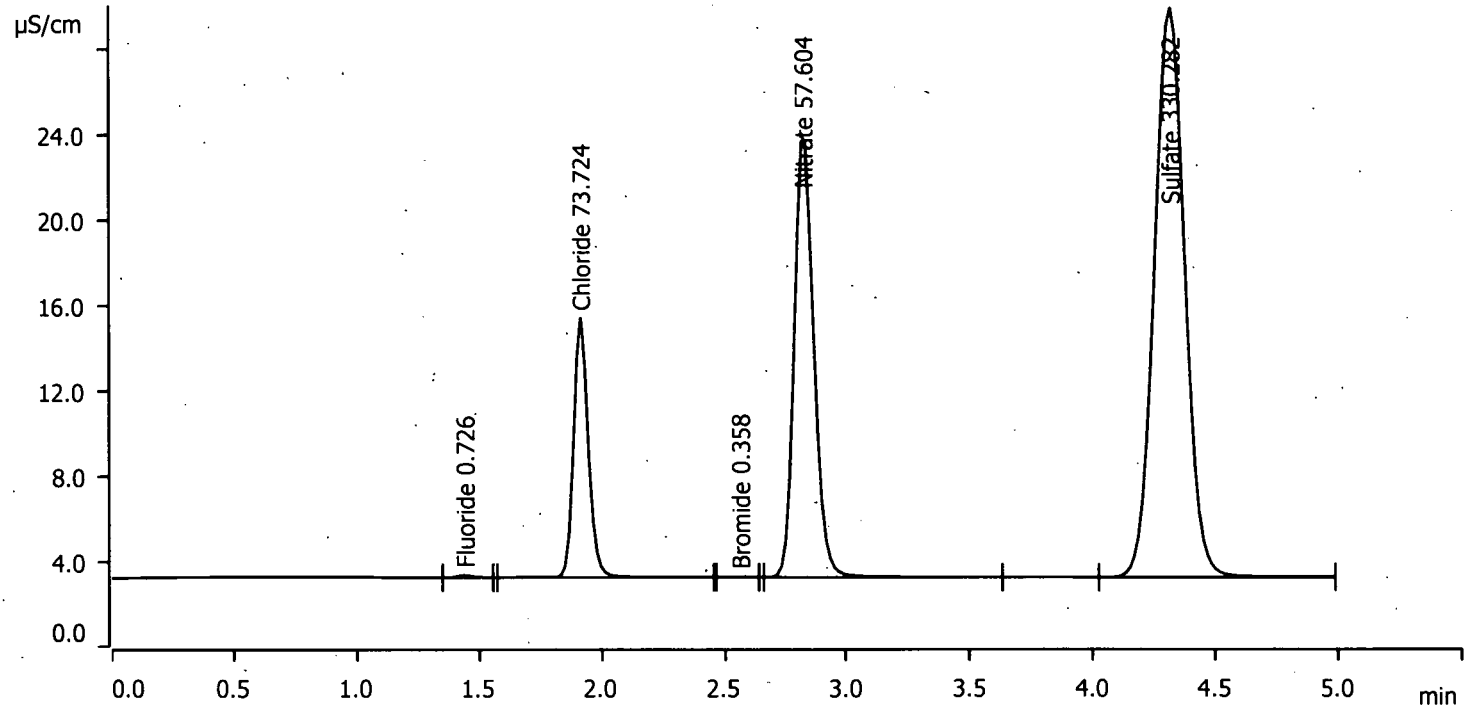
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.099	0.599	Fluoride	BB
2	1.93	10.355	44.675	Chloride	BB
3	2.57	0.012	0.317	Bromide	BB
4	2.81	22.004	30.228	Nitrate	BB
5	4.44	41.714	145.517	Sulfate	BB

Sample data

Ident	R2407792-004
Sample type	Sample
Determination start	2024-08-23 22:06:53 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90677
Sample Position	63
Comment 1	300.0 C
Comment 2	

Anions



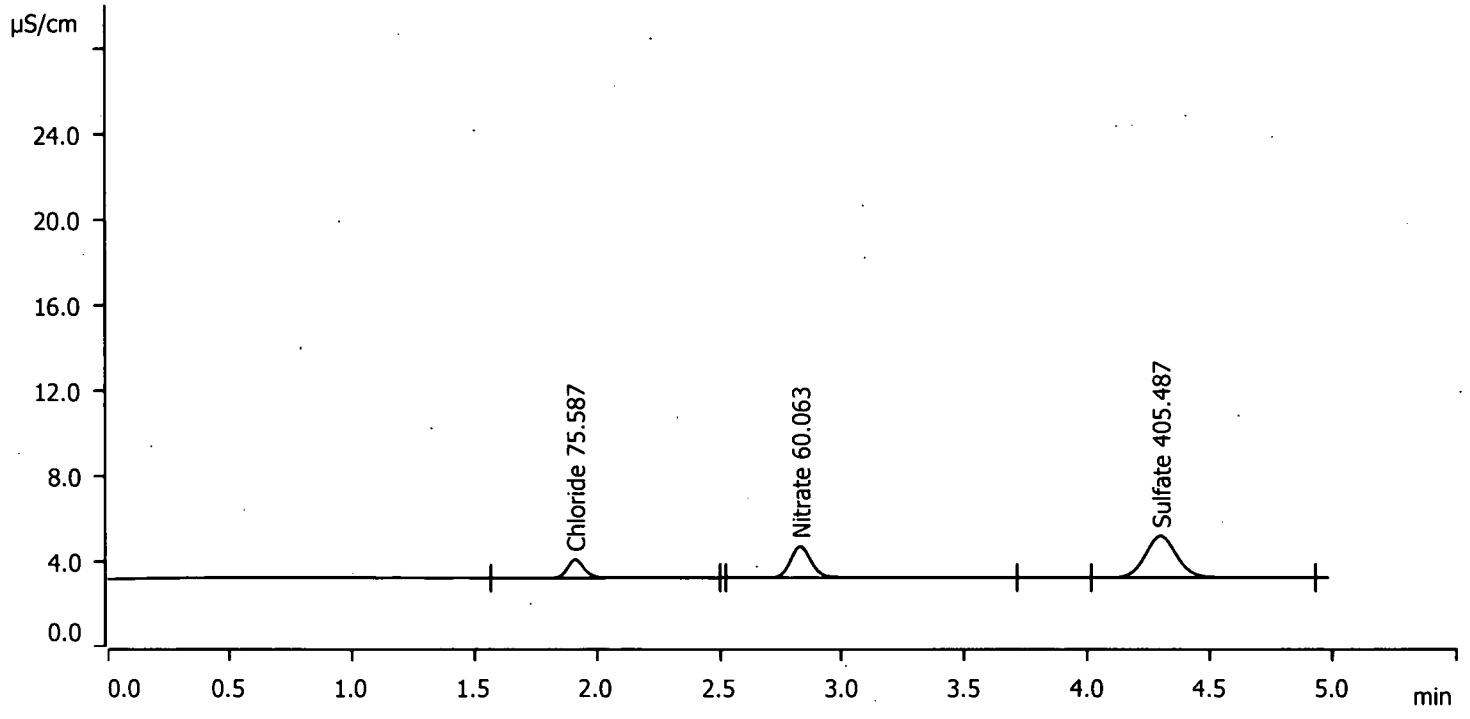
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.009	0.726	Fluoride	BB
2	1.92	0.855	73.724	Chloride	BB
3	2.57	0.001	0.358	Bromide	BB
4	2.83	1.910	57.604	Nitrate	BB
5	4.32	3.828	330.282	Sulfate	BB

Sample data

Ident	R2407792-004
Sample type	Sample
Determination start	2024-08-23 22:13:09 UTC-4
Method	10-082224FAST
Dilution	100
Counter	90678
Sample Position	64
Comment 1	300.0 S
Comment 2	

Anions



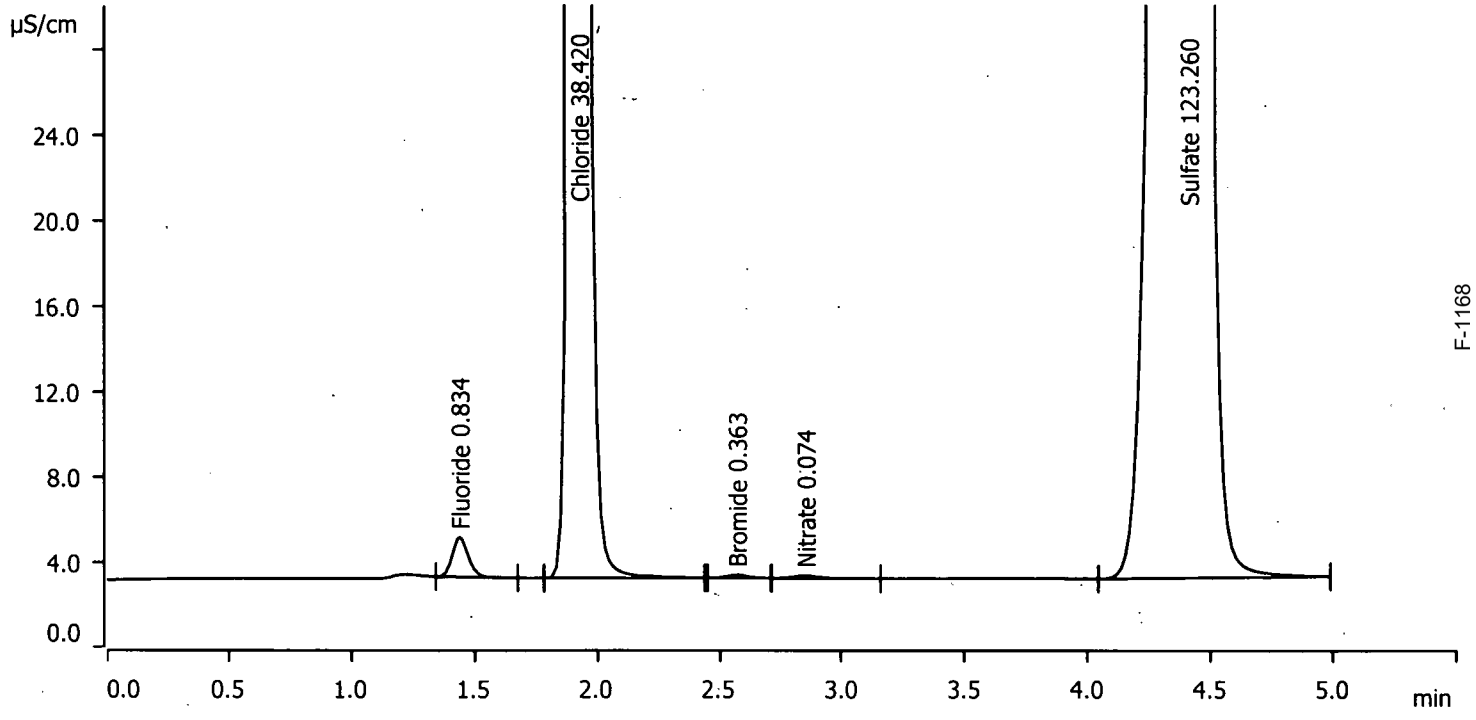
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.92	0.070	75.587	Chloride	BB
2	2.83	0.146	60.063	Nitrate	BB
3	4.30	0.292	405.487	Sulfate	BB

Sample data

Ident	R2407792-012
Sample type	Sample
Determination start	2024-08-23 22:19:24 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90679
Sample Position	65
Comment 1	300.0 F
Comment 2	

Anions



Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.141	0.834	Fluoride	BB
2	1.93	8.160	38.420	Chloride	BB
3	2.57	0.013	0.363	Bromide	BB
4	2.85	0.014	0.074	Nitrate	BB
5	4.41	31.169	123.260	Sulfate	BB

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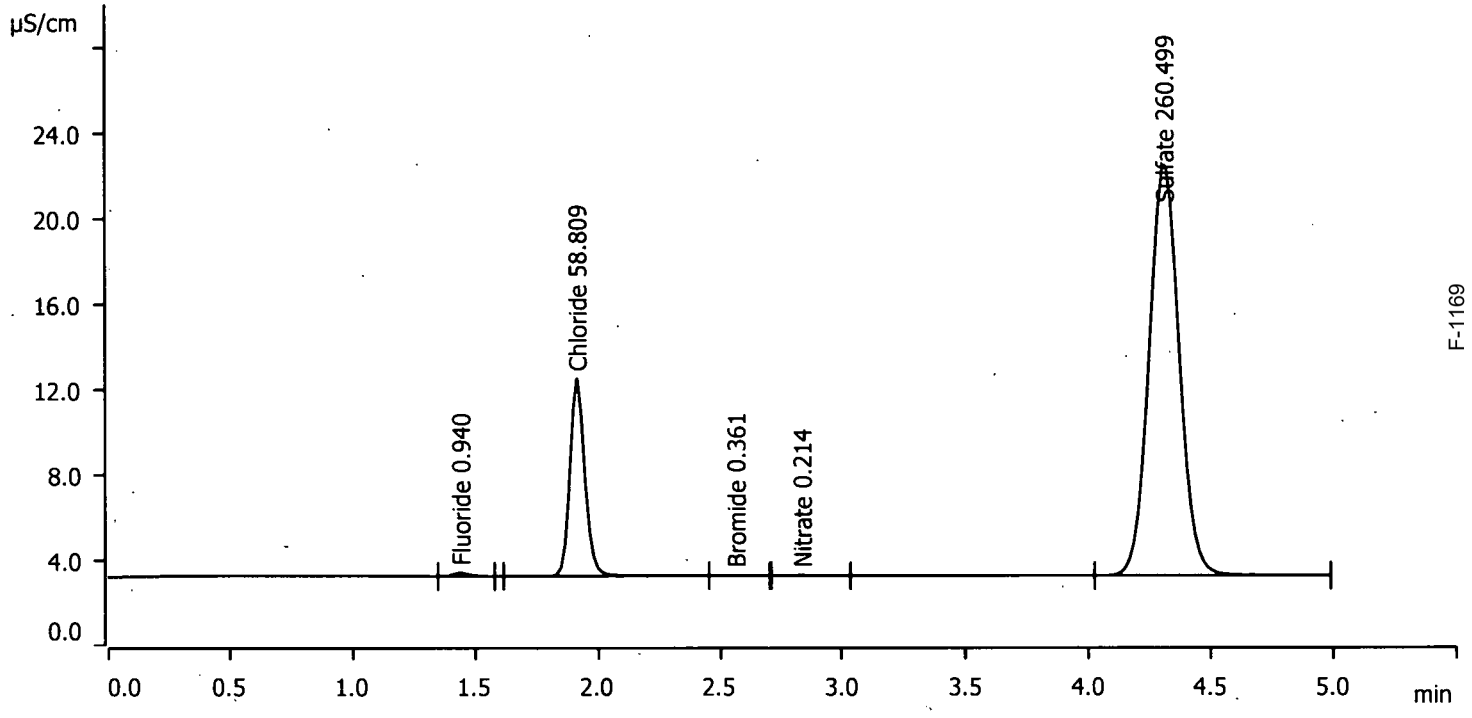
Sample data

Ident	R2407792-012
Sample type	Sample
Determination start	2024-08-23 22:25:39 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90680
Sample Position	66
Comment 1	300.0 C
Comment 2	

Anions



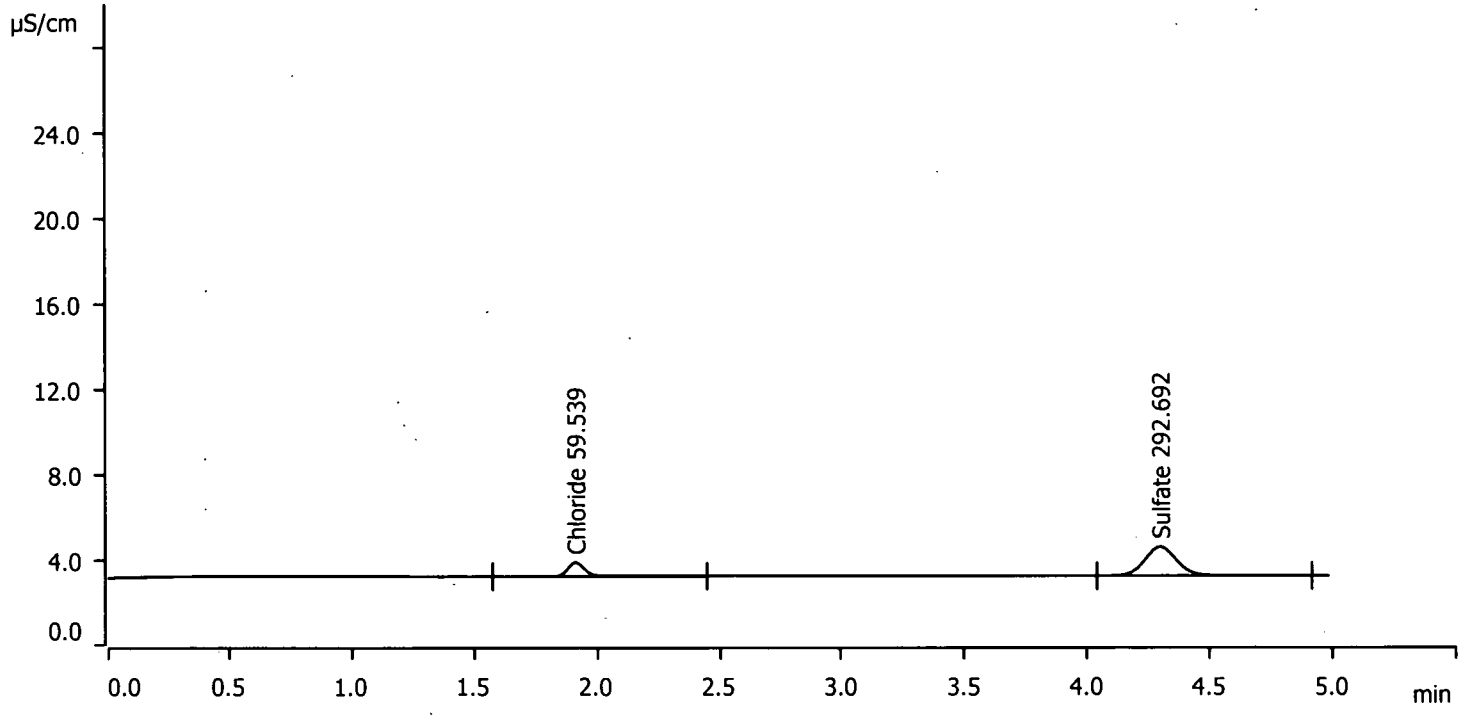
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.012	0.940	Fluoride	BB
2	1.92	0.654	58.809	Chloride	BB
3	2.57	0.001	0.361	Bromide	BB
4	2.84	0.001	0.214	Nitrate	BB
5	4.31	2.743	260.499	Sulfate	BB

Sample data

Ident	R2407792-012
Sample type	Sample
Determination start	2024-08-23 22:31:55 UTC-4
Method	10-082224FAST
Dilution	100
Counter	90681
Sample Position	67
Comment 1	300.0 S
Comment 2	

Anions



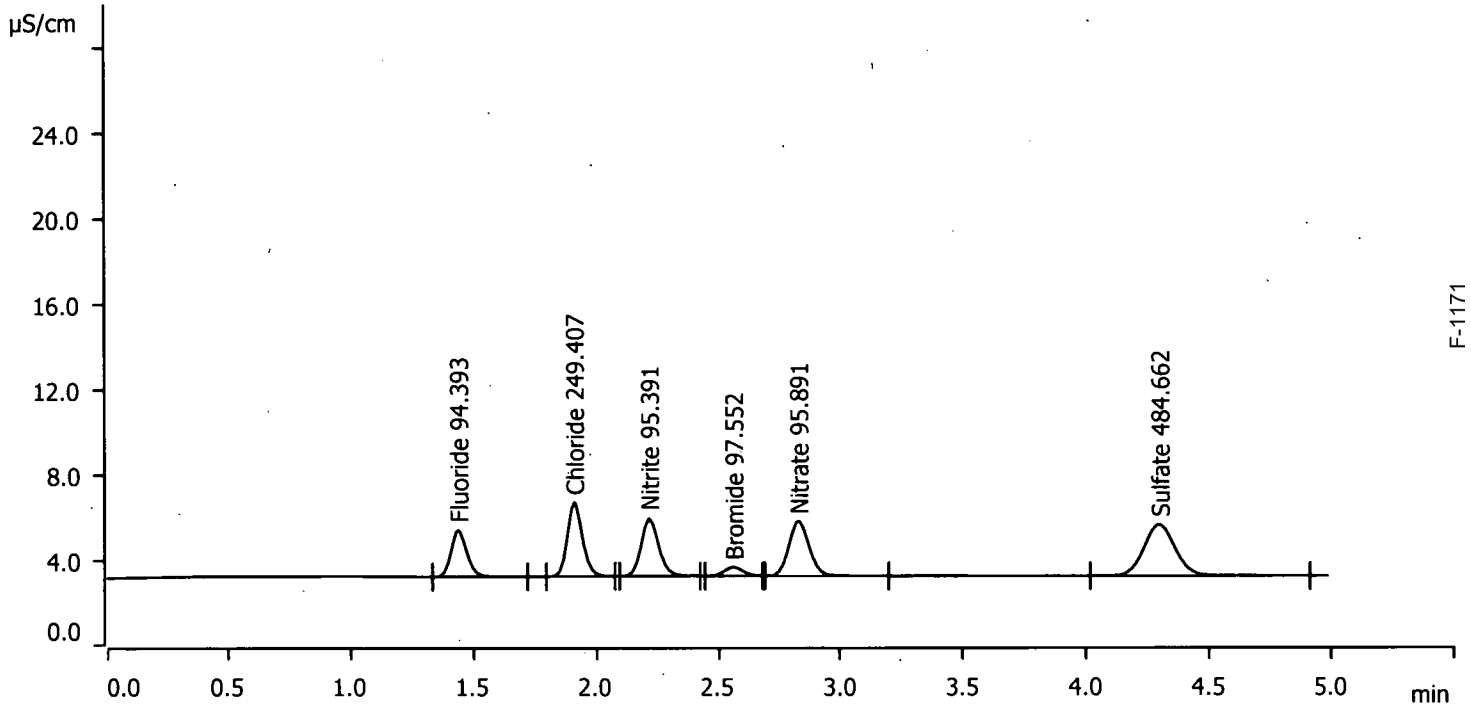
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.92	0.054	59.539	Chloride	BB
2	4.30	0.206	292.692	Sulfate	BB

Sample data

Ident	R2407792-012 MS
Sample type	Sample
Determination start	2024-08-23 22:38:10 UTC-4
Method	10-082224FAST
Dilution	100
Counter	90682
Sample Position	68
Comment 1	300.0 S
Comment 2	

Anions



Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.160	94.393	Fluoride	BB
2	1.91	0.250	249.407	Chloride	BB
3	2.22	0.225	95.391	Nitrite	BB
4	2.56	0.036	97.552	Bromide	BB
5	2.83	0.240	95.891	Nitrate	BB
6	4.30	0.354	484.662	Sulfate	BB

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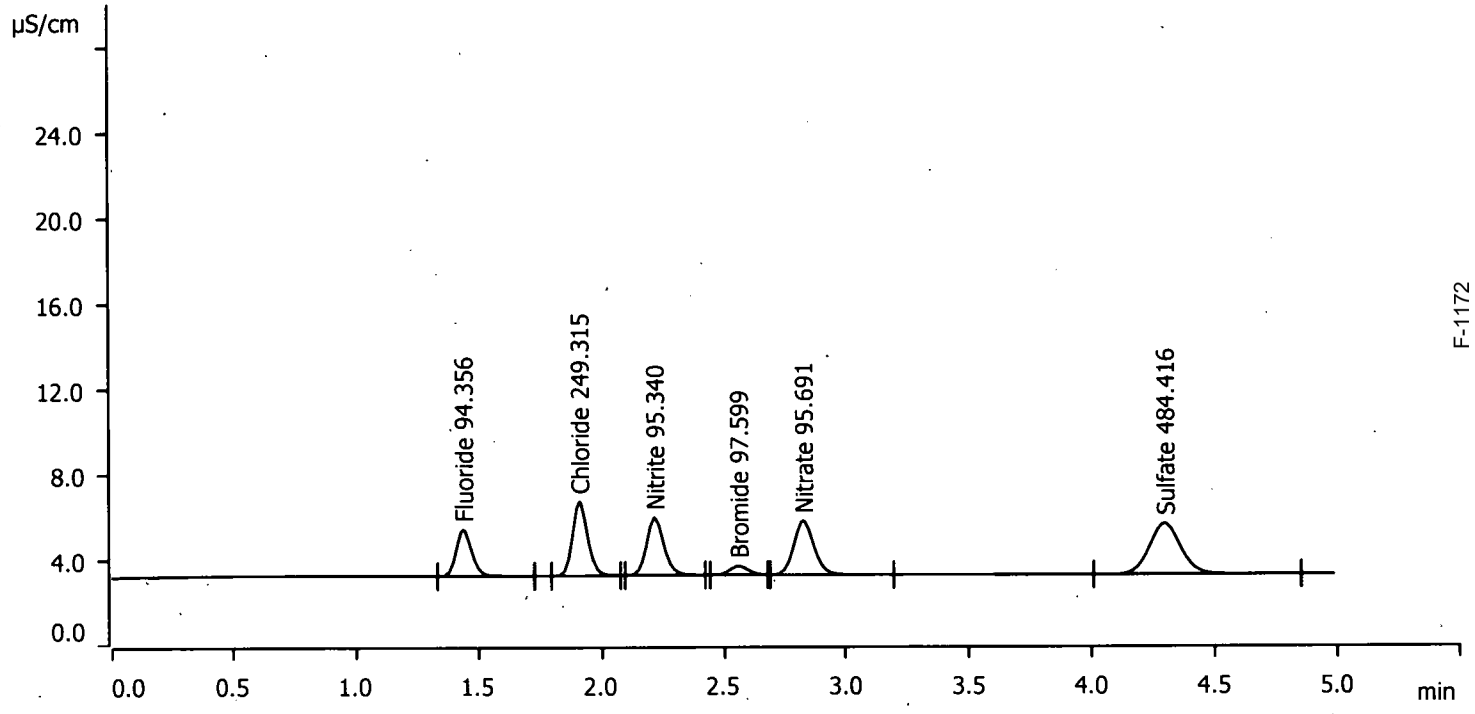
Sample data

Ident	R2407792-012 MSD
Sample type	Sample
Determination start	2024-08-23 22:44:26 UTC-4
Method	10-082224FAST
Dilution	100
Counter	90683
Sample Position	69
Comment 1	300.0 S
Comment 2	

Anions



Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.160	94.356	Fluoride	BB
2	1.91	0.250	249.315	Chloride	BB
3	2.22	0.225	95.340	Nitrite	BB
4	2.56	0.036	97.599	Bromide	BB
5	2.83	0.240	95.691	Nitrate	BB
6	4.30	0.354	484.416	Sulfate	BB

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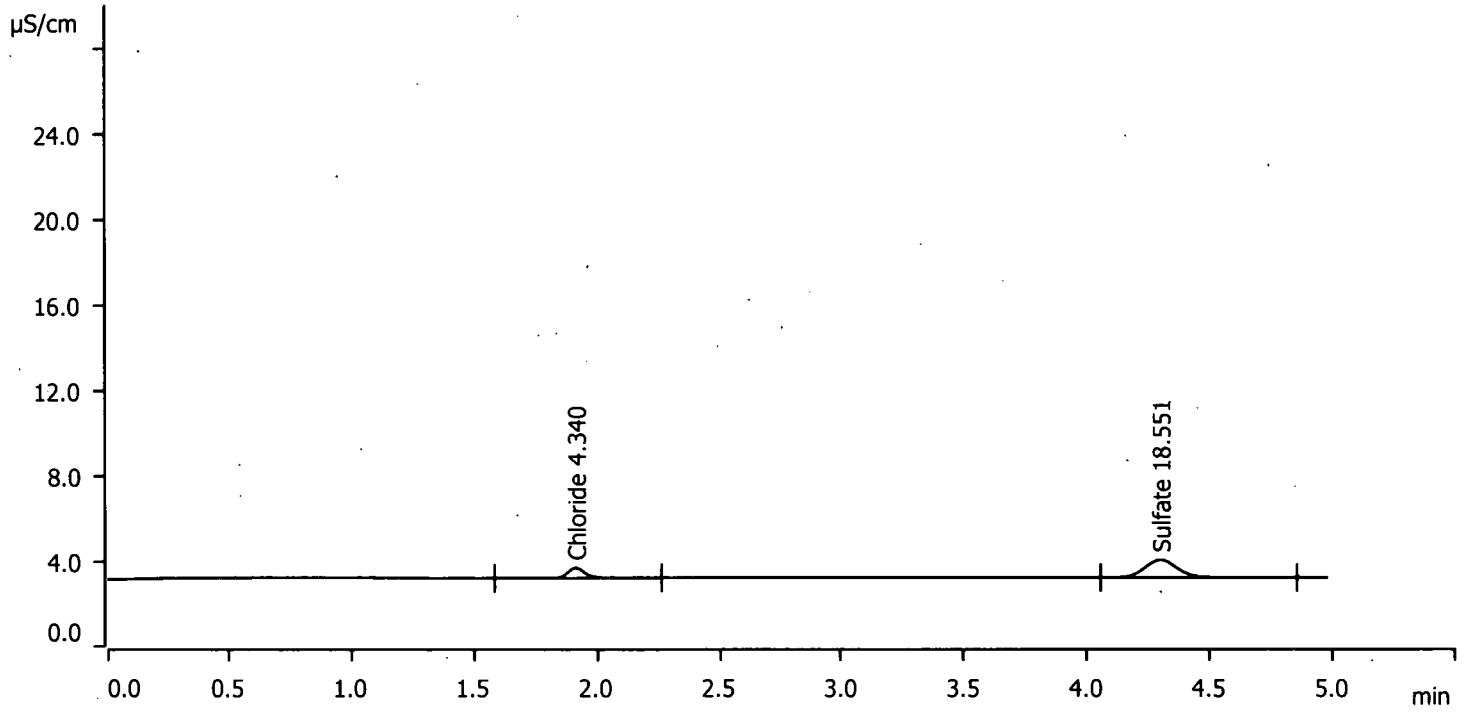
Sample data

Ident	R2407830-002
Sample type	Sample
Determination start	2024-08-23 22:50:41 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90684
Sample Position	70
Comment 1	300.0 S
Comment 2	

Anions



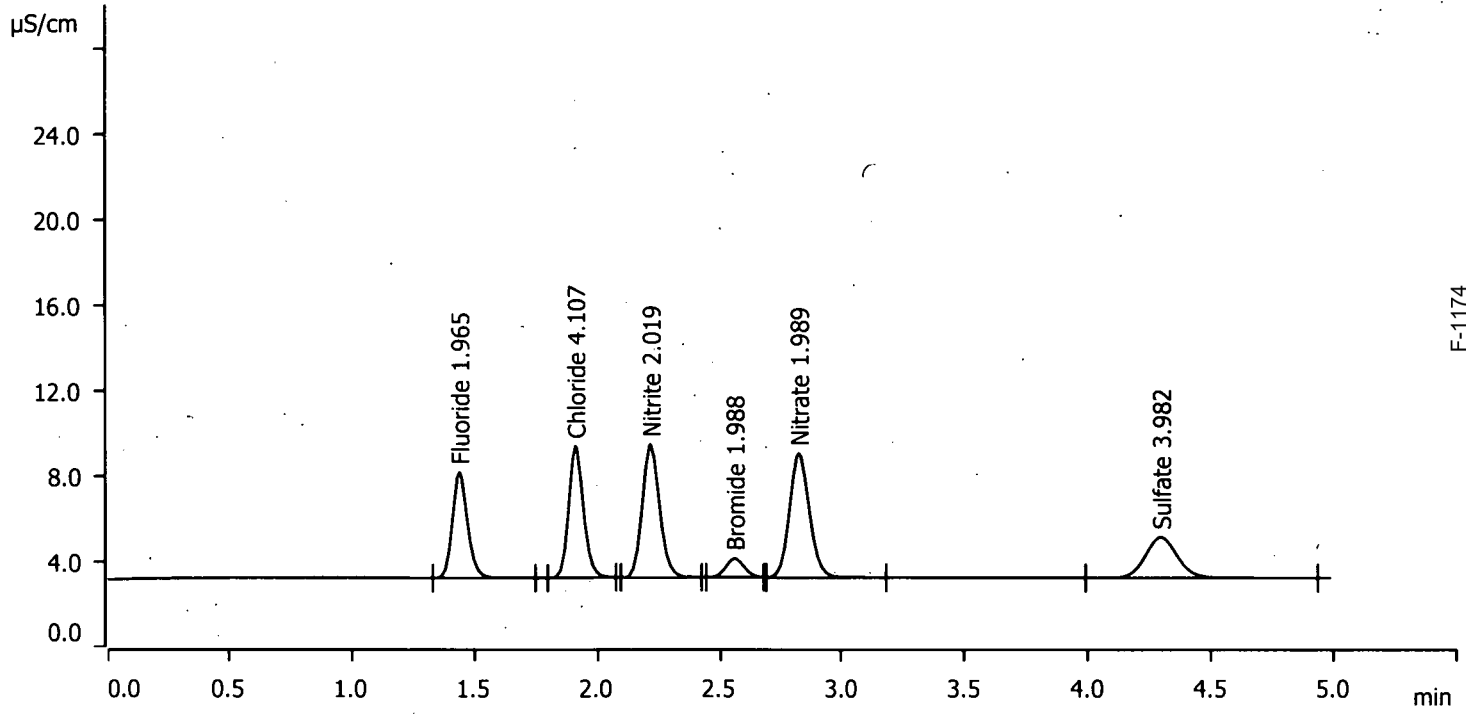
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.92	0.038	4.340	Chloride	BB
2	4.30	0.127	18.551	Sulfate	BB

Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-08-23 22:56:56 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90685
Sample Position	71
Comment 1	300.0/9056A
Comment 2	

Anions



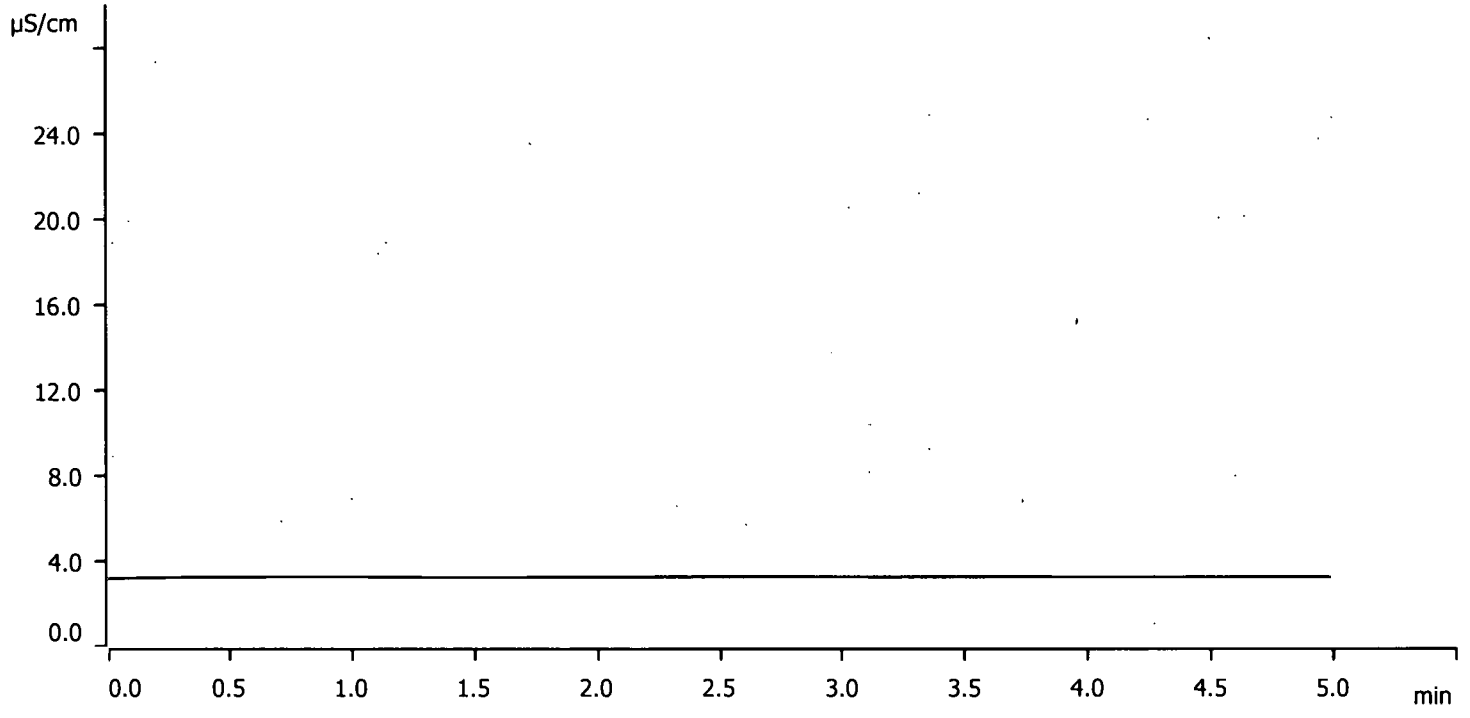
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.354	1.965	Fluoride	BB
2	1.91	0.434	4.107	Chloride	BB
3	2.22	0.506	2.019	Nitrite	BB
4	2.56	0.076	1.988	Bromide	BB
5	2.83	0.536	1.989	Nitrate	BB
6	4.30	0.286	3.982	Sulfate	BB

Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-08-23 23:03:12 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90686
Sample Position	72
Comment 1	300.0/9056A
Comment 2	

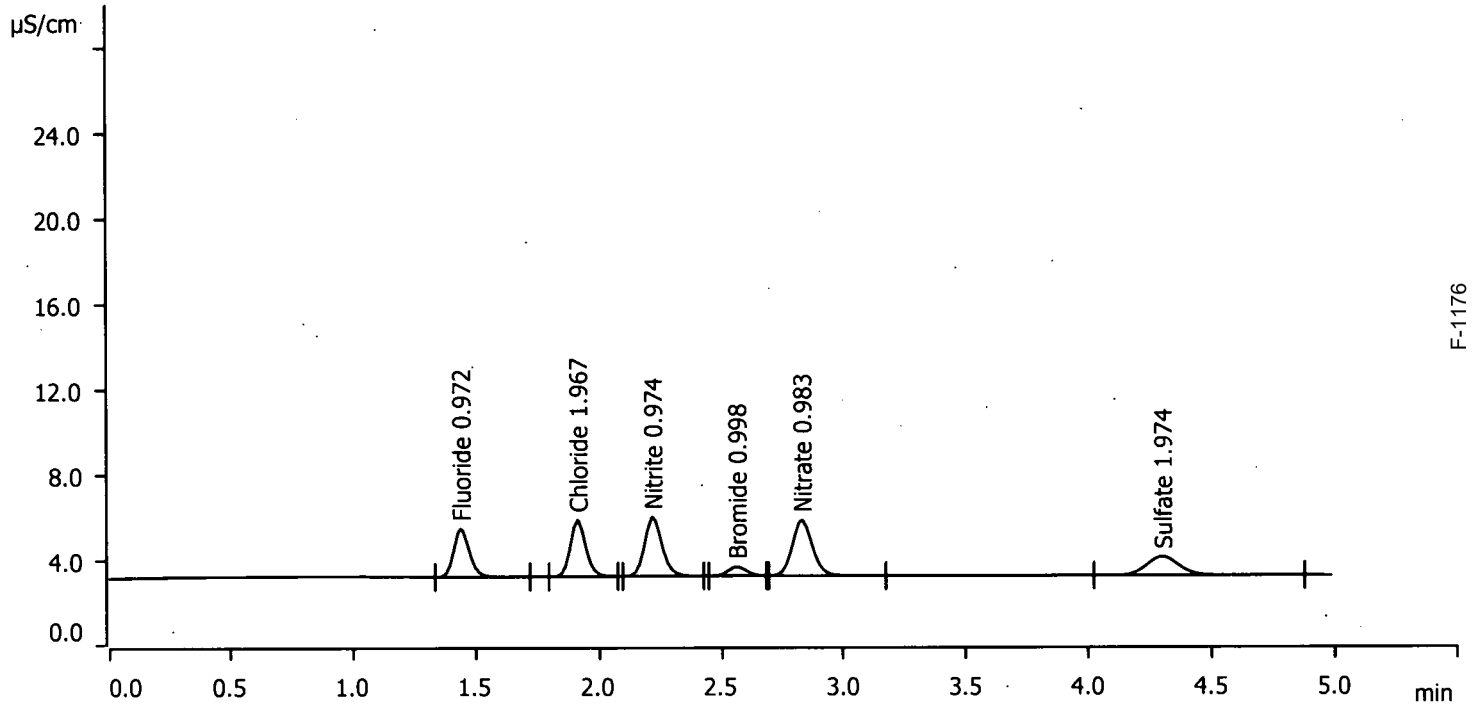
Anions



Sample data

Ident	LCS
Sample type	Check standard 2
Determination start	2024-08-23 23:09:26 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90687
Sample Position	73
Comment 1	300.0/9056A
Comment 2	

Anions



Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.166	0.972	Fluoride	BB
2	1.92	0.193	1.967	Chloride	BB
3	2.22	0.230	0.974	Nitrite	BB
4	2.57	0.037	0.998	Bromide	BB
5	2.83	0.247	0.983	Nitrate	BB
6	4.30	0.136	1.974	Sulfate	BB

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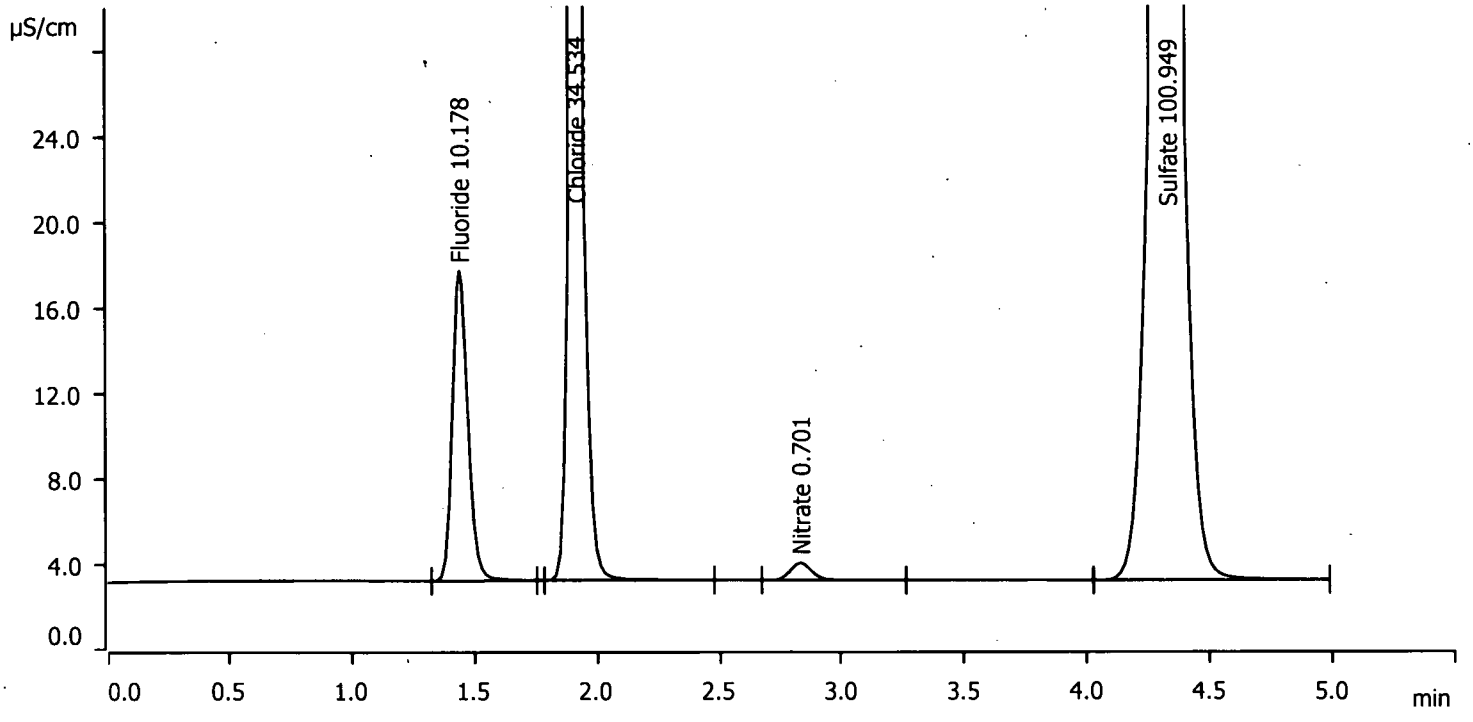
Sample data

Ident	R2407881-001 DNR
Sample type	Sample
Determination start	2024-08-23 23:15:42 UTC-4
Method	10-082224FAST
Dilution	2
Counter	90688
Sample Position	74
Comment 1	300.0 F
Comment 2	

Anions



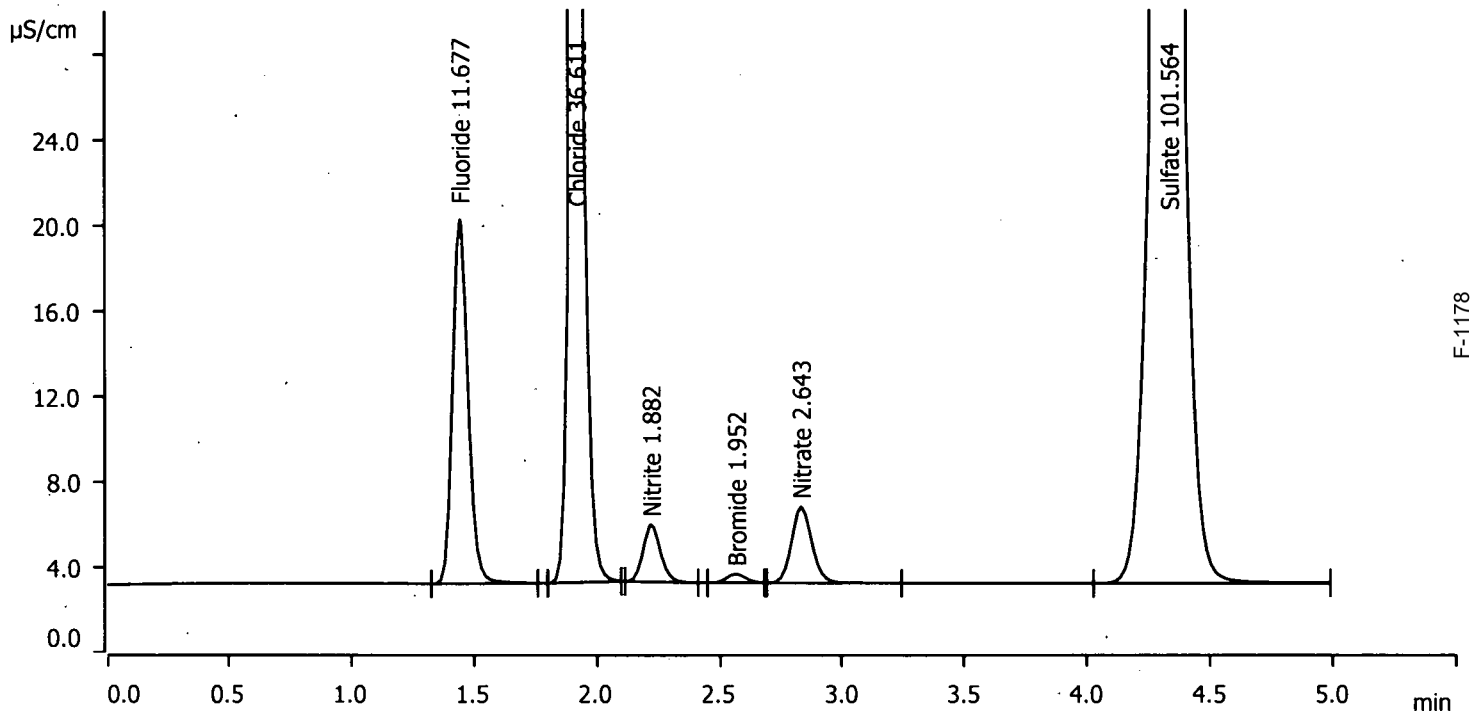
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	1.050	10.178	Fluoride	BB
2	1.92	2.535	34.534	Chloride	BB
3	2.83	0.082	0.701	Nitrate	BB
4	4.33	7.186	100.949	Sulfate	BB

Sample data

Ident	R2407881-001 MS! DNR
Sample type	Sample
Determination start	2024-08-23 23:21:57 UTC-4
Method	10-082224FAST
Dilution	2
Counter	90689
Sample Position	75
Comment 1	300.0 F
Comment 2	

Anions



Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	1.240	11.677	Fluoride	BB
2	1.92	2.747	36.611	Chloride	BB
3	2.22	0.222	1.882	Nitrite	BB
4	2.57	0.036	1.952	Bromide	BB
5	2.83	0.340	2.643	Nitrate	BB
6	4.33	7.254	101.564	Sulfate	BB

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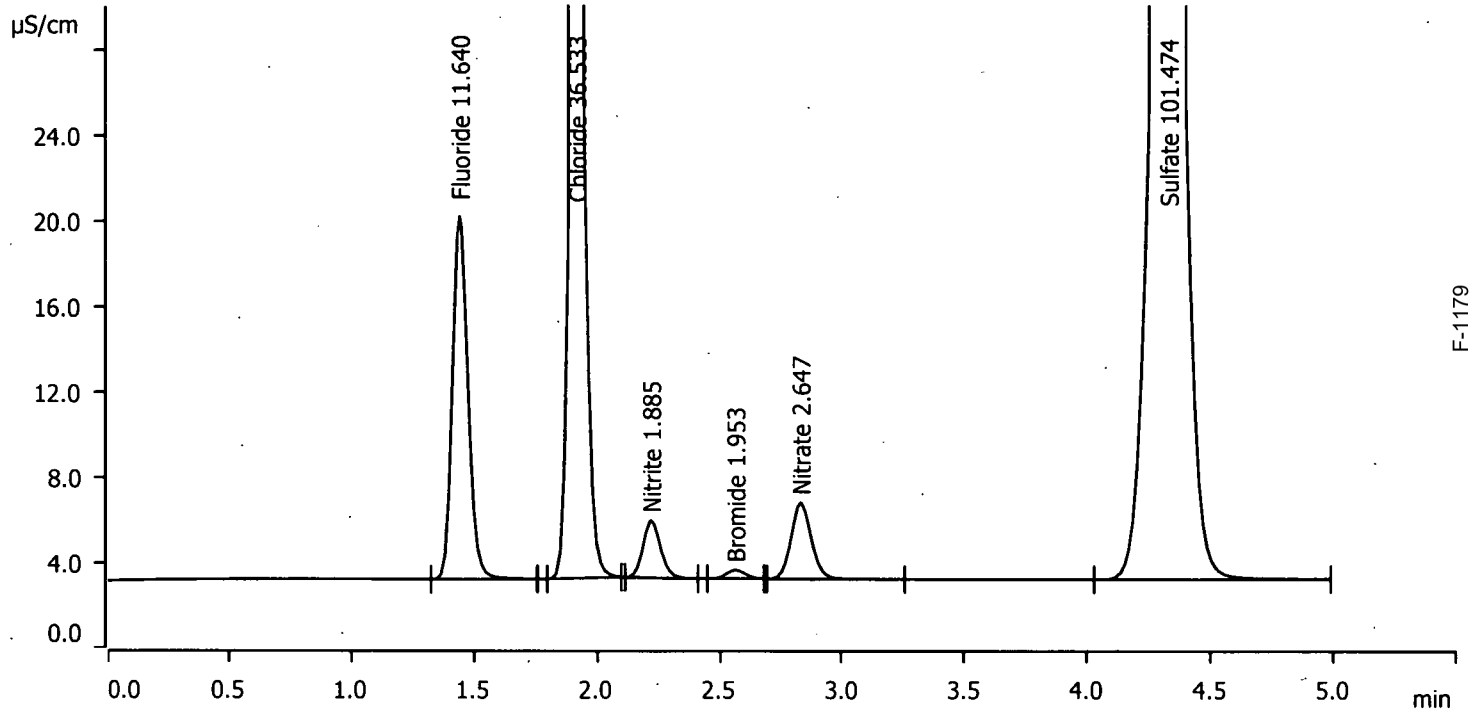
Sample data

Ident	R2407881-001 MSD! DNR
Sample type	Sample
Determination start	2024-08-23 23:28:12 UTC-4
Method	10-082224FAST
Dilution	2
Counter	90690
Sample Position	76
Comment 1	300.0 F
Comment 2	

Anions



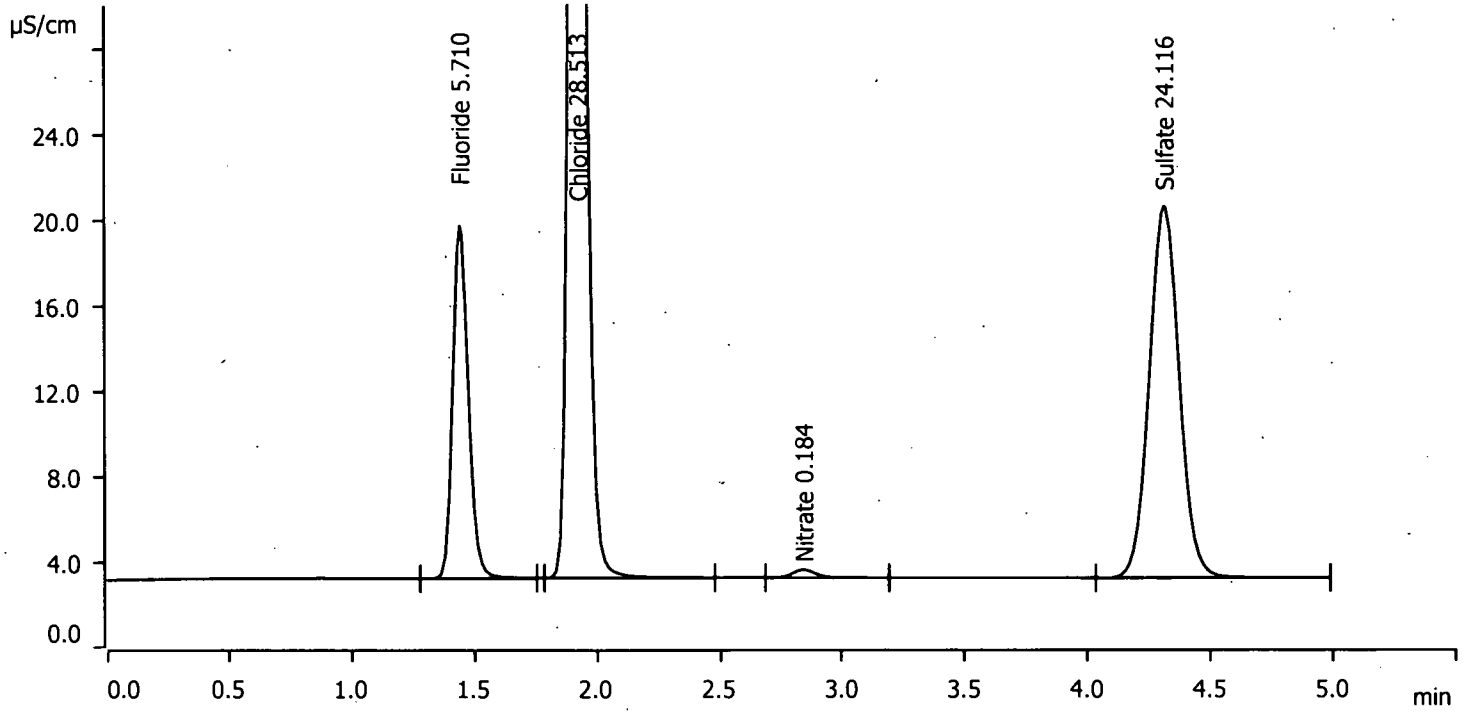
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	1.235	11.640	Fluoride	BB
2	1.92	2.739	36.533	Chloride	BB
3	2.22	0.222	1.885	Nitrite	BB
4	2.57	0.036	1.953	Bromide	BB
5	2.83	0.341	2.647	Nitrate	BB
6	4.33	7.244	101.474	Sulfate	BB

Sample data

Ident	R2407939-002 DNR
Sample type	Sample
Determination start	2024-08-23 23:34:28 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90691
Sample Position	77
Comment 1	300.0 F
Comment 2	

Anions



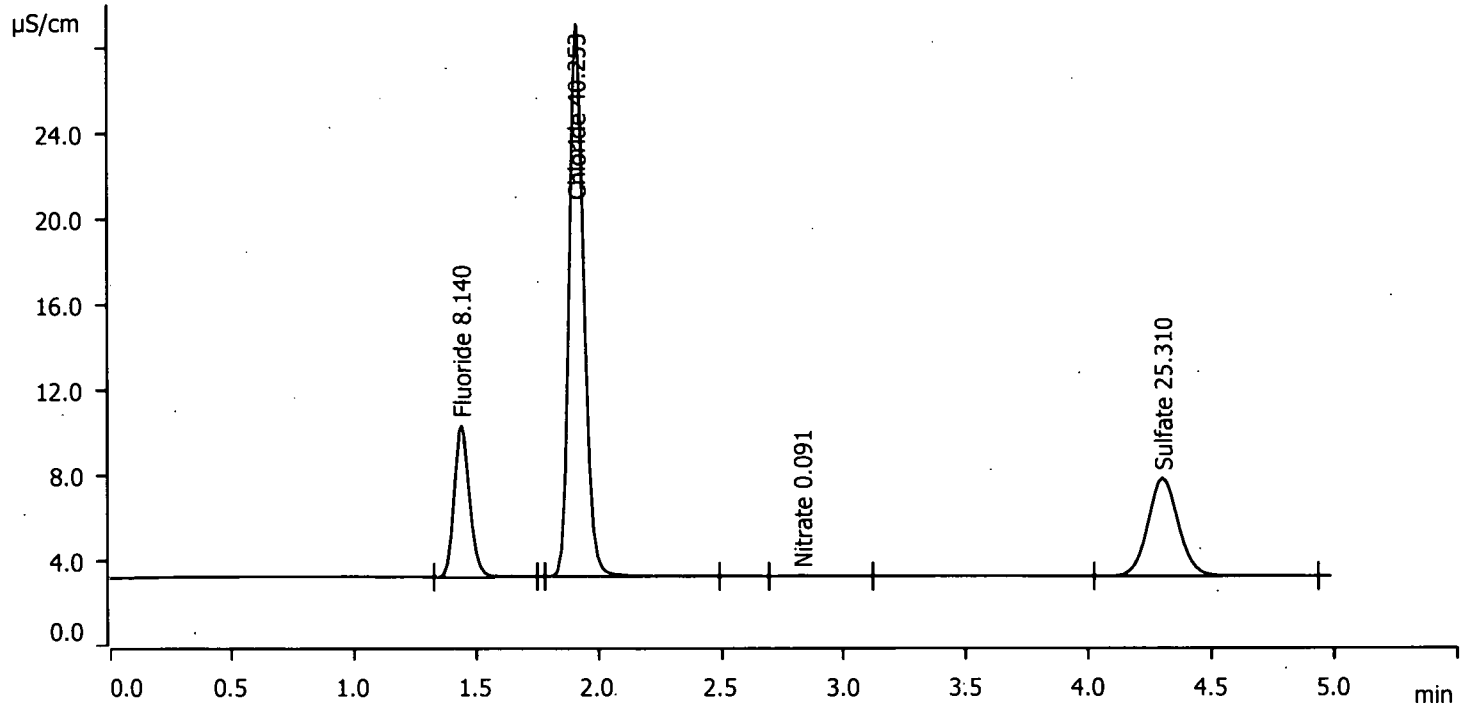
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	1.207	5.710	Fluoride	BB
2	1.93	5.181	28.513	Chloride	BB
3	2.84	0.041	0.184	Nitrate	BB
4	4.31	2.468	24.116	Sulfate	BB

Sample data

Ident	R2407939-003
Sample type	Sample
Determination start	2024-08-23 23:40:42 UTC-4
Method	10-082224FAST
Dilution	3
Counter	90692
Sample Position	78
Comment 1	300.0 F
Comment 2	

Anions



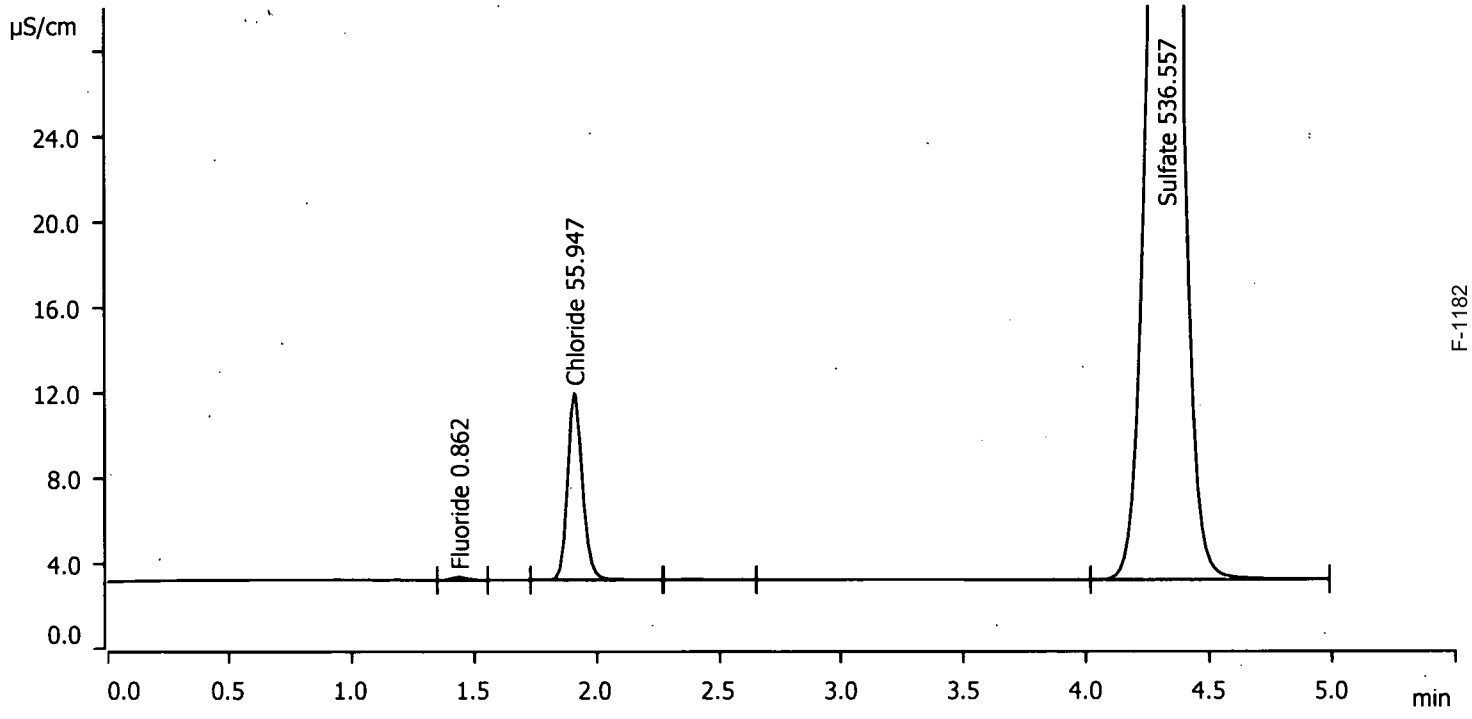
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.506	8.140	Fluoride	BB
2	1.92	1.810	40.253	Chloride	BB
3	2.83	0.003	0.091	Nitrate	BB
4	4.30	0.663	25.310	Sulfate	BB

Sample data

Ident	R2407830-003 DNR
Sample type	Sample
Determination start	2024-08-23 23:46:58 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90693
Sample Position	79
Comment 1	300.0 S
Comment 2	

Anions



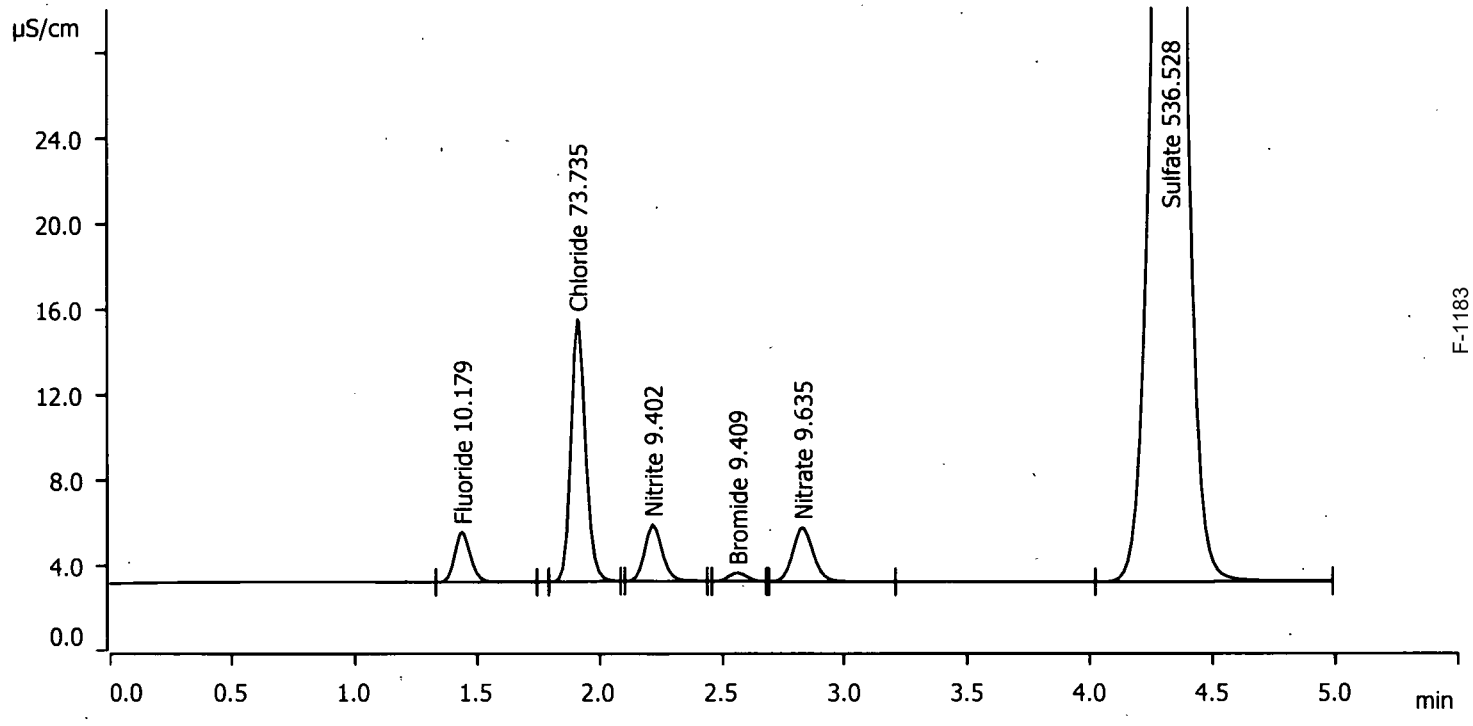
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.011	0.862	Fluoride	BB
2	1.91	0.617	55.947	Chloride	BB
4	4.33	7.898	536.557	Sulfate	BB

Sample data

Ident	R2407830-003 MS DNR
Sample type	Sample
Determination start	2024-08-23 23:53:13 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90694
Sample Position	80
Comment 1	300.0 S
Comment 2	

Anions



Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.174	10.179	Fluoride	BB
2	1.92	0.855	73.735	Chloride	BB
3	2.22	0.222	9.402	Nitrite	BB
4	2.56	0.035	9.409	Bromide	BB
5	2.83	0.242	9.635	Nitrate	BB
6	4.33	7.898	536.528	Sulfate	BB

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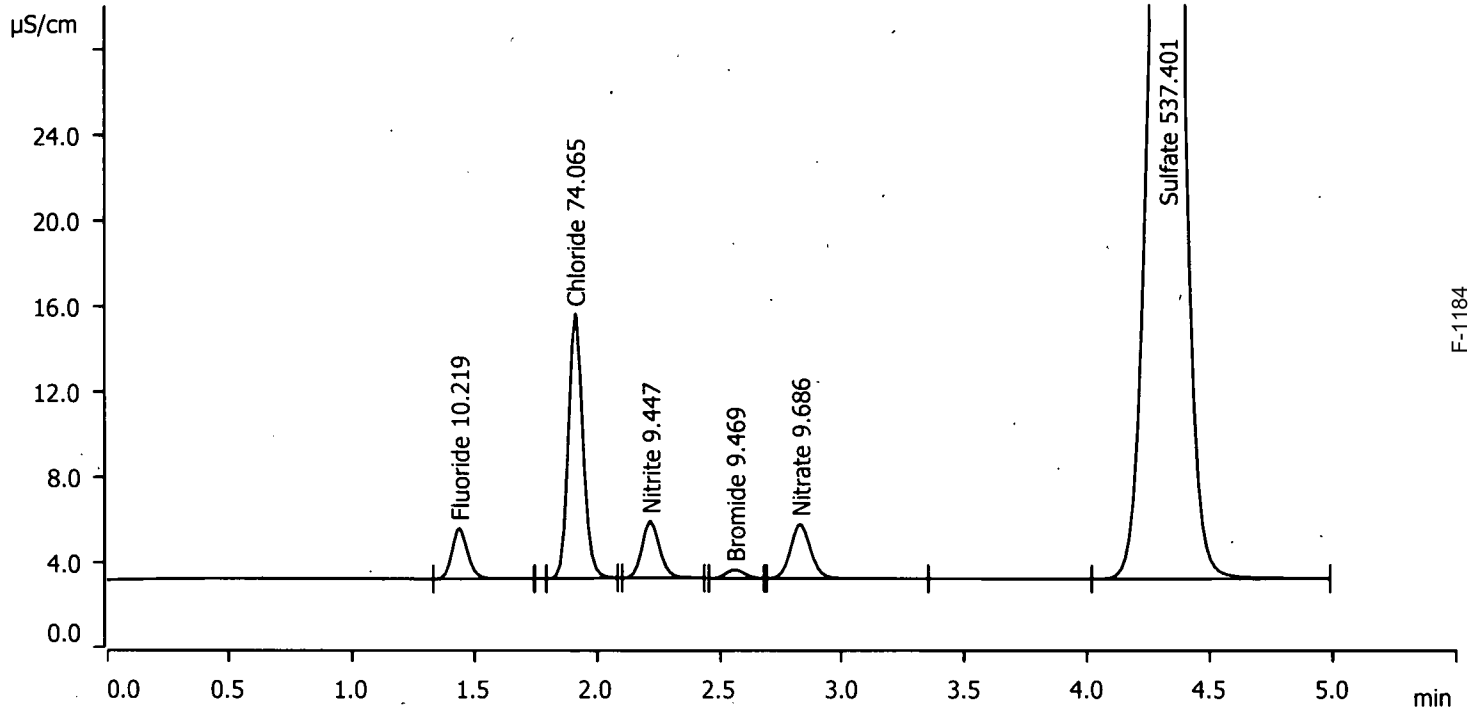
Sample data

Ident	R2407830-003 MSD DNR
Sample type	Sample
Determination start	2024-08-23 23:59:28 UTC-4
Method	10-082224FAST
Dilution	10
Counter	90695
Sample Position	81
Comment 1	300.0 S
Comment 2	

Anions



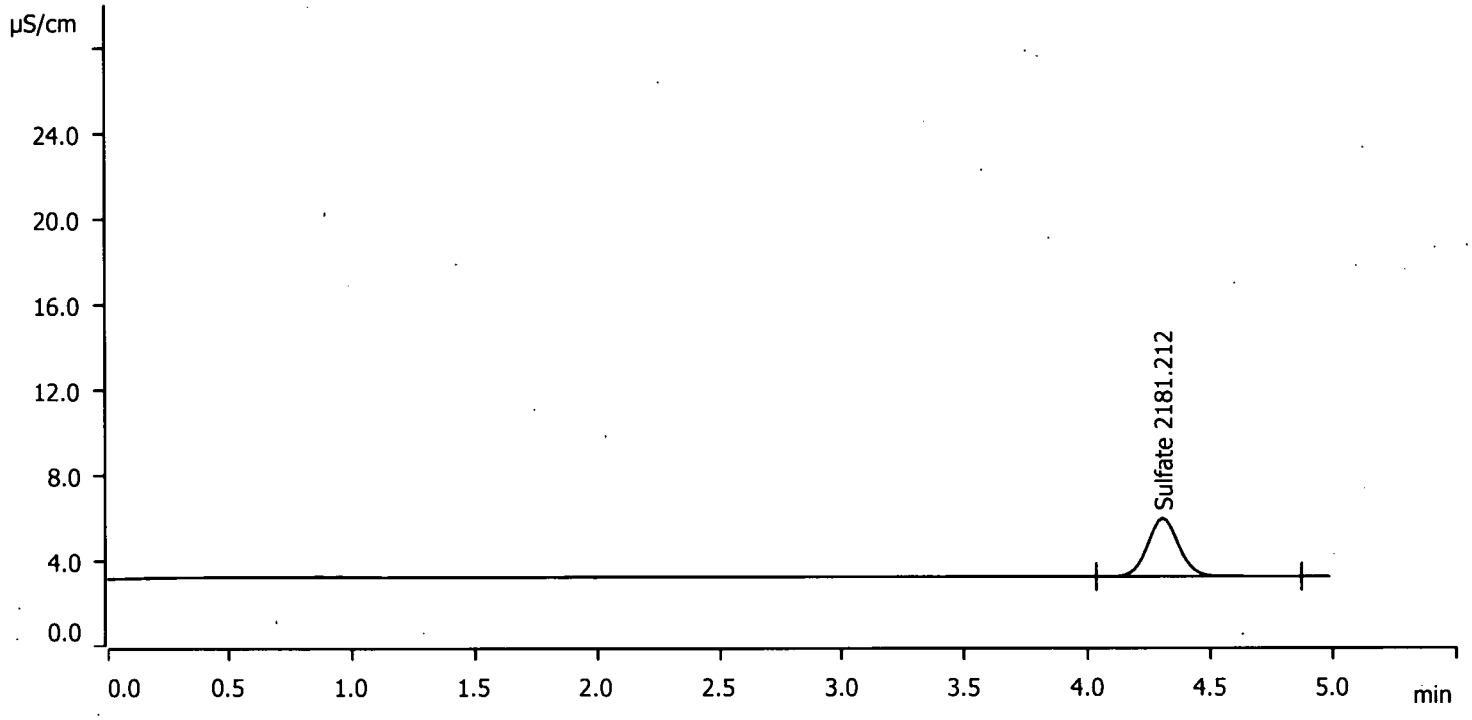
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.175	10.219	Fluoride	BB
2	1.92	0.860	74.065	Chloride	BB
3	2.22	0.223	9.447	Nitrite	BB
4	2.56	0.035	9.469	Bromide	BB
5	2.83	0.243	9.686	Nitrate	BB
6	4.33	7.918	537.401	Sulfate	BB

Sample data

Ident	R2407633-001
Sample type	Sample
Determination start	2024-08-24 00:05:44 UTC-4
Method	10-082224FAST
Dilution	400
Counter	90696
Sample Position	82
Comment 1	9056A S
Comment 2	

Anions



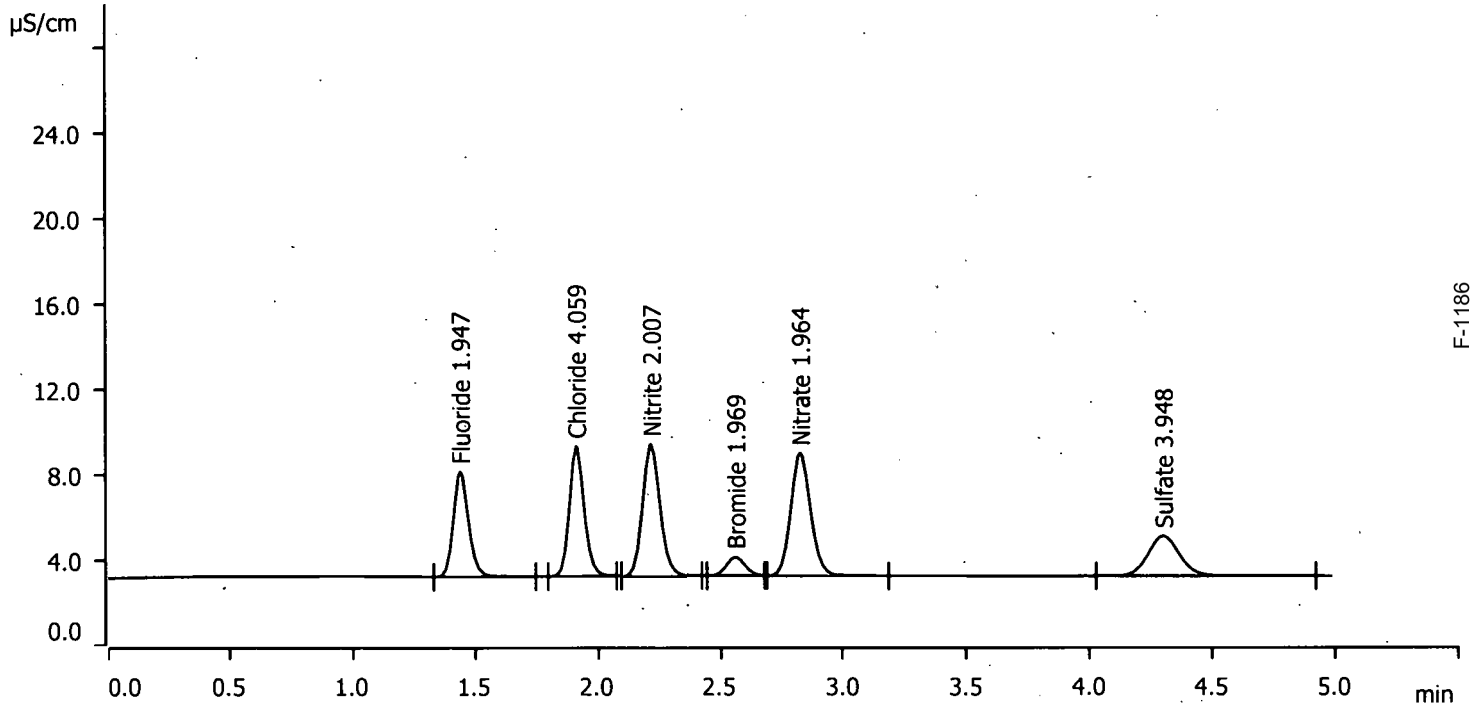
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	4.30	0.404	2181.212	Sulfate	BB

Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-08-24 00:11:58 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90697
Sample Position	83
Comment 1	300.0/9056A
Comment 2	

Anions



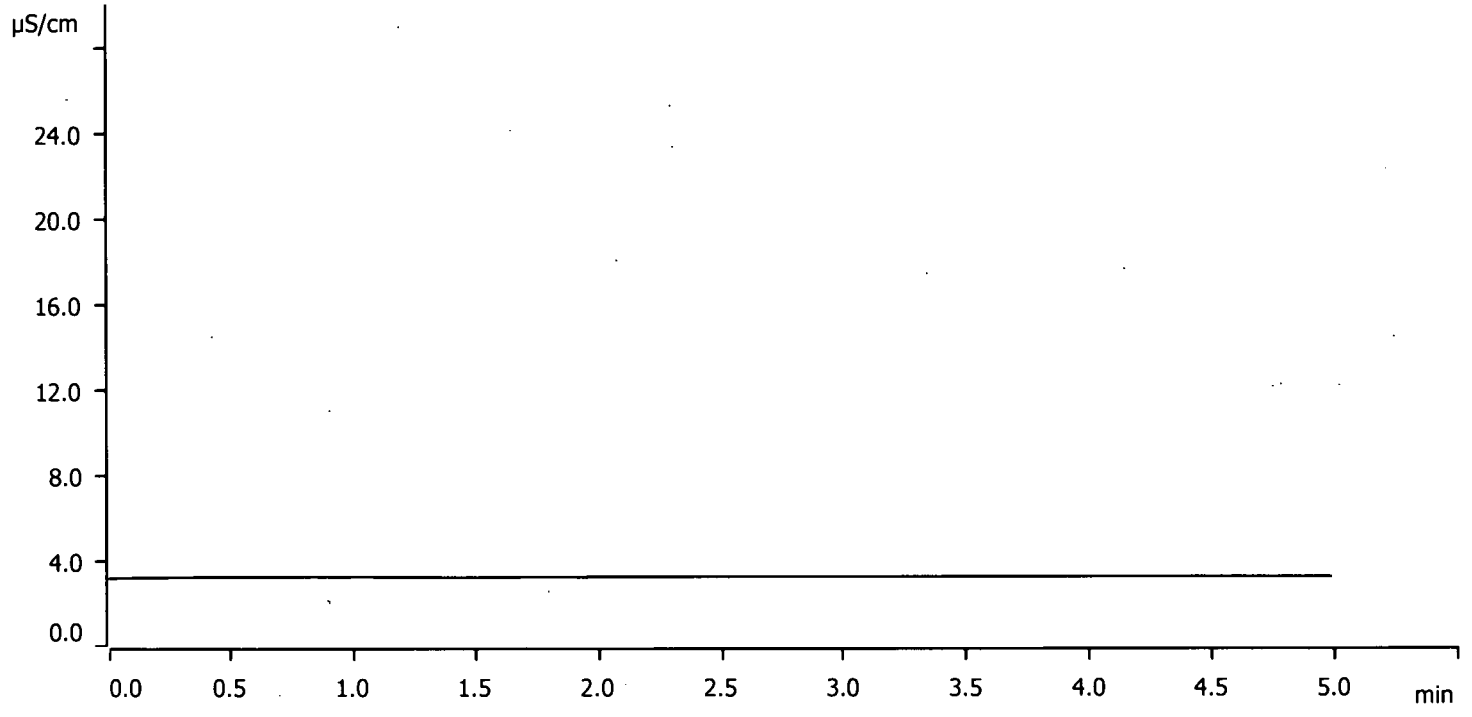
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.351	1.947	Fluoride	BB
2	1.92	0.428	4.059	Chloride	BB
3	2.22	0.503	2.007	Nitrite	BB
4	2.56	0.075	1.969	Bromide	BB
5	2.83	0.528	1.964	Nitrate	BB
6	4.30	0.283	3.948	Sulfate	BB

Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-08-24 00:18:13 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90698
Sample Position	84
Comment 1	300.0/9056A
Comment 2	

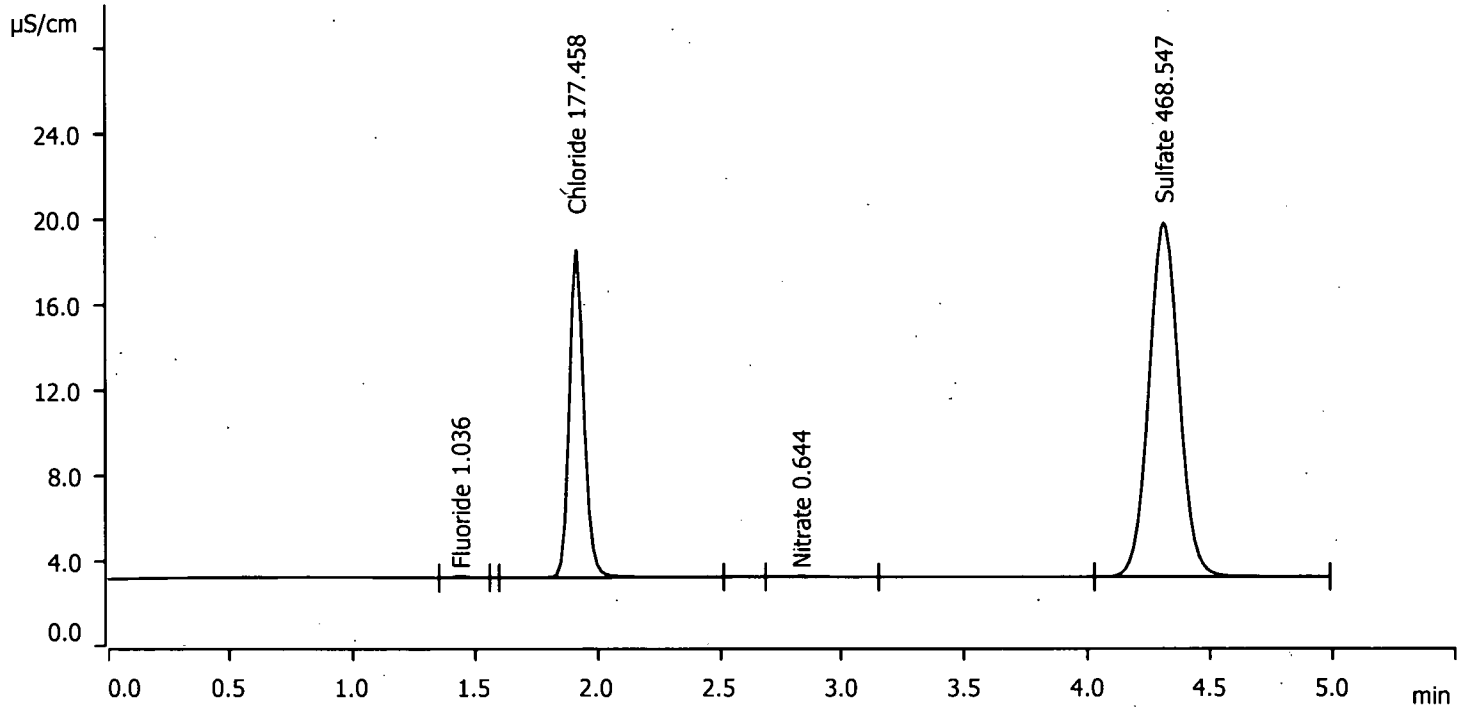
Anions



Sample data

Ident	R2407573-006
Sample type	Sample
Determination start	2024-08-24 00:24:32 UTC-4
Method	10-082224FAST
Dilution	20
Counter	90699
Sample Position	85
Comment 1	9056A C
Comment 2	

Anions



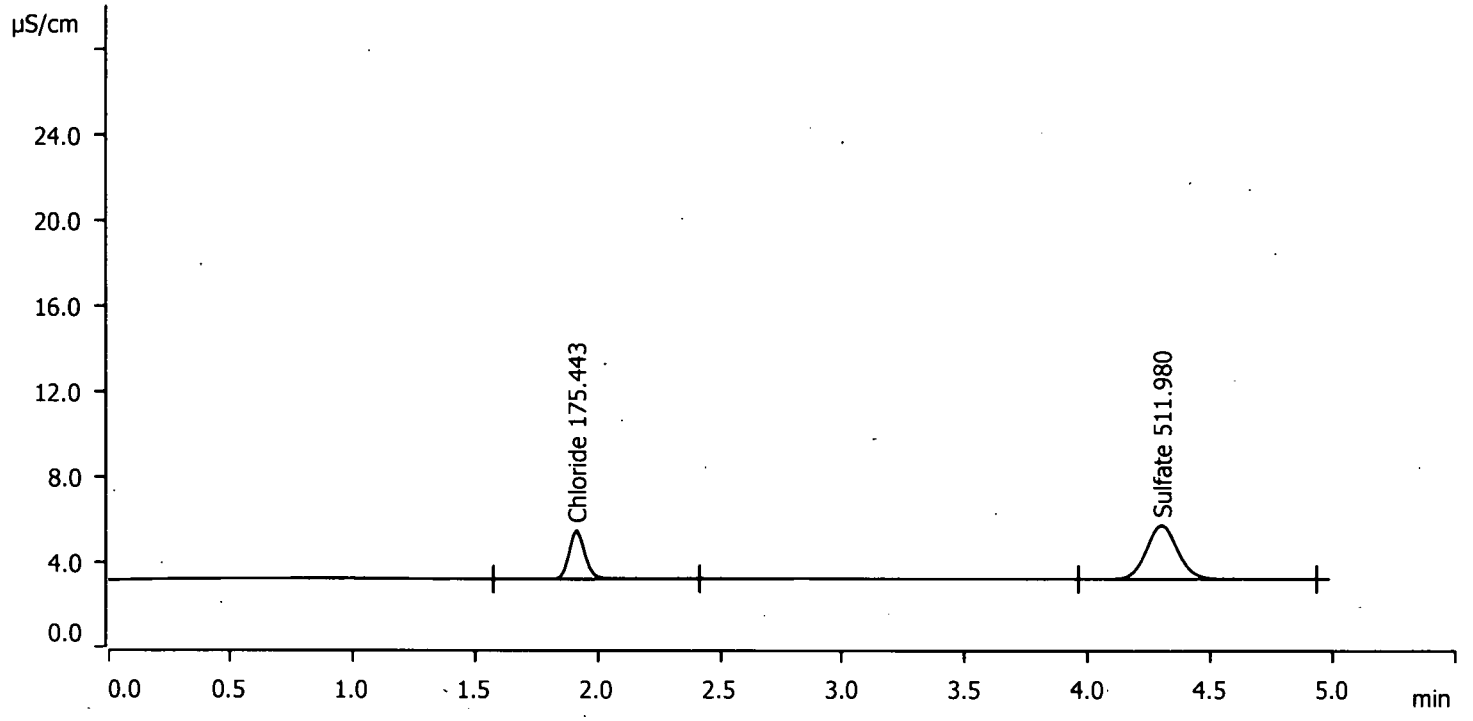
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.005	1.036	Fluoride	BB
2	1.92	1.071	177.458	Chloride	BB
3	2.83	0.004	0.644	Nitrate	BB
4	4.31	2.374	468.547	Sulfate	BB

Sample data

Ident	R2407573-006
Sample type	Sample
Determination start	2024-08-24 00:30:47 UTC-4
Method	10-082224FAST
Dilution	100
Counter	90700
Sample Position	86
Comment 1	9056A S
Comment 2	

Anions



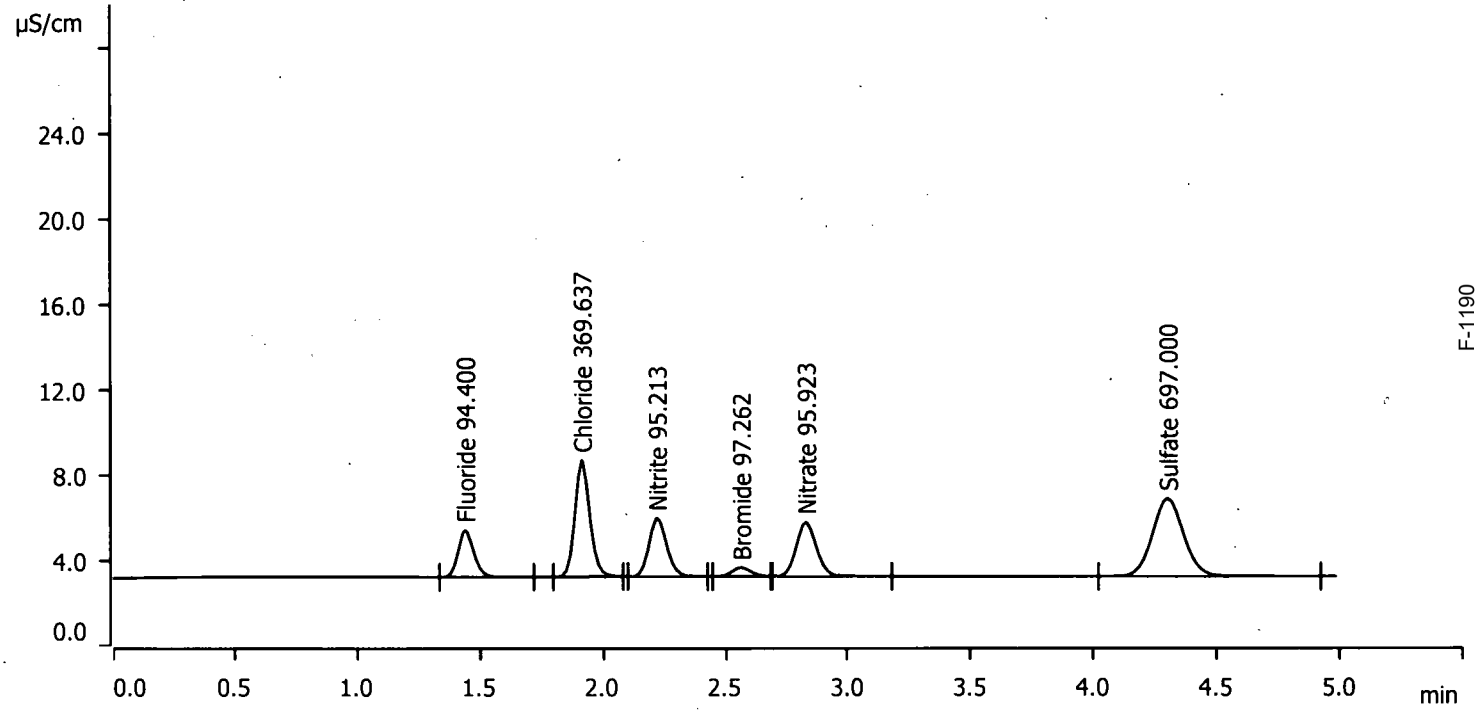
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.92	0.171	175.443	Chloride	BB
2	4.30	0.377	511.980	Sulfate	BB

Sample data

Ident	R2407573-006 MS
Sample type	Sample
Determination start	2024-08-24 00:37:02 UTC-4
Method	10-082224FAST
Dilution	100
Counter	90701
Sample Position	87
Comment 1	9056A S
Comment 2	

Anions



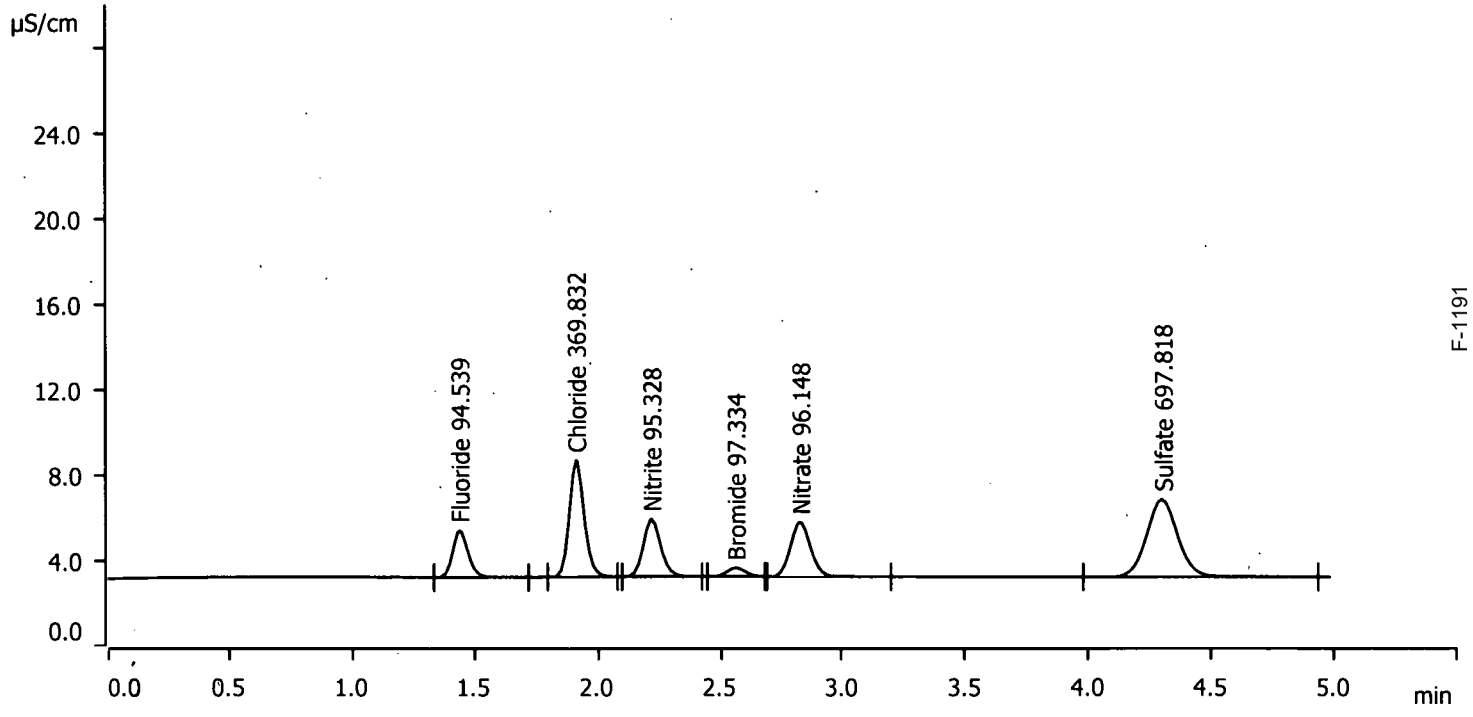
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.160	94.400	Fluoride	BB
2	1.92	0.385	369.637	Chloride	BB
3	2.22	0.225	95.213	Nitrite	BB
4	2.57	0.036	97.262	Bromide	BB
5	2.83	0.240	95.923	Nitrate	BB
6	4.30	0.532	697.000	Sulfate	BB

Sample data

Ident	R2407573-006 MSD
Sample type	Sample
Determination start	2024-08-24 00:43:17 UTC-4
Method	10-082224FAST
Dilution	100
Counter	90702
Sample Position	88
Comment 1	9056A S
Comment 2	

Anions



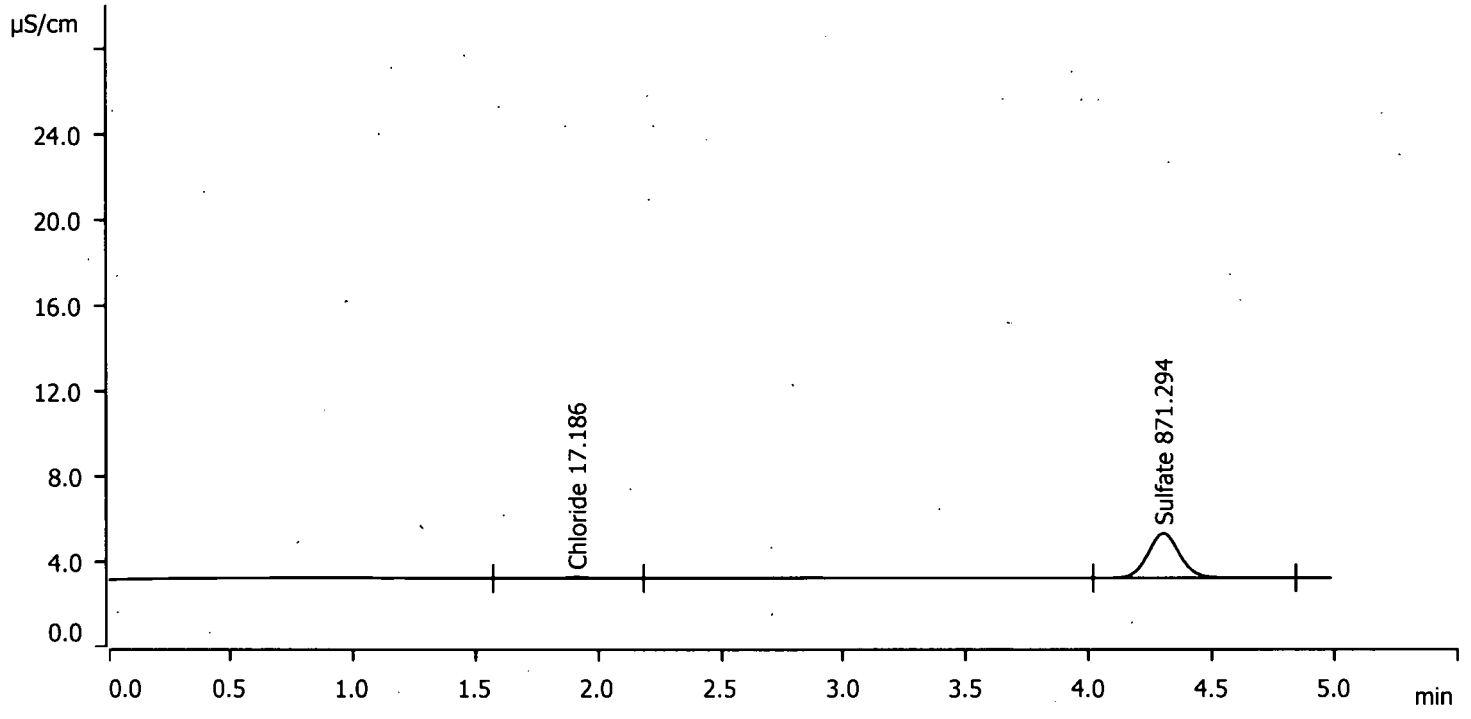
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.161	94.539	Fluoride	BB
2	1.92	0.386	369.832	Chloride	BB
3	2.22	0.225	95.328	Nitrite	BB
4	2.56	0.036	97.334	Bromide	BB
5	2.83	0.241	96.148	Nitrate	BB
6	4.30	0.533	697.818	Sulfate	BB

Sample data

Ident	R2407573-010
Sample type	Sample
Determination start	2024-08-24 00:49:32 UTC-4
Method	10-082224FAST
Dilution	200
Counter	90703
Sample Position	89
Comment 1	9056A S
Comment 2	

Anions



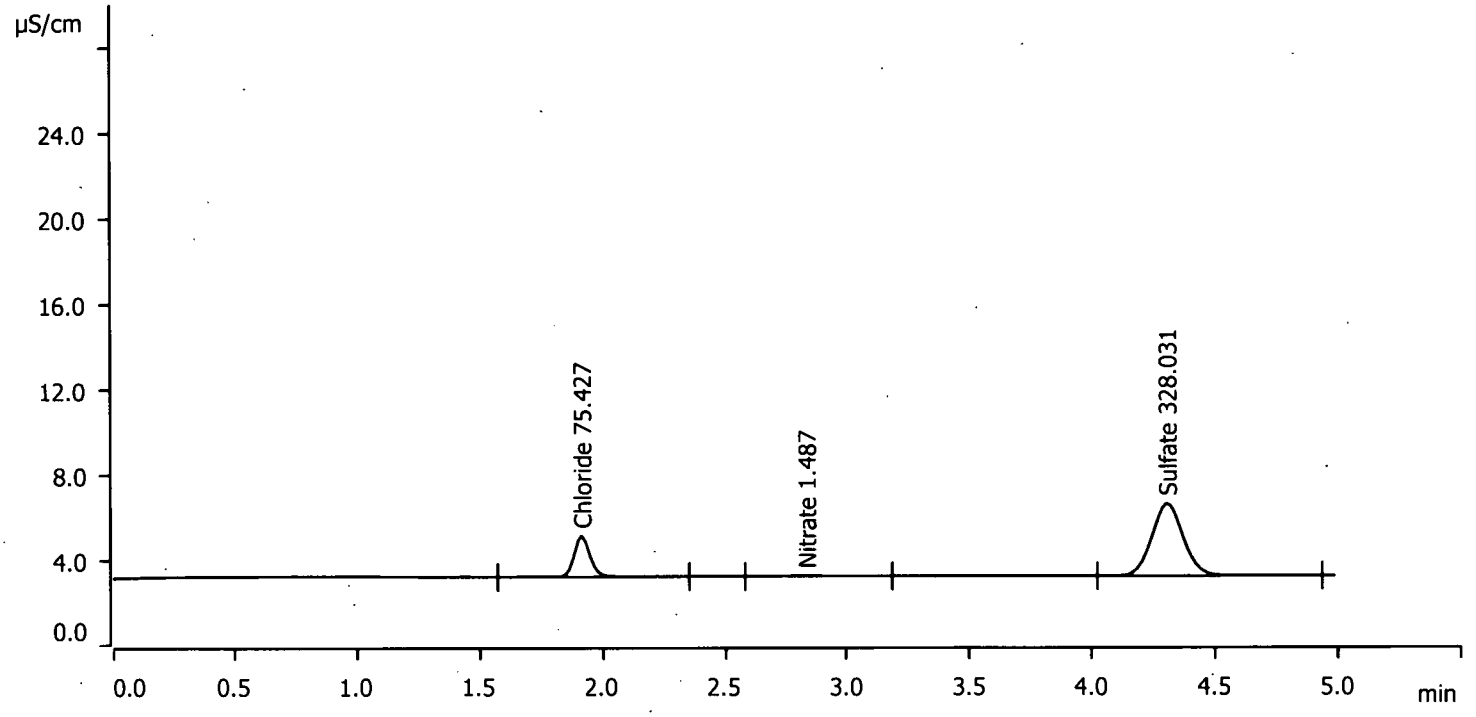
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.92	0.005	17.186	Chloride	BB
2	4.30	0.315	871.294	Sulfate	BB

Sample data

Ident	R2407573-012
Sample type	Sample
Determination start	2024-08-24 00:55:47 UTC-4
Method	10-082224FAST
Dilution	50
Counter	90704
Sample Position	90
Comment 1	9056A S
Comment 2	

Anions



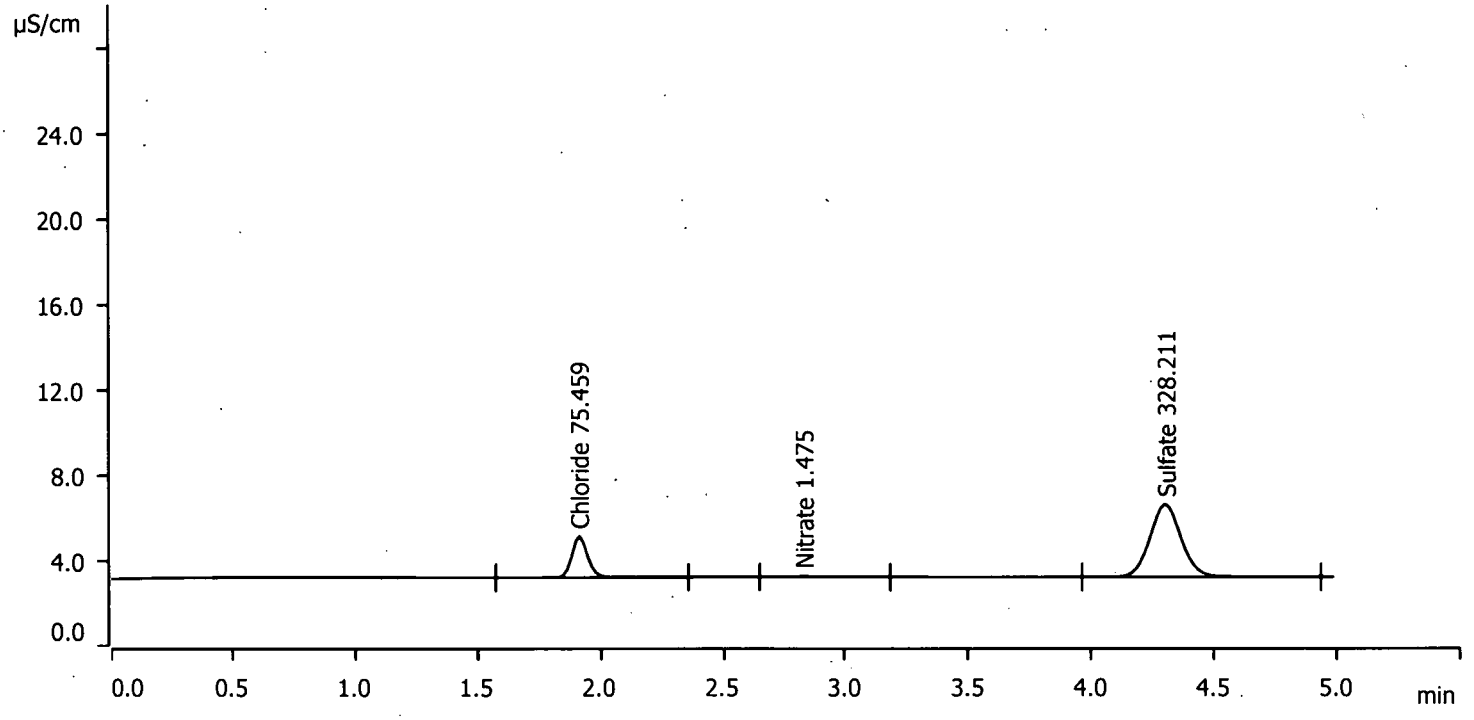
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.92	0.145	75.427	Chloride	BB
2	2.83	0.003	1.487	Nitrate	BB
3	4.30	0.497	328.031	Sulfate	BB

Sample data

Ident	R2407573-013
Sample type	Sample
Determination start	2024-08-24 01:02:02 UTC-4
Method	10-082224FAST
Dilution	50
Counter	90705
Sample Position	91
Comment 1	9056A S
Comment 2	

Anions



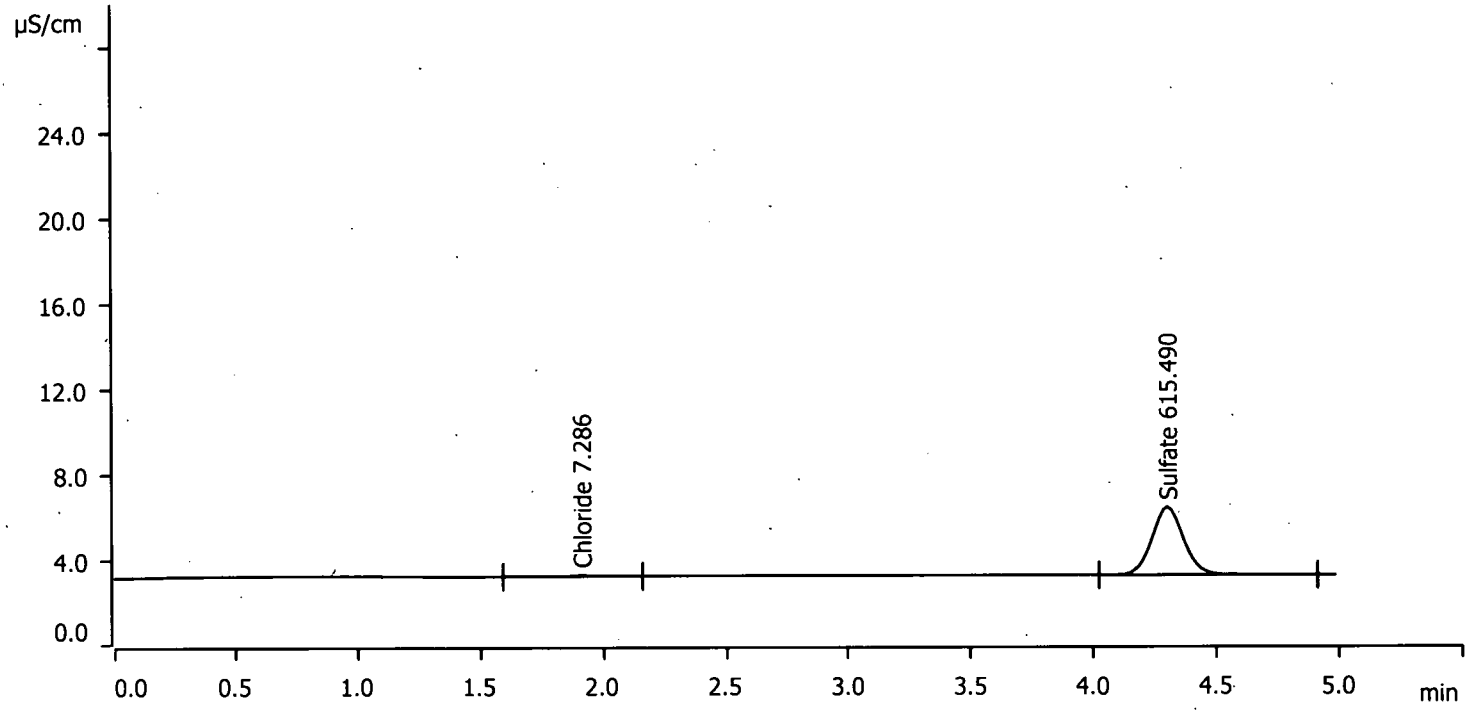
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.92	0.146	75.459	Chloride	BB
2	2.83	0.003	1.475	Nitrate	BB
3	4.30	0.497	328.211	Sulfate	BB

Sample data

Ident	R2407724-001
Sample type	Sample
Determination start	2024-08-24 01:08:18 UTC-4
Method	10-082224FAST
Dilution	100
Counter	90706
Sample Position	92
Comment 1	9056A S
Comment 2	

Anions



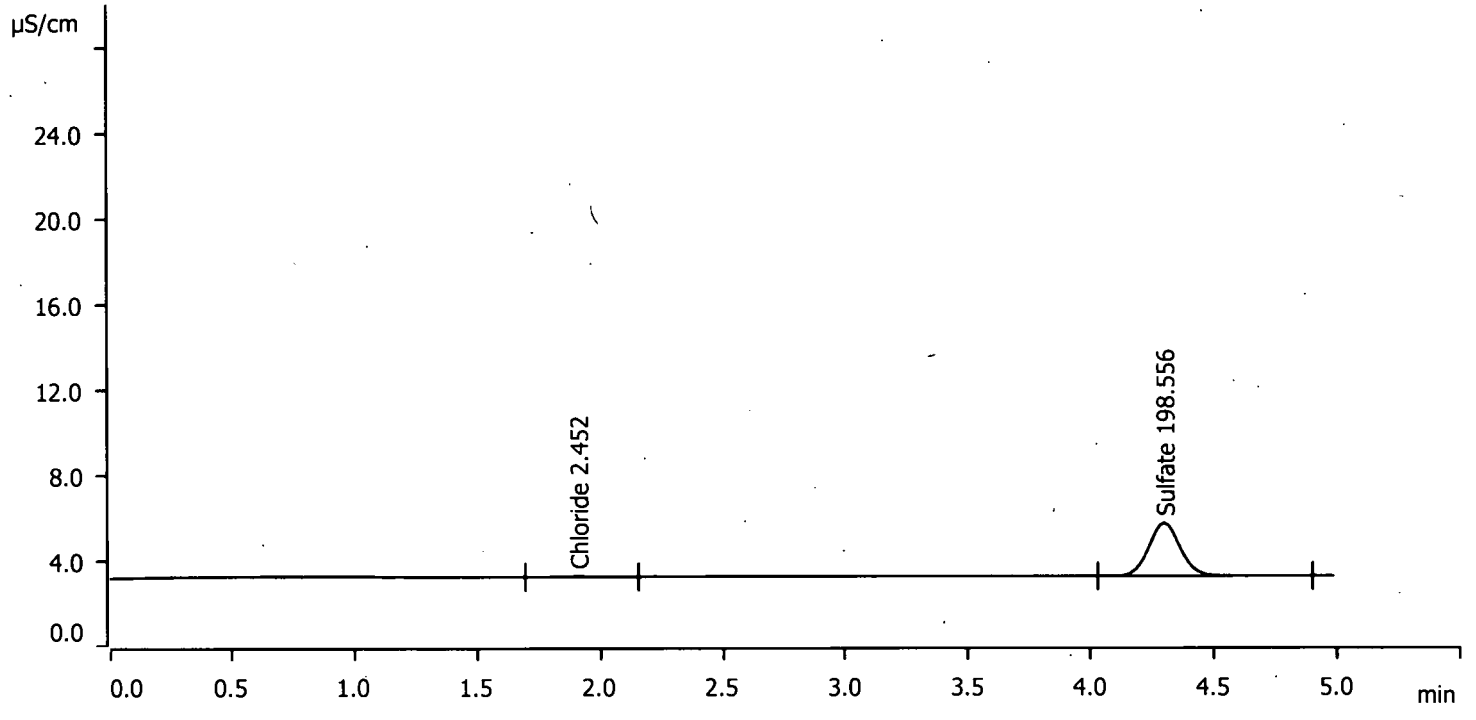
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.92	0.004	7.286	Chloride	BB
2	4.30	0.462	615.490	Sulfate	BB

Sample data

Ident	R2407724-002
Sample type	Sample
Determination start	2024-08-24 01:14:32 UTC-4
Method	10-082224FAST
Dilution	40
Counter	90707
Sample Position	93
Comment 1	9056A S
Comment 2	

Anions



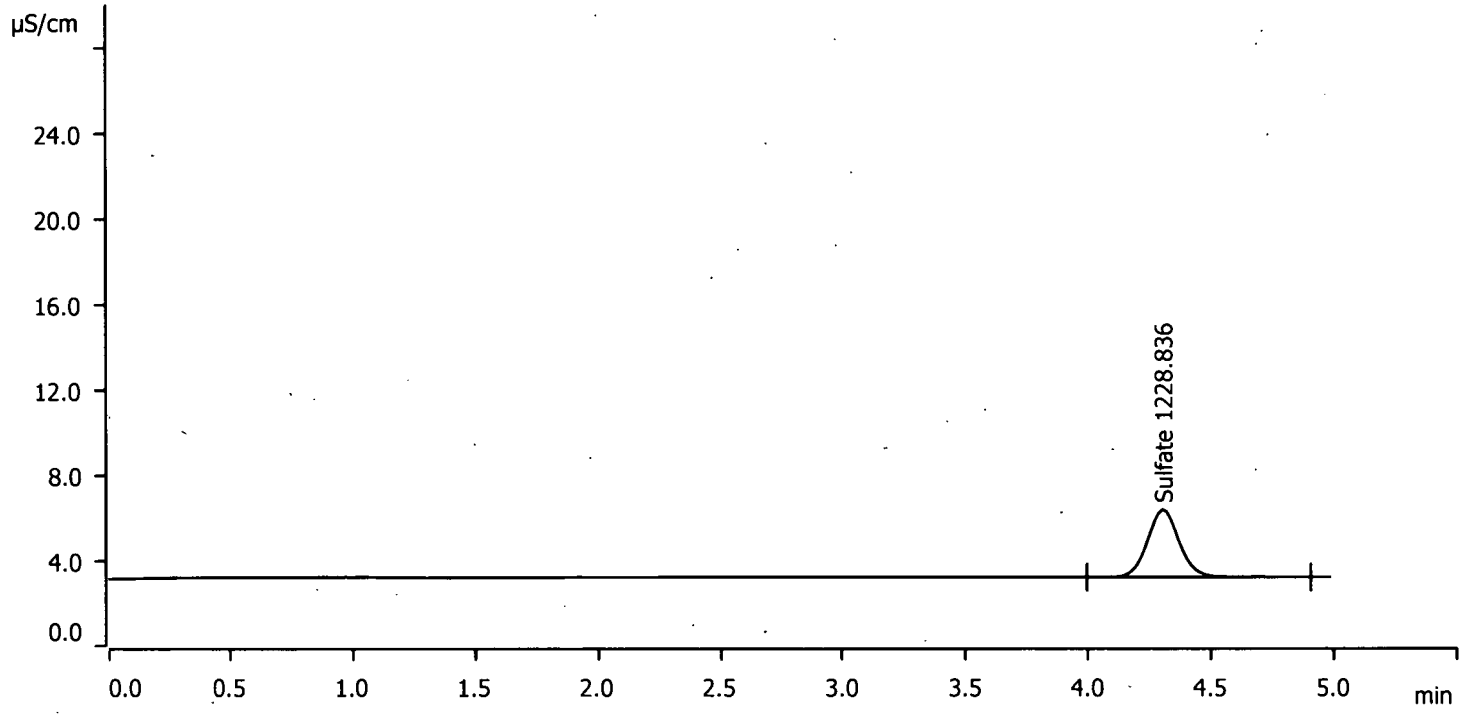
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.92	0.003	2.452	Chloride	BB
2	4.30	0.364	198.556	Sulfate	BB

Sample data

Ident	R2407724-003
Sample type	Sample
Determination start	2024-08-24 01:20:47 UTC-4
Method	10-082224FAST
Dilution	200
Counter	90708
Sample Position	94
Comment 1	9056A S
Comment 2	

Anions



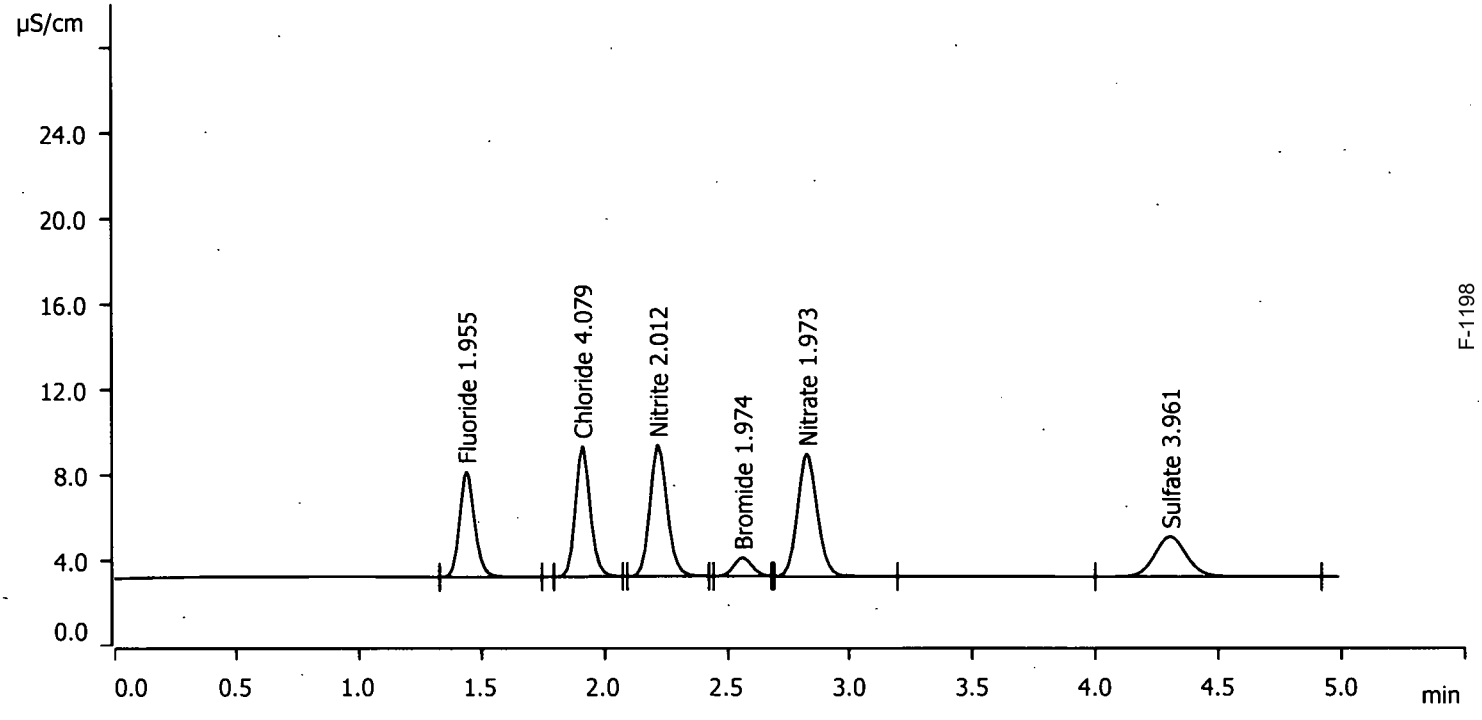
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	4.30	0.461	1228.836	Sulfate	BB

Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-08-24 01:27:02 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90709
Sample Position	95
Comment 1	300.0/9056A
Comment 2	

Anions



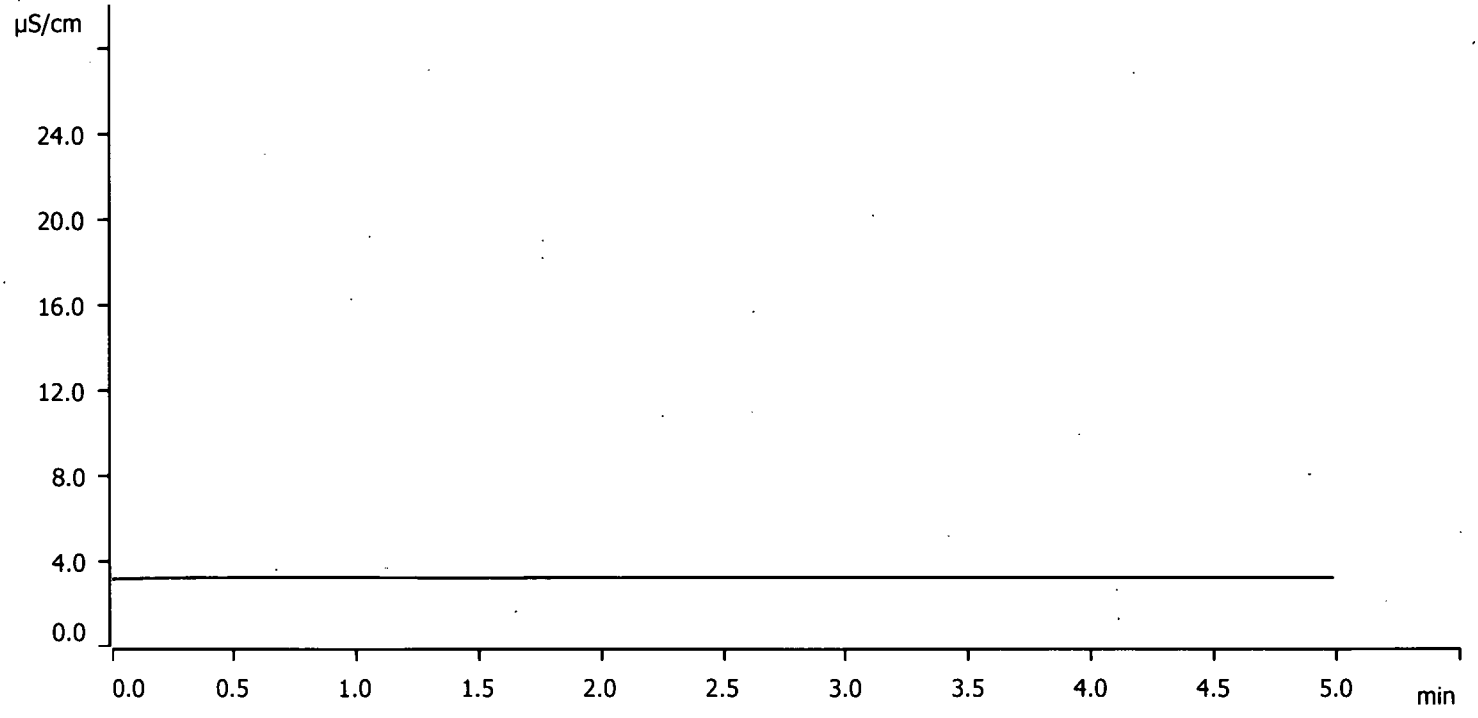
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.44	0.352	1.955	Fluoride	BB
2	1.92	0.430	4.079	Chloride	BB
3	2.22	0.504	2.012	Nitrite	BB
4	2.56	0.076	1.974	Bromide	BB
5	2.83	0.531	1.973	Nitrate	BB
6	4.30	0.284	3.961	Sulfate	BB

Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-08-24 01:33:18 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90710
Sample Position	96
Comment 1	300.0/9056A
Comment 2	

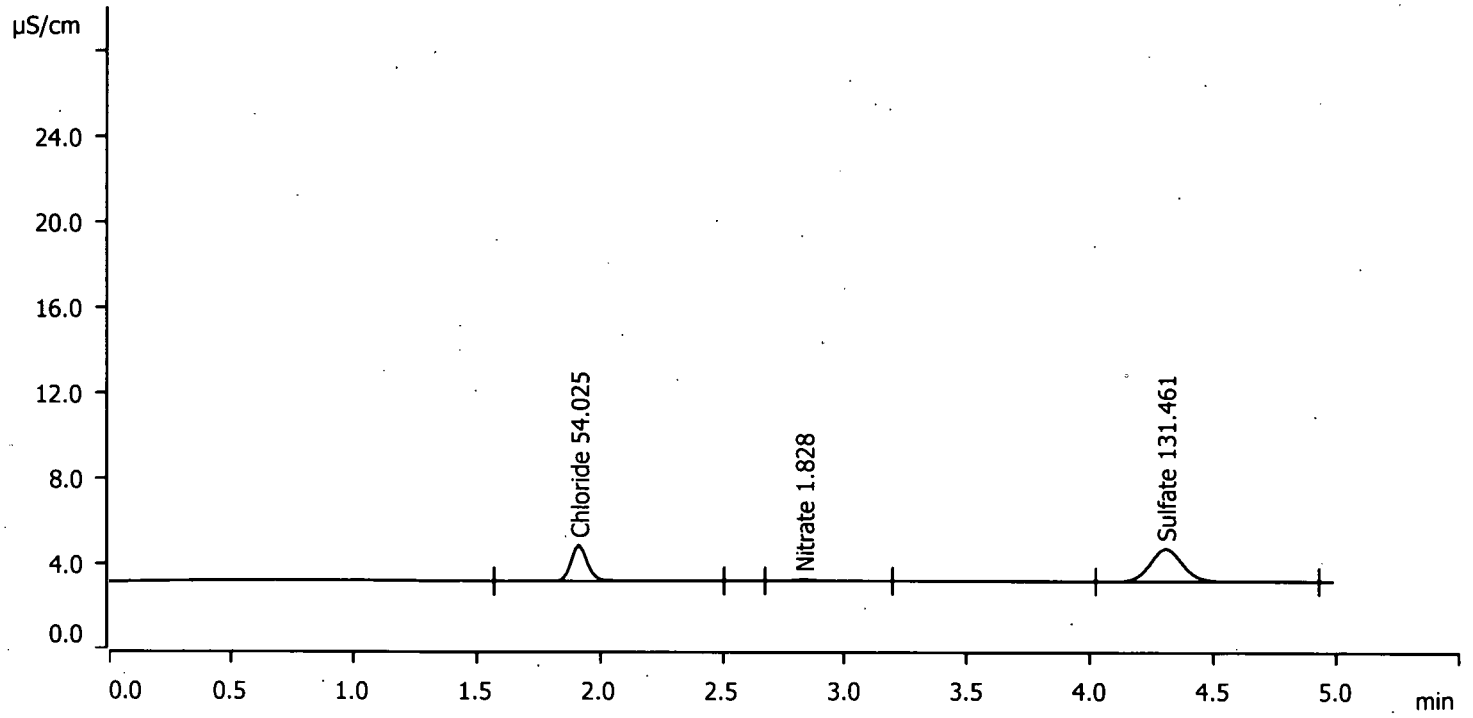
Anions



Sample data

Ident	R2407724-004
Sample type	Sample
Determination start	2024-08-24 01:39:32 UTC-4
Method	10-082224FAST
Dilution	40
Counter	90711
Sample Position	97
Comment 1	9056A S
Comment 2	

Anions



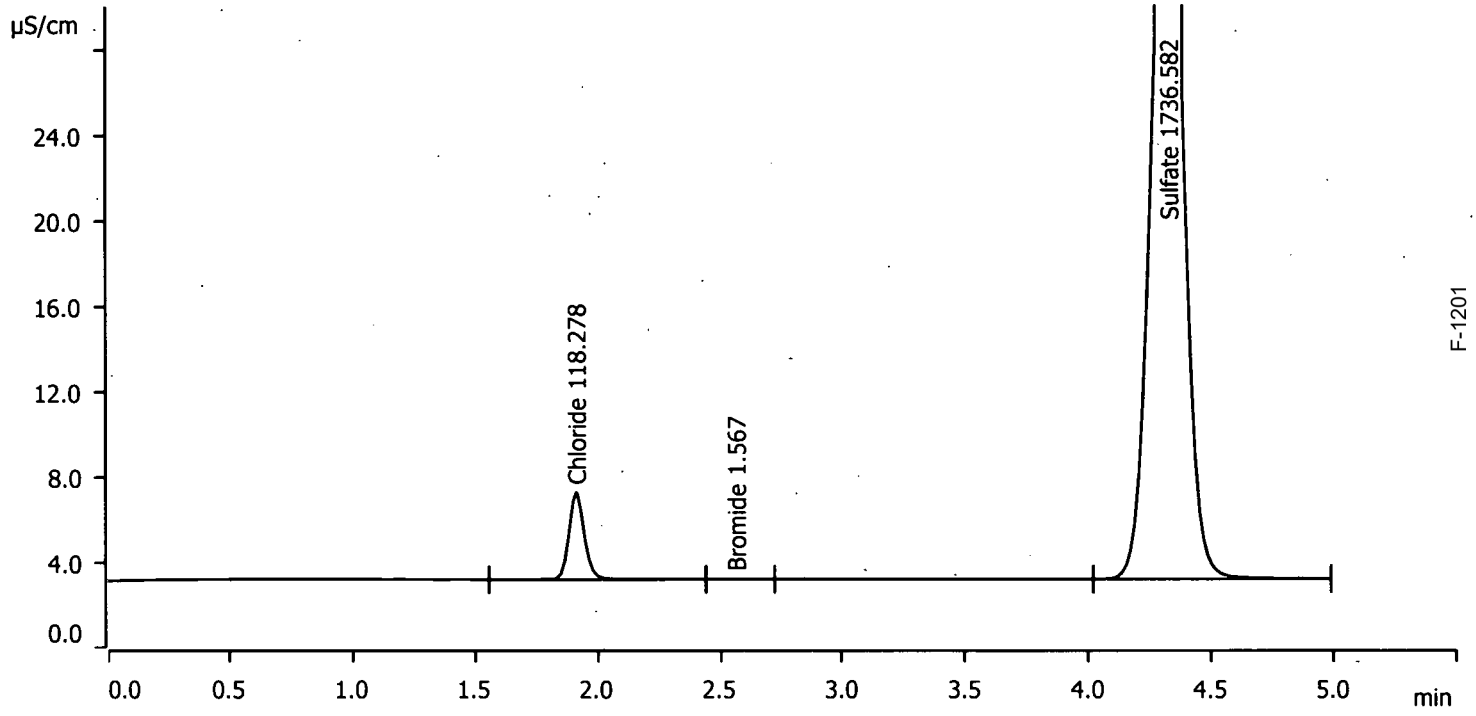
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.92	0.129	54.025	Chloride	BB
2	2.83	0.007	1.828	Nitrate	BB
3	4.31	0.233	131.461	Sulfate	BB

Sample data

Ident	R2407825-022
Sample type	Sample
Determination start	2024-08-24 01:45:47 UTC-4
Method	10-082224FAST
Dilution	40
Counter	90712
Sample Position	98
Comment 1	9056A C
Comment 2	

Anions



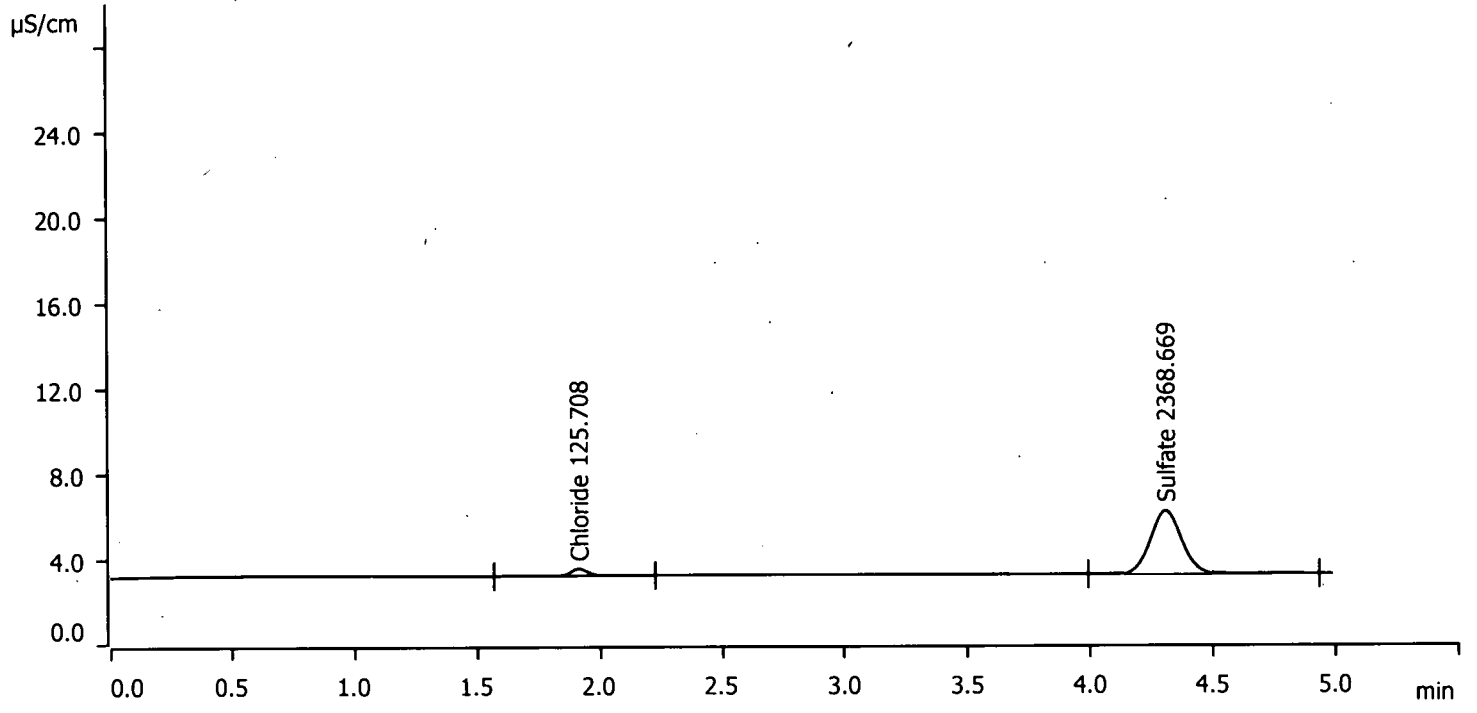
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.92	0.301	118.278	Chloride	BB
2	2.56	0.001	1.567	Bromide	BB
3	4.33	5.716	1736.582	Sulfate	BB

Sample data

Ident	R2407825-022
Sample type	Sample
Determination start	2024-08-24 01:52:02 UTC-4
Method	10-082224FAST
Dilution	400
Counter	90713
Sample Position	99
Comment 1	9056A S
Comment 2	

Anions



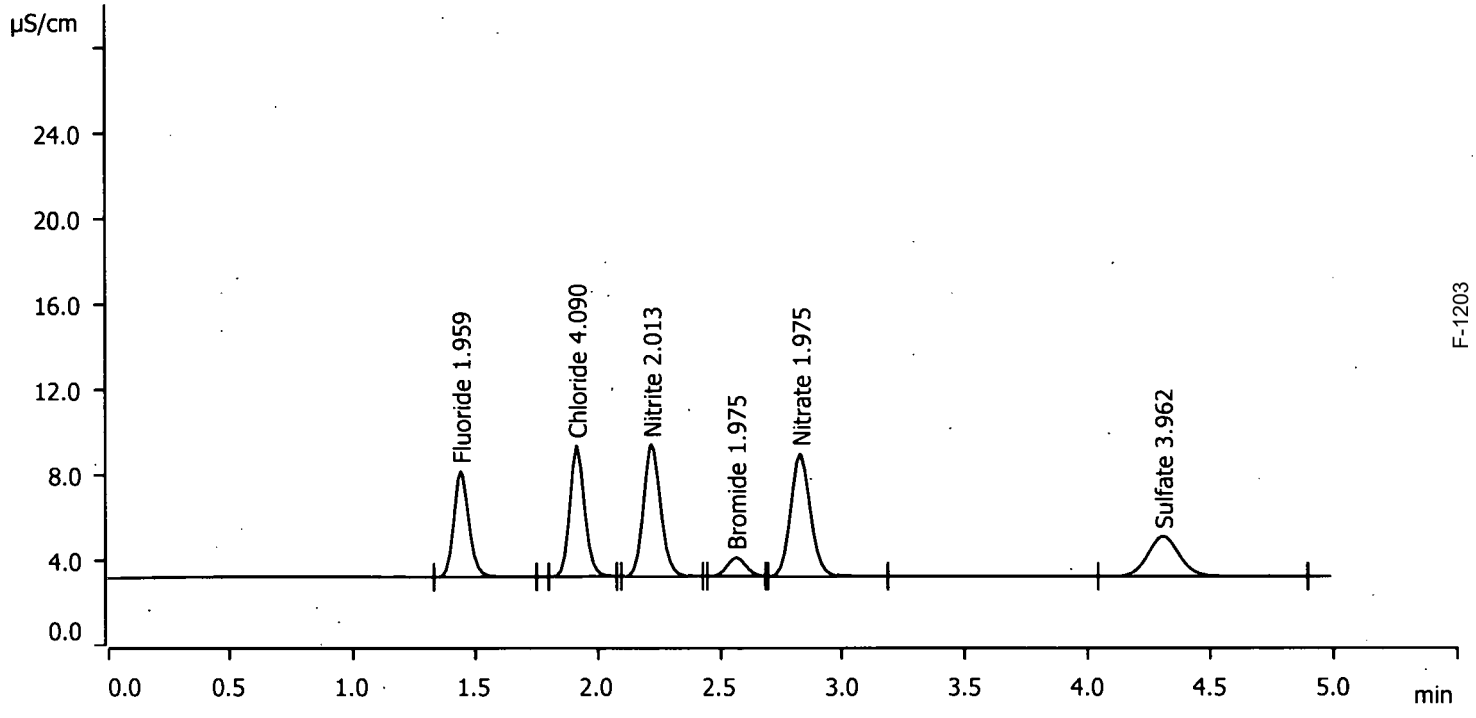
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.92	0.027	125.708	Chloride	BB
2	4.31	0.443	2368.669	Sulfate	BB

Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-08-24 01:58:17 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90714
Sample Position	100
Comment 1	300.0/9056A
Comment 2	

Anions



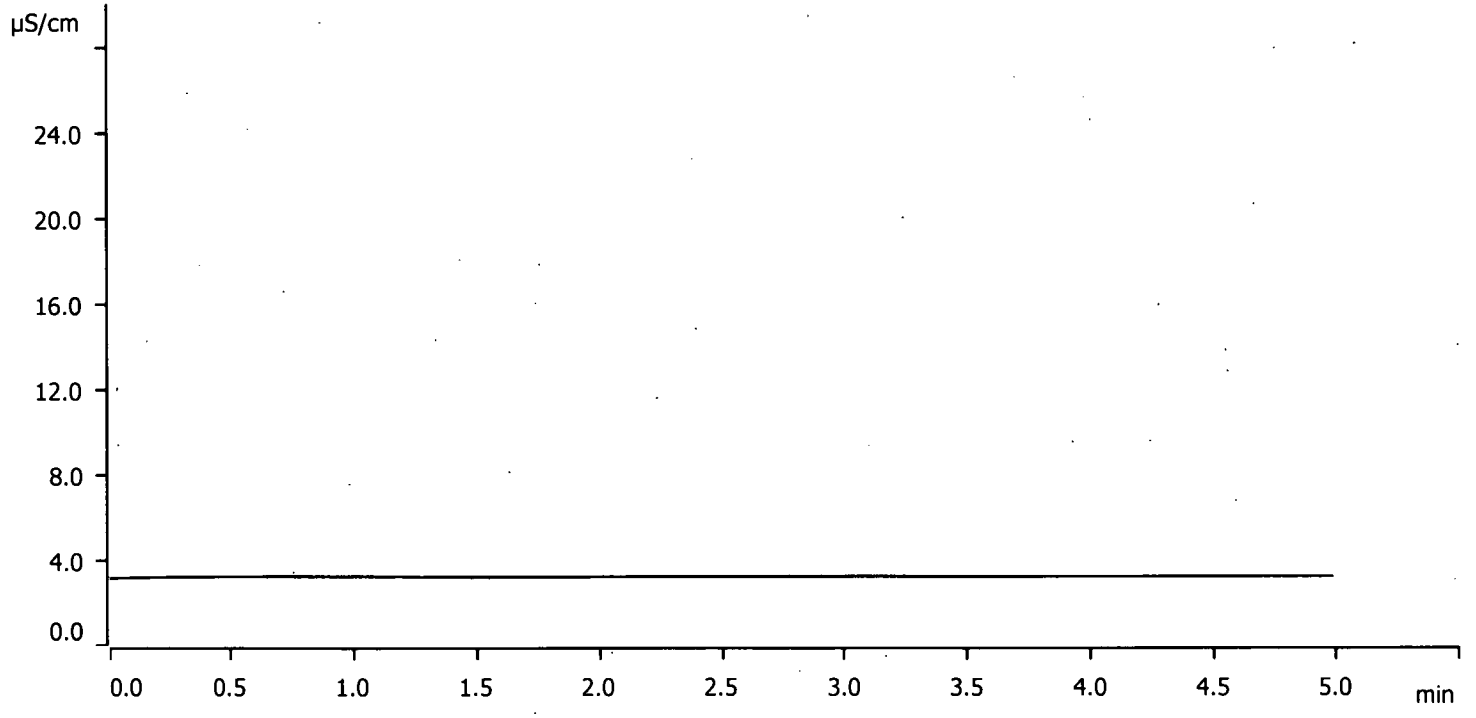
Anions

Peak number	Retention time min	Area (µS/cm) x min	Concentration ppm	Component name	Type
1	1.45	0.353	1.959	Fluoride	BB
2	1.92	0.432	4.090	Chloride	BB
3	2.22	0.504	2.013	Nitrite	BB
4	2.57	0.076	1.975	Bromide	BB
5	2.83	0.531	1.975	Nitrate	BB
6	4.31	0.284	3.962	Sulfate	BB

Sample data

Ident	CCB
Sample type	Sample
Determination start	2024-08-24 02:04:33 UTC-4
Method	10-082224FAST
Dilution	1
Counter	90715
Sample Position	101
Comment 1	300.0/9056A
Comment 2	

Anions



ALS Environmental

1575 Jefferson Road, Building 300, Suite 360, Rochester, New York 14623

Ion Chromatography Cover Sheet

Instrument: Metrohm IC 930 (IC#10)

Column: Dionex IonPac AS22-Fast (Installed 07/25/2024)

Curve Date: 08/22/24 **Loop size: 25 uL Loop**

Analyst: _____ **Analysis Date:** 08/23/24

Balance ID for Soil Preparation: N/A

Is copy of LCS attached to run? (YES) / NO

Method Filename: 10-082224FAST

Standards Prep Dates & Log ID's:

Std Type	*Prep Date*	*Log ID*		*Std Type*	*Prep Date*	*Log ID*
Calibration Intermediate	08/09/2024	236789		Working Calibration Stds	08/22/2024	WC236014A
LCS / MS Intermediate	08/09/2024	236789		Working LCS/MS Standard	08/23/2024	WC236097M
ICV Intermediate	08/09/2024	236787		Working ICV Standard	08/22/2024	WC236039L
CCV Intermediate	08/09/2024	236787		Working CCV Standard	08/23/2025	WC236039M

Original Retention Times for this method are based on Standard 6 and are as follows:

Fluoride: 1.44	Bromide: 2.57
Chloride: 1.92	Nitrate: 2.83
Nitrite: 2.22	Sulfate: 4.31

Additional Comments: Column Serial Number: 240212573
Linear Range Verification (High Standard) Analyzed: 03/09/2024 – Due Every Six Months

Pipets: Chrome, Bottom
Disposable Pipet ID: (Fisher) 26023005

Eluent Stock (100x): 235121
Suppressor Stock (5x): 235047

LCS Prep

(Stocks delivered using volumetric glassware and brought to volume with DI. LCS expires after 7 days; if NO_2 is needed, LCS must be prepared daily.)

(MS prepared fresh daily using same volume of intermediate stock added to 100mLs sample. MS not prepared volumetrically.)

Analyte	Calibration Intermediate Stock ID	Conc. mg/L	mLs Stock	Final Vol. mL	Final Conc. mg/L	Analyst / Date Prepped	Lot ID	Exp. Date	Matrix H_2SO_4 / NaOH / DI	H_2SO_4 / NaOH Lot #
F	236789	50	2.0	200	1.0	KW 8/9/24	A	8/16/24	DI	—
Cl		100			2.0	KAW 8/10/24	B	8/17/24	DI	—
NO_2		50			1.0	KAW 8/11/24	C	8/18/24	DI	—
Br		50			1.0	CMW 8/12/24	D	8/19/24	DI	—
NO_3		50			1.0	CMW 8/13/24	E	8/20/24	DI	—
OPO_4		50			1.0	KW 8/14/24	F	8/21/24	DI	—
SO_4		100			2.0	KW 8/15/24	G	8/22/24	DI	—
						KW 8/16/24	H	8/23/24	DI	—
						KW 8/17/24	I	8/24/24	DI	—
						KW 8/20/24	J	8/27/24	DI	—
						KW 8/21/24	K	8/28/24	DI	—
						KAW 8/22/24	L	8/29/24	DI	—
						KW 8/23/24	M	8/30/24	DI	—
						KW 8/24/24	N	8/31/24	DI	—
						KW 8/25/24	O	9/1/24	DI	—
							P			
							Q			
							R			

ICV / CCV PREP

(A 1:1 dilution of the Reference Intermediate Stock is done daily.)

Analyte	ICV / CCV Intermediate Stock ID	Conc. mg/L	mLs Stock	Final Vol. mL	Final Conc. mg/L	Analyst / Date Prepped	Lot ID	Exp. Date	Matrix H_2SO_4 / NaOH / DI	H_2SO_4 / NaOH Lot #
F	236787	4.00	5.0	10.0	2.00	KAW 8/9/24	A	8/10/24	DI	—
Cl		8.00			4.00	KAW 8/10/24	B	8/11/24	DI	—
NO_2		4.00			2.00	KAW 8/11/24	C	8/12/24	DI	—
Br		4.00			2.00	AMW 8/12/24	D	8/13/24	DI	—
NO_3		4.00			2.00	AMW 8/13/24	E	8/14/24	DI	—
OPO_4		4.00			2.00	KW 8/14/24	F	8/15/24	DI	—
SO_4		8.00			4.00	KW 8/15/24	G	8/16/24	DI	—
						KW 8/16/24	H	8/17/24	DI	—
						KW 8/17/24	I	8/18/24	DI	—
						KW 8/20/24	J	8/21/24	DI	—
						KW 8/21/24	K	8/22/24	DI	—
						KAW 8/22/24	L	8/23/24	DI	—
						KW 8/23/24	M	8/24/24	DI	—
						KW 8/24/24	N	8/25/24	DI	—
						KW 8/25/24	O	8/26/24	DI	—
							P			
							Q			
							R			

Analytical Results Summary

Instrument Name: R-FIA-05 **Analyst:** GNITAJOUPPI **Analysis Lot:** 851757 **Method/Testcode:** 353.2/NO2 NO3 T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2410404-01	Nitrate+Nitrite as Nitrogen	CCV		Water	0.96 mg/L	10 mL	0.961 mg/L	1					8/23/24 11:11:52	N	II
KQ2410404-01	Nitrate+Nitrite as Nitrogen Dissolved	CCV		Water	0.96 mg/L	10 mL	0.961 mg/L	1					8/23/24 11:11:52	N	II
KQ2410404-02	Nitrate+Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 11:13:14	N	II
KQ2410404-02	Nitrate+Nitrite as Nitrogen Dissolved	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 11:13:14	N	II
KQ2410404-09	Nitrate+Nitrite as Nitrogen	MB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 11:13:14	N	II
KQ2410404-09	Nitrate+Nitrite as Nitrogen Dissolved	MB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 11:13:14	N	II
KQ2410404-10	Nitrate+Nitrite as Nitrogen	LCS		Water	0.53 mg/L	10 mL	0.526 mg/L	1	0.002	0.050	105		8/23/24 11:14:37	N	II
KQ2410404-10	Nitrate+Nitrite as Nitrogen Dissolved	LCS		Water	0.53 mg/L	10 mL	0.526 mg/L	1	0.002	0.050	105		8/23/24 11:14:37	N	II
K2407710-001	Nitrate+Nitrite as Nitrogen Dissolved	N/A		Water	0.00 mg/L	10 mL	0.0020 mg/L U	1	0.0015	0.0020			8/23/24 11:16:00	N	II
K2407710-002	Nitrate+Nitrite as Nitrogen Dissolved	N/A		Water	0.01 mg/L	10 mL	0.0066 mg/L	1	0.0015	0.0020			8/23/24 11:17:22	N	II
K2407710-003	Nitrate+Nitrite as Nitrogen Dissolved	N/A		Water	-0.01 mg/L	10 mL	0.0020 mg/L U	1	0.0015	0.0020			8/23/24 11:18:45	N	II
K2407710-004	Nitrate+Nitrite as Nitrogen Dissolved	N/A		Water	-0.01 mg/L	10 mL	0.0020 mg/L U	1	0.0015	0.0020			8/23/24 11:20:07	N	II
K2407710-005	Nitrate+Nitrite as Nitrogen Dissolved	N/A		Water	0.02 mg/L	10 mL	0.0212 mg/L	1	0.0015	0.0020			8/23/24 11:21:30	N	II
K2407710-006	Nitrate+Nitrite as Nitrogen Dissolved	N/A		Water	0.99 mg/L	10 mL	4.96 mg/L	5	0.008	0.010			8/23/24 11:22:52	N	II
K2407626-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.02 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 11:24:14	N	II
K2407627-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.06 mg/L	10 mL	0.057 mg/L	1	0.002	0.050			8/23/24 11:25:36	N	II
KQ2410404-03	Nitrate+Nitrite as Nitrogen	CCV		Water	0.94 mg/L	10 mL	0.937 mg/L	1					8/23/24 11:28:19	N	II
KQ2410404-03	Nitrate+Nitrite as Nitrogen Dissolved	CCV		Water	0.94 mg/L	10 mL	0.937 mg/L	1					8/23/24 11:28:19	N	II
KQ2410404-04	Nitrate+Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 11:29:42	N	II
KQ2410404-04	Nitrate+Nitrite as Nitrogen Dissolved	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 11:29:42	N	II
K2407873-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 11:32:25	N	II
K2407874-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.85 mg/L	10 mL	0.854 mg/L	1	0.002	0.050			8/23/24 11:33:46	N	II
K2407875-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.13 mg/L	10 mL	0.129 mg/L	1	0.002	0.050			8/23/24 11:35:08	N	II
K2407876-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.01 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 11:36:29	N	II
K2407454-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.00 mg/L	10 mL	0.0041 mg/L	1	0.0015	0.0020			8/23/24 11:37:52	N	IV
KQ2410404-11	Nitrate+Nitrite as Nitrogen	MS	R2407454-001	Water	0.47 mg/L	10 mL	0.470 mg/L	1	0.002	0.050	93		8/23/24 11:39:15	N	IV
KQ2410404-12	Nitrate+Nitrite as Nitrogen	DMS	R2407454-001	Water	0.47 mg/L	10 mL	0.470 mg/L	1	0.002	0.050	93	<1	8/23/24 11:40:37	N	IV
K2407454-003	Nitrate+Nitrite as Nitrogen	N/A		Water	0.00 mg/L	10 mL	0.0020 mg/L U	1	0.0015	0.0020			8/23/24 11:42:00	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-FIA-05 **Analyst:** GNITAJOUPPI **Analysis Lot:** 851757 **Method/Testcode:** 353.2/NO2 NO3 T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R2407455-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.29 mg/L	10 mL	0.292 mg/L	1	0.0015	0.0020			8/23/24 11:43:22	N	IV
WQ2410404-05	Nitrate+Nitrite as Nitrogen	CCV		Water	0.94 mg/L	10 mL	0.942 mg/L	1					8/23/24 11:44:44	N	II
WQ2410404-05	Nitrate+Nitrite as Nitrogen Dissolved	CCV		Water	0.94 mg/L	10 mL	0.942 mg/L	1					8/23/24 11:44:44	N	II
WQ2410404-06	Nitrate+Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 11:46:06	N	II
WQ2410404-06	Nitrate+Nitrite as Nitrogen Dissolved	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 11:46:06	N	II
R2407455-003	Nitrate+Nitrite as Nitrogen	N/A		Water	0.04 mg/L	10 mL	0.0442 mg/L	1	0.0015	0.0020			8/23/24 11:47:28	N	IV
R2407455-005	Nitrate+Nitrite as Nitrogen	N/A		Water	0.05 mg/L	10 mL	0.0514 mg/L	1	0.0015	0.0020			8/23/24 11:48:51	Y	IV
WQ2410404-13	Nitrate+Nitrite as Nitrogen	MS	R2407455-005	Water	0.51 mg/L	10 mL	0.510 mg/L	1	0.002	0.050	92		8/23/24 11:50:12	N	IV
WQ2410404-14	Nitrate+Nitrite as Nitrogen	DMS	R2407455-005	Water	0.51 mg/L	10 mL	0.511 mg/L	1	0.002	0.050	92	<1	8/23/24 11:51:34	N	IV
R2407455-007	Nitrate+Nitrite as Nitrogen	N/A		Water	0.00 mg/L	10 mL	0.0020 mg/L U	1	0.0015	0.0020			8/23/24 11:52:56	N	IV
WQ2410404-07	Nitrate+Nitrite as Nitrogen	CCV		Water	0.96 mg/L	10 mL	0.958 mg/L	1					8/23/24 12:01:05	N	II
WQ2410404-07	Nitrate+Nitrite as Nitrogen Dissolved	CCV		Water	0.96 mg/L	10 mL	0.958 mg/L	1					8/23/24 12:01:05	N	II
WQ2410404-08	Nitrate+Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 12:02:27	N	II
WQ2410404-08	Nitrate+Nitrite as Nitrogen Dissolved	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 12:02:27	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-FIA-05 **Analyst:** GNITAJOUPPI **Analysis Lot:** 851759 **Method/Testcode:** 353.2/NO2 NO3 T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ2410406-01	Nitrate+Nitrite as Nitrogen	CCV		Water	0.94 mg/L	10 mL	0.942 mg/L	1					8/23/24 11:44:44	N	IV
RQ2410406-02	Nitrate+Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 11:46:06	N	IV
RQ2410406-09	Nitrate+Nitrite as Nitrogen	MB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 11:46:06	N	IV
RQ2410406-10	Nitrate+Nitrite as Nitrogen	LCS		Water	0.51 mg/L	10 mL	0.511 mg/L	1	0.002	0.050	102		8/23/24 11:54:18	N	IV
R2407479-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.19 mg/L	10 mL	0.195 mg/L	1	0.0015	0.0020			8/23/24 11:55:39	N	IV
RQ2410406-11	Nitrate+Nitrite as Nitrogen	MS	R2407479-001	Water	0.66 mg/L	10 mL	0.656 mg/L	1	0.002	0.050	92		8/23/24 11:57:01	N	IV
RQ2410406-12	Nitrate+Nitrite as Nitrogen	DMS	R2407479-001	Water	0.66 mg/L	10 mL	0.657 mg/L	1	0.002	0.050	92	<1	8/23/24 11:58:22	N	IV
R2407479-003	Nitrate+Nitrite as Nitrogen	N/A		Water	0.00 mg/L	10 mL	0.0023 mg/L	1	0.0015	0.0020			8/23/24 11:59:44	N	IV
RQ2410406-03	Nitrate+Nitrite as Nitrogen	CCV		Water	0.96 mg/L	10 mL	0.958 mg/L	1					8/23/24 12:01:05	N	IV
RQ2410406-04	Nitrate+Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 12:02:27	N	IV
R2407505-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.02 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 12:03:50	N	II
RQ2410406-13	Nitrate+Nitrite as Nitrogen	MS	R2407505-001	Water	0.47 mg/L	10 mL	0.470 mg/L	1	0.002	0.050	94		8/23/24 12:05:13	N	II
RQ2410406-14	Nitrate+Nitrite as Nitrogen	DMS	R2407505-001	Water	0.47 mg/L	10 mL	0.469 mg/L	1	0.002	0.050	94	<1	8/23/24 12:06:36	N	II
R2407662-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 12:07:58	N	II
R2407664-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.01 mg/L	10 mL	0.014 mg/L J	1	0.002	0.050			8/23/24 12:09:20	N	II
R2407921-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 12:12:05	N	II
R2407922-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 12:13:27	N	II
R2407924-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.16 mg/L	10 mL	0.155 mg/L	1	0.002	0.050			8/23/24 12:16:11	N	II
RQ2410406-05	Nitrate+Nitrite as Nitrogen	CCV		Water	0.97 mg/L	10 mL	0.966 mg/L	1					8/23/24 12:17:32	N	IV
RQ2410406-06	Nitrate+Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 12:18:54	N	IV
R2407925-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 12:20:16	N	II
R2407926-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 12:21:38	N	II
R2407927-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.47 mg/L	10 mL	0.472 mg/L	1	0.002	0.050			8/23/24 12:22:59	N	II
R2407761-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.29 mg/L	10 mL	0.287 mg/L	1	0.002	0.050			8/23/24 12:24:20	N	II
R2407763-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.01 mg/L	10 mL	0.013 mg/L J	1	0.002	0.050			8/23/24 12:25:42	N	II
R2407786-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.16 mg/L	10 mL	0.160 mg/L	1	0.002	0.050			8/23/24 12:27:04	N	II
R2407786-002	Nitrate+Nitrite as Nitrogen	N/A		Water	0.81 mg/L	10 mL	8.06 mg/L	10	0.02	0.50			8/23/24 12:28:27	N	II
R2407829-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.01 mg/L	10 mL	0.013 mg/L J	1	0.002	0.050			8/23/24 12:33:41	N	II
RQ2410406-07	Nitrate+Nitrite as Nitrogen	CCV		Water	0.97 mg/L	10 mL	0.969 mg/L	1					8/23/24 12:35:02	N	IV
RQ2410406-08	Nitrate+Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 12:36:24	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-FIA-05 **Analyst:** GNITAJOUPPI **Analysis Lot:** 851763 **Method/Testcode:** 353.2/NO2 NO3 T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ2410411-01	Nitrate+Nitrite as Nitrogen	CCV		Drinking Water	0.97 mg/L	10 mL	0.969 mg/L	1					8/23/24 12:35:02	N	II
RQ2410411-02	Nitrate+Nitrite as Nitrogen	CCB		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 12:36:24	N	II
RQ2410411-09	Nitrate+Nitrite as Nitrogen	MB		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 12:36:24	N	II
RQ2410411-10	Nitrate+Nitrite as Nitrogen	LCS		Drinking Water	0.53 mg/L	10 mL	0.528 mg/L	1	0.002	0.050	106		8/23/24 12:37:47	N	II
R2407830-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.01 mg/L	10 mL	0.008 mg/L J	1	0.002	0.050			8/23/24 12:39:09	N	II
R2407836-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.02 mg/L	10 mL	0.020 mg/L J	1	0.002	0.050			8/23/24 12:40:31	N	II
R2407529-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.63 mg/L	10 mL	0.626 mg/L	1	0.0015	0.0020			8/23/24 12:41:53	N	IV
RQ2410411-11	Nitrate+Nitrite as Nitrogen	MS	R2407529-001	Water	1.07 mg/L	10 mL	1.07 mg/L	1	0.002	0.050	89*		8/23/24 12:43:15	N	IV
RQ2410411-12	Nitrate+Nitrite as Nitrogen	DMS	R2407529-001	Water	1.07 mg/L	10 mL	1.07 mg/L	1	0.002	0.050	89*	<1	8/23/24 12:44:37	N	IV
R2407529-003	Nitrate+Nitrite as Nitrogen	N/A		Water	0.23 mg/L	10 mL	0.232 mg/L	1	0.0015	0.0020			8/23/24 12:45:59	N	IV
R2407529-005	Nitrate+Nitrite as Nitrogen	N/A		Water	0.25 mg/L	10 mL	0.251 mg/L	1	0.0015	0.0020			8/23/24 12:47:20	N	IV
R2407547-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.01 mg/L	10 mL	0.0083 mg/L	1	0.0015	0.0020			8/23/24 12:48:41	N	IV
R2407547-003	Nitrate+Nitrite as Nitrogen	N/A		Water	0.09 mg/L	10 mL	0.0887 mg/L	1	0.0015	0.0020			8/23/24 12:50:03	N	IV
RQ2410411-03	Nitrate+Nitrite as Nitrogen	CCV		Drinking Water	0.97 mg/L	10 mL	0.966 mg/L	1					8/23/24 12:51:24	N	II
RQ2410411-04	Nitrate+Nitrite as Nitrogen	CCB		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 12:52:47	N	II
R2407552-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.35 mg/L	10 mL	0.351 mg/L	1	0.0015	0.0020			8/23/24 12:54:10	N	IV
RQ2410411-13	Nitrate+Nitrite as Nitrogen	MS	R2407552-001	Water	0.80 mg/L	10 mL	0.800 mg/L	1	0.002	0.050	90		8/23/24 12:55:32	N	IV
RQ2410411-14	Nitrate+Nitrite as Nitrogen	DMS	R2407552-001	Water	0.80 mg/L	10 mL	0.800 mg/L	1	0.002	0.050	90	<1	8/23/24 12:56:55	N	IV
R2407552-003	Nitrate+Nitrite as Nitrogen	N/A		Water	0.40 mg/L	10 mL	0.398 mg/L	1	0.0015	0.0020			8/23/24 12:58:17	N	IV
R2407552-005	Nitrate+Nitrite as Nitrogen	N/A		Water	0.40 mg/L	10 mL	0.395 mg/L	1	0.0015	0.0020			8/23/24 12:59:40	N	IV
R2407554-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.44 mg/L	10 mL	0.441 mg/L	1	0.0015	0.0020			8/23/24 13:01:02	N	IV
R2407554-003	Nitrate+Nitrite as Nitrogen	N/A		Water	0.44 mg/L	10 mL	0.442 mg/L	1	0.0015	0.0020			8/23/24 13:02:24	N	IV
R2407557-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.00 mg/L	10 mL	0.0020 mg/L U	1	0.0015	0.0020			8/23/24 13:03:46	N	IV
R2407557-003	Nitrate+Nitrite as Nitrogen	N/A		Water	0.38 mg/L	10 mL	0.383 mg/L	1	0.0015	0.0020			8/23/24 13:05:08	N	IV
R2407557-005	Nitrate+Nitrite as Nitrogen	N/A		Water	0.37 mg/L	10 mL	0.371 mg/L	1	0.0015	0.0020			8/23/24 13:06:30	N	IV
RQ2410411-05	Nitrate+Nitrite as Nitrogen	CCV		Drinking Water	0.97 mg/L	10 mL	0.974 mg/L	1					8/23/24 13:07:51	N	II
RQ2410411-06	Nitrate+Nitrite as Nitrogen	CCB		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 13:09:13	N	II
R2407557-007	Nitrate+Nitrite as Nitrogen	N/A		Water	0.38 mg/L	10 mL	0.377 mg/L	1	0.0015	0.0020			8/23/24 13:10:35	N	IV
R2407557-009	Nitrate+Nitrite as Nitrogen	N/A		Water	0.43 mg/L	10 mL	0.430 mg/L	1	0.0015	0.0020			8/23/24 13:11:57	N	IV
R2407634-003	Nitrate+Nitrite as Nitrogen	N/A		Water	0.00 mg/L	10 mL	0.0020 mg/L U	1	0.0015	0.0020			8/23/24 13:13:18	N	IV
R2407637-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.01 mg/L	10 mL	0.0065 mg/L	1	0.0015	0.0020			8/23/24 13:14:40	N	IV
R2407640-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.05 mg/L	10 mL	0.0502 mg/L	1	0.0015	0.0020			8/23/24 13:16:01	N	IV

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Analytical Results Summary

Instrument Name: R-FIA-05 **Analyst:** GNITAJOUPPI **Analysis Lot:** 851763 **Method/Testcode:** 353.2/NO2 NO3 T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ2410411-07	Nitrate+Nitrite as Nitrogen	CCV		Drinking Water	0.96 mg/L	10 mL	0.961 mg/L	1					8/23/24 13:24:16	N	II
RQ2410411-08	Nitrate+Nitrite as Nitrogen	CCB		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 13:25:39	N	II

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Analytical Results Summary

Instrument Name: R-FIA-05 **Analyst:** GNITAJOUPPI **Analysis Lot:** 851765 **Method/Testcode:** 353.2/NO2 NO3 T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ2410412-01	Nitrate+Nitrite as Nitrogen	CCV		Water	0.97 mg/L	10 mL	0.974 mg/L	1					8/23/24 13:07:51	N	IV
RQ2410412-02	Nitrate+Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 13:09:13	N	IV
RQ2410412-09	Nitrate+Nitrite as Nitrogen	MB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 13:09:13	N	IV
RQ2410412-10	Nitrate+Nitrite as Nitrogen	LCS		Water	0.52 mg/L	10 mL	0.520 mg/L	1	0.002	0.050	104		8/23/24 13:17:24	N	IV
R2407634-005	Nitrate+Nitrite as Nitrogen	N/A		Water	0.01 mg/L	10 mL	0.0050 mg/L	1	0.0015	0.0020			8/23/24 13:18:47	Y	IV
RQ2410412-11	Nitrate+Nitrite as Nitrogen	MS	R2407634-005	Water	0.50 mg/L	10 mL	0.496 mg/L	1	0.002	0.050	98		8/23/24 13:20:10	N	IV
RQ2410412-12	Nitrate+Nitrite as Nitrogen	DMS	R2407634-005	Water	0.50 mg/L	10 mL	0.496 mg/L	1	0.002	0.050	98	<1	8/23/24 13:21:33	N	IV
R2407634-007	Nitrate+Nitrite as Nitrogen	N/A		Water	0.00 mg/L	10 mL	0.0020 mg/L U	1	0.0015	0.0020			8/23/24 13:22:55	Y	IV
RQ2410412-03	Nitrate+Nitrite as Nitrogen	CCV		Water	0.96 mg/L	10 mL	0.961 mg/L	1					8/23/24 13:24:16	N	IV
RQ2410412-04	Nitrate+Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 13:25:39	N	IV
RQ2410412-13	Nitrate+Nitrite as Nitrogen	MS	R2407634-007	Water	0.48 mg/L	10 mL	0.478 mg/L	1	0.002	0.050	96		8/23/24 13:27:01	N	IV
RQ2410412-14	Nitrate+Nitrite as Nitrogen	DMS	R2407634-007	Water	0.48 mg/L	10 mL	0.477 mg/L	1	0.002	0.050	95	<1	8/23/24 13:28:23	N	IV
R2407640-003	Nitrate+Nitrite as Nitrogen	N/A		Water	0.45 mg/L	10 mL	0.449 mg/L	1	0.0015	0.0020			8/23/24 13:29:45	N	IV
R2407643-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.46 mg/L	10 mL	0.458 mg/L	1	0.0015	0.0020			8/23/24 13:31:07	N	IV
R2407643-003	Nitrate+Nitrite as Nitrogen	N/A		Water	0.48 mg/L	10 mL	0.476 mg/L	1	0.0015	0.0020			8/23/24 13:32:29	N	IV
R2407643-005	Nitrate+Nitrite as Nitrogen	N/A		Water	0.50 mg/L	10 mL	0.495 mg/L	1	0.0015	0.0020			8/23/24 13:33:51	N	IV
R2407643-007	Nitrate+Nitrite as Nitrogen	N/A		Water	0.46 mg/L	10 mL	0.460 mg/L	1	0.0015	0.0020			8/23/24 13:35:12	N	IV
R2407643-009	Nitrate+Nitrite as Nitrogen	N/A		Water	0.47 mg/L	10 mL	0.468 mg/L	1	0.0015	0.0020			8/23/24 13:36:34	N	IV
R2407643-011	Nitrate+Nitrite as Nitrogen	N/A		Water	0.47 mg/L	10 mL	0.470 mg/L	1	0.0015	0.0020			8/23/24 13:37:56	N	IV
R2407643-013	Nitrate+Nitrite as Nitrogen	N/A		Water	0.40 mg/L	10 mL	0.396 mg/L	1	0.0015	0.0020			8/23/24 13:39:17	N	IV
RQ2410412-05	Nitrate+Nitrite as Nitrogen	CCV		Water	0.96 mg/L	10 mL	0.960 mg/L	1					8/23/24 13:40:39	N	IV
RQ2410412-06	Nitrate+Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 13:42:01	N	IV
R2407643-015	Nitrate+Nitrite as Nitrogen	N/A		Water	0.00 mg/L	10 mL	0.0020 mg/L U	1	0.0015	0.0020			8/23/24 13:43:24	N	IV
R2407643-017	Nitrate+Nitrite as Nitrogen	N/A		Water	0.47 mg/L	10 mL	0.471 mg/L	1	0.0015	0.0020			8/23/24 13:44:47	N	IV
R2407643-019	Nitrate+Nitrite as Nitrogen	N/A		Water	0.41 mg/L	10 mL	0.414 mg/L	1	0.0015	0.0020			8/23/24 13:46:09	N	IV
R2407643-022	Nitrate+Nitrite as Nitrogen	N/A		Water	0.39 mg/L	10 mL	0.389 mg/L	1	0.0015	0.0020			8/23/24 13:47:32	N	IV
R2407685-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.02 mg/L	10 mL	0.0214 mg/L	1	0.0015	0.0020			8/23/24 13:48:54	N	IV
R2407685-003	Nitrate+Nitrite as Nitrogen	N/A		Water	0.05 mg/L	10 mL	0.0543 mg/L	1	0.0015	0.0020			8/23/24 13:50:16	N	IV
R2407685-005	Nitrate+Nitrite as Nitrogen	N/A		Water	0.14 mg/L	10 mL	0.139 mg/L	1	0.0015	0.0020			8/23/24 13:51:38	N	IV
R2407721-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.00 mg/L	10 mL	5.0 mg/L U	100	0.2	5.0			8/23/24 13:53:00	N	IV
R2407721-003	Nitrate+Nitrite as Nitrogen	N/A		Water	0.03 mg/L	10 mL	3.4 mg/L J	100	0.2	5.0			8/23/24 13:54:23	N	IV
R2407721-005	Nitrate+Nitrite as Nitrogen	N/A		Water	0.00 mg/L	10 mL	0.4 mg/L J	100	0.2	5.0			8/23/24 13:55:45	N	IV
RQ2410412-07	Nitrate+Nitrite as Nitrogen	CCV		Water	0.96 mg/L	10 mL	0.962 mg/L	1					8/23/24 13:57:06	N	IV
RQ2410412-08	Nitrate+Nitrite as Nitrogen	CCB		Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 13:58:28	N	IV

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Analytical Results Summary

Instrument Name: R-FIA-05 **Analyst:** GNITAJOUPPI **Analysis Lot:** 851766 **Method/Testcode:** 353.2/NO2 NO3 T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ2410413-01	Nitrate+Nitrite as Nitrogen	CCV		Drinking Water	0.96 mg/L	10 mL	0.962 mg/L	1					8/23/24 13:57:06	N	II
RQ2410413-02	Nitrate+Nitrite as Nitrogen	CCB		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 13:58:28	N	II
RQ2410413-09	Nitrate+Nitrite as Nitrogen	MB		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 13:58:28	N	II
RQ2410413-10	Nitrate+Nitrite as Nitrogen	LCS		Drinking Water	0.52 mg/L	10 mL	0.518 mg/L	1	0.002	0.050	104		8/23/24 13:59:50	N	II
R2407871-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	1.76 mg/L	10 mL	17.6 mg/L	10	0.02	0.50			8/23/24 14:01:12	N	II
R2407872-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.74 mg/L	10 mL	3.72 mg/L	5	0.008	0.25			8/23/24 14:02:34	N	II
R2407680-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.67 mg/L	10 mL	3.36 mg/L	5	0.008	0.25			8/23/24 14:03:55	N	II
R2407923-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.70 mg/L	10 mL	6.97 mg/L	10	0.02	0.50			8/23/24 14:05:17	N	II
R2407721-007	Nitrate+Nitrite as Nitrogen	N/A		Water	0.02 mg/L	10 mL	2.3 mg/L J	100	0.2	5.0			8/23/24 14:06:40	N	IV
R2407729-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.00 mg/L	10 mL	0.0035 mg/L	1	0.0015	0.0020			8/23/24 14:08:03	N	IV
RQ2410413-11	Nitrate+Nitrite as Nitrogen	MS	R2407729-001	Water	0.44 mg/L	10 mL	0.440 mg/L	1	0.002	0.050	87*		8/23/24 14:09:25	N	IV
RQ2410413-12	Nitrate+Nitrite as Nitrogen	DMS	R2407729-001	Water	0.44 mg/L	10 mL	0.439 mg/L	1	0.002	0.050	87*	<1	8/23/24 14:10:48	N	IV
R2407792-007	Nitrate+Nitrite as Nitrogen	N/A		Water	0.62 mg/L	10 mL	61.6 mg/L	100	0.2	5.0			8/23/24 14:12:11	N	IV
RQ2410413-03	Nitrate+Nitrite as Nitrogen	CCV		Drinking Water	0.97 mg/L	10 mL	0.966 mg/L	1					8/23/24 14:13:32	N	II
RQ2410413-04	Nitrate+Nitrite as Nitrogen	CCB		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 14:14:55	N	II
R2407792-015	Nitrate+Nitrite as Nitrogen	N/A		Water	0.07 mg/L	10 mL	0.075 mg/L	1	0.002	0.050			8/23/24 14:16:17	N	IV
R2407734-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.50 mg/L	10 mL	0.501 mg/L	1	0.0015	0.0020			8/23/24 14:17:39	N	IV
R2407734-003	Nitrate+Nitrite as Nitrogen	N/A		Water	0.44 mg/L	10 mL	0.442 mg/L	1	0.0015	0.0020			8/23/24 14:19:01	N	IV
R2407734-005	Nitrate+Nitrite as Nitrogen	N/A		Water	0.41 mg/L	10 mL	0.412 mg/L	1	0.0015	0.0020			8/23/24 14:20:23	N	IV
R2407734-007	Nitrate+Nitrite as Nitrogen	N/A		Water	0.43 mg/L	10 mL	0.433 mg/L	1	0.0015	0.0020			8/23/24 14:21:45	N	IV
R2407734-009	Nitrate+Nitrite as Nitrogen	N/A		Water	0.43 mg/L	10 mL	0.434 mg/L	1	0.0015	0.0020			8/23/24 14:23:07	N	IV
R2407734-011	Nitrate+Nitrite as Nitrogen	N/A		Water	0.43 mg/L	10 mL	0.430 mg/L	1	0.0015	0.0020			8/23/24 14:24:29	N	IV
R2407734-013	Nitrate+Nitrite as Nitrogen	N/A		Water	0.46 mg/L	10 mL	0.457 mg/L	1	0.0015	0.0020			8/23/24 14:25:51	N	IV
R2407734-015	Nitrate+Nitrite as Nitrogen	N/A		Water	0.49 mg/L	10 mL	0.495 mg/L	1	0.0015	0.0020			8/23/24 14:27:13	N	IV
R2407909-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	1.14 mg/L	10 mL	1.14 mg/L	1	0.002	0.050			8/23/24 14:28:35	N	II
RQ2410413-05	Nitrate+Nitrite as Nitrogen	CCV		Drinking Water	0.96 mg/L	10 mL	0.957 mg/L	1					8/23/24 14:29:56	N	II
RQ2410413-06	Nitrate+Nitrite as Nitrogen	CCB		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 14:31:19	N	II
R2407734-017	Nitrate+Nitrite as Nitrogen	N/A		Water	0.38 mg/L	10 mL	0.380 mg/L	1	0.0015	0.0020			8/23/24 14:32:41	N	IV
RQ2410413-13	Nitrate+Nitrite as Nitrogen	MS	R2407734-017	Water	0.84 mg/L	10 mL	0.844 mg/L	1	0.002	0.050	93		8/23/24 14:34:04	N	IV
RQ2410413-14	Nitrate+Nitrite as Nitrogen	DMS	R2407734-017	Water	0.84 mg/L	10 mL	0.844 mg/L	1	0.002	0.050	93	<1	8/23/24 14:35:27	N	IV
R2407933-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.03 mg/L	10 mL	0.033 mg/L J	1	0.002	0.050			8/23/24 14:36:49	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-FIA-05 **Analyst:** GNITAJOUPPI **Analysis Lot:** 851766 **Method/Testcode:** 353.2/NO2 NO3 T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R2407734-019	Nitrate+Nitrite as Nitrogen	N/A		Water	0.34 mg/L	10 mL	0.343 mg/L	1	0.0015	0.0020			8/23/24 14:38:12	N	IV
RQ2410413-07	Nitrate+Nitrite as Nitrogen	CCV		Drinking Water	0.96 mg/L	10 mL	0.959 mg/L	1					8/23/24 14:39:33	N	II
RQ2410413-08	Nitrate+Nitrite as Nitrogen	CCB		Drinking Water	0.00 mg/L	10 mL	0.050 mg/L U	1	0.002	0.050			8/23/24 14:40:56	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Creator : GABRIELA NITA-JOUPPI
Creation Date : 8/23/2024 10:45:54 AM
Last Modified : 8/23/2024 2:43:02 PM
Description :

Cup	Sample ID	MDF	Weight	Sample Type	Comments
S1	STD 2.000			Calibration Standard	
S2	STD 1.000			Calibration Standard	
S3	STD 0.500			Calibration Standard	
S4	STD 0.200			Calibration Standard	
S5	STD 0.100			Calibration Standard	
S6	STD 0.050			Calibration Standard	
S7	STD 0.010			Calibration Standard	
S8	STD 0.005			Calibration Standard	
S9	STD 0.002			Calibration Standard	
S10	STD 0.000			Calibration Standard	
179	1.000 NO3			Unknown	
180	1.000 NO2			Unknown	
S1	ICV TV= 1.0			Unknown	
S10	ICB			Unknown	
S7	CRDL 0.01			Unknown	
S8	CRDL 0.005			Unknown	
S9	CRDL 0.002			Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
1	LCS 1			Unknown	
2	R2407710-001			Unknown	
3	R2407710-002			Unknown	
4	R2407710-003			Unknown	
5	R2407710-004			Unknown	
6	R2407710-005			Unknown	
7	R2407710-006	5.00000		Unknown	
8	R2407626-001			Unknown	
9	R2407627-001			Unknown	
10	R2407871-001			Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
11	R2407872-001			Unknown	
12	R2407873-001			Unknown	
13	R2407874-001			Unknown	
14	R2407875-001			Unknown	
15	R2407876-001			Unknown	
16	R2407454-001			Unknown	
17	R2407454-001 MS			Unknown	
18	R2407454-001 MSD			Unknown	
19	R2407454-003			Unknown	

20	R2407455-001			Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
21	R2407455-003			Unknown	
22	R2407455-005			Unknown	
23	R2407455-005 MS			Unknown	
24	R2407455-005 MSD			Unknown	
25	R2407455-007			Unknown	
26	LCS			Unknown	
27	R2407479-001			Unknown	
28	R2407479-001 MS			Unknown	
29	R2407479-001 MSD			Unknown	
30	R2407479-003			Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
31	R2407505-001			Unknown	
32	R2407505-001 MS			Unknown	
33	R2407505-001 MSD			Unknown	
34	R2407662-001			Unknown	
35	R2407664-001			Unknown	
36	R2407680-001			Unknown	
37	R2407921-001			Unknown	
38	R2407922-001			Unknown	
39	R2407923-001			Unknown	
40	R2407924-001			Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
41	R2407925-001			Unknown	
42	R2407926-001			Unknown	
43	R2407927-001			Unknown	
44	R2407761-001			Unknown	
45	R2407763-001			Unknown	
46	R2407786-001			Unknown	
47	R2407786-002	10.0000		Unknown	
48	R2407792-007			Unknown	
49	R2407792-015			Unknown	
50	R2407829-001			Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
51	LCS			Unknown	
52	R2407830-001			Unknown	
53	R2407836-001			Unknown	
54	R2407529-001			Unknown	
55	R2407529-001 MS			Unknown	
56	R2407529-001 MSD			Unknown	

57	R2407529-003			Unknown	
58	R2407529-005			Unknown	
59	R2407547-001			Unknown	
60	R2407547-003			Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
61	R2407552-001			Unknown	
62	R2407552-001 MS			Unknown	
63	R2407552-001 MSD			Unknown	
64	R2407552-003			Unknown	
65	R2407552-005			Unknown	
66	R2407554-001			Unknown	
67	R2407554-003			Unknown	
68	R2407557-001			Unknown	
69	R2407557-003			Unknown	
70	R2407557-005			Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
71	R2407557-007			Unknown	
72	R2407557-009			Unknown	
73	R2407634-003			Unknown	
74	R2407637-001			Unknown	
75	R2407640-001			Unknown	
76	LCS			Unknown	
77	R2407634-005			Unknown	
78	R2407634-005 MS			Unknown	
79	R2407634-005 MSD			Unknown	
80	R2407634-007			Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
81	R2407634-007 MS			Unknown	
82	R2407634-007 MSD			Unknown	
83	R2407640-003			Unknown	
84	R2407643-001			Unknown	
85	R2407643-003			Unknown	
86	R2407643-005			Unknown	
87	R2407643-007			Unknown	
88	R2407643-009			Unknown	
89	R2407643-011			Unknown	
90	R2407643-013			Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
91	R2407643-015			Unknown	
92	R2407643-017			Unknown	
93	R2407643-019			Unknown	

94	R2407643-022			Unknown	
95	R2407685-001			Unknown	
96	R2407685-003			Unknown	
97	R2407685-005			Unknown	
98	R2407721-001	100.000		Unknown	
99	R2407721-003	100.000		Unknown	
100	R2407721-005	100.000		Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
101	LCS			Unknown	
102	R2407871-001 RPT	10.0000		Unknown	
103	R2407872-001 RPT	5.00000		Unknown	
104	R2407680-001 RPT	5.00000		Unknown	
105	R2407923-001 RPT	10.0000		Unknown	
106	R2407721-007	100.000		Unknown	
107	R2407729-001			Unknown	
108	R2407729-001 MS			Unknown	
109	R2407729-001 MSD			Unknown	
110	R2407792-007 RPT	100.000		Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
111	R2407792-015 RPT			Unknown	
112	R2407734-001			Unknown	
113	R2407734-003			Unknown	
114	R2407734-005			Unknown	
115	R2407734-007			Unknown	
116	R2407734-009			Unknown	
117	R2407734-011			Unknown	
118	R2407734-013			Unknown	
119	R2407734-015			Unknown	
120	R2407909-001			Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	
121	R2407734-017			Unknown	
122	R2407734-017 MS			Unknown	
123	R2407734-017 MSD			Unknown	
124	R2407933-001			Unknown	
125	R2407734-019			Unknown	
S1	CCV			Unknown	
S10	CCB			Unknown	

Analyte Table	QC8500 353.2 NO3+N
	(mg/L)
STD 2.000	2.00000
STD 1.000	1.00000
STD 0.500	0.50000
STD 0.200	0.20000
STD 0.100	0.10000
STD 0.050	0.05000
STD 0.010	0.01000
STD 0.005	0.00500
STD 0.002	0.00200
STD 0.000	0.00000

Sample Dilutions

Final Volume: 8-10mL - Lachat / FIA

Analyst: GNITA
Instrument: Lachat 8500

Date 08/23/2024
Analysis NO_2 NO_3

Common Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor
1/2		4	4	1/2												
1/3		3	6	1/3												
1/4		2	6	1/4												
1/5		2	8	1/5												
1/10		1	9	1/10												
1/20		1	1	1/2	1	9	1/20									
1/30		3	6	1/3	1	9	1/30									
1/40		1	3	1/4	1	9	1/40									
1/50		1	4	1/5	1	9	1/50									
1/100		1	9	1/10	1	9	1/100									
1/200		1	1	1/2	1	9	1/20	1	9	1/200						
1/300		3	6	1/3	1	9	1/30	1	9	1/300						
1/400		1	3	1/4	1	9	1/40	1	9	1/400						
1/500		1	4	1/5	1	9	1/50	1	9	1/500						
1/1000		1	9	1/10	1	9	1/100	1	9	1/1000						
1/2000		1	1	1/2	1	9	1/20	1	9	1/200	1	9	1/2000			
1/3000		3	6	1/3	1	9	1/30	1	9	1/300	1	9	1/3000			
1/4000		1	3	1/4	1	9	1/40	1	9	1/400	1	9	1/4000			
1/10000		1	9	1/10	1	9	1/100	1	9	1/1000	1	9	1/10000			
1/20000		1	1	1/2	1	9	1/20	1	9	1/200	1	9	1/2000	1	9	1/20000
1/40000		1	3	1/4	1	9	1/40	1	9	1/400	1	9	1/4000	1	9	1/40000
1/100000		1	9	1/10	1	9	1/100	1	9	1/1000	1	9	1/10000	1	9	1/100000

Special Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor

Author: GABRIELA NITA-JOUPPI Date : 8/23/2024

Original Run Filename: OM_8-23-2024_10-45-54AM.OMN Created: 8/23/2024 10:45:54 AM
Original Run Author's Signature: [GABRIELA NITA-JOUPPI]
Current Run Filename: OM_8-23-2024_10-45-54AM.OMN Last Modified: 8/23/2024 2:43:02 PM
Current Run Author's Signature: [GABRIELA NITA-JOUPPI]
Description: Default New Run

Sample	Cup No.	Channel 2 QC8500 353.2 NO3+NO2 (TOTN)		Detection Time	MDF
		Conc. (mg/L)	Area (V.s)		
STD 2.000	S1	2.00000	68.79427	8/23/2024@10:46:54 AM	
STD 1.000	S2	1.00000	37.39137	8/23/2024@10:48:16 AM	
STD 0.500	S3	0.50000	19.25667	8/23/2024@10:49:38 AM	
STD 0.200	S4	0.20000	7.77969	8/23/2024@10:51:00 AM	
STD 0.100	S5	0.10000	3.89829	8/23/2024@10:52:22 AM	
STD 0.050	S6	0.05000	1.95638	8/23/2024@10:53:44 AM	
STD 0.010	S7	0.01000	0.39782	8/23/2024@10:55:05 AM	
STD 0.005	S8	0.00500	0.20825	8/23/2024@10:56:27 AM	
STD 0.002	S9	0.00200	0.08720	8/23/2024@10:57:49 AM	
STD 0.000	S10	0.00000	-0.01198	8/23/2024@10:59:12 AM	
DQM Test: Minimum Correlation Coefficient					
Result:		0.99997 > 0.99700			
Message		Pass			
Action		Continue			
1.000 NO3	179	1.03100	37.34202	8/23/2024@11:02:19 AM	
Calibration:		Table/Fig. : 1			
1.000 NO2	180	1.01589	36.79494	8/23/2024@11:03:41 AM	
ICV TV= 1.0	S1	0.96011	34.77564	8/23/2024@11:05:02 AM	
ICB	S10	-0.00110	-0.02460	8/23/2024@11:06:25 AM	
CRDL 0.01	S7	0.01092	0.41077	8/23/2024@11:07:46 AM	
CRDL 0.005	S8	0.00523	0.20480	8/23/2024@11:09:08 AM	
CRDL 0.002	S9	0.00208	0.09059	8/23/2024@11:10:30 AM	
CCV	S1	0.96087	34.80310	8/23/2024@11:11:52 AM	
CCB	S10	-0.00067	-0.00890	8/23/2024@11:13:14 AM	
LCS 1	1	0.52588	19.05443	8/23/2024@11:14:37 AM	
R2407710-001	2	-0.00156	-0.04109	8/23/2024@11:16:00 AM	
R2407710-002	3	0.00664	0.25563	8/23/2024@11:17:22 AM	
R2407710-003	4	-0.00529	-0.17623	8/23/2024@11:18:45 AM	
R2407710-004	5	-0.00587	-0.19719	8/23/2024@11:20:07 AM	
R2407710-005	6	0.02124	0.78447	8/23/2024@11:21:30 AM	
R2407710-006	7	4.96468	35.96392	8/23/2024@11:22:52 AM	5.00
R2407626-001	8	0.01584	0.58896	8/23/2024@11:24:14 AM	
R2407627-001	9	0.05710	2.08261	8/23/2024@11:25:36 AM	
R2407871-001	10	4.47728	162.11223	8/23/2024@11:26:58 AM	
CCV	S1	0.93696	33.93730	8/23/2024@11:28:19 AM	
CCB	S10	-0.00077	-0.01263	8/23/2024@11:29:42 AM	
R2407872-001	11	2.81380	101.88713	8/23/2024@11:31:03 AM	
R2407873-001	12	0.00420	0.16744	8/23/2024@11:32:25 AM	
R2407874-001	13	0.85397	30.93269	8/23/2024@11:33:46 AM	
R2407875-001	14	0.12896	4.68437	8/23/2024@11:35:08 AM	
R2407876-001	15	0.00566	0.22041	8/23/2024@11:36:29 AM	
R2407454-001	16	0.00408	0.16302	8/23/2024@11:37:52 AM	
R2407454-001 MS	17	0.47009	17.03448	8/23/2024@11:39:15 AM	
R2407454-001 MSD	18	0.47021	17.03882	8/23/2024@11:40:37 AM	
R2407454-003	19	0.00082	0.04499	8/23/2024@11:42:00 AM	
R2407455-001	20	0.29238	10.60069	8/23/2024@11:43:22 AM	
CCV	S1	0.94167	34.10798	8/23/2024@11:44:44 AM	
CCB	S10	-0.00068	-0.00936	8/23/2024@11:46:06 AM	
R2407455-003	21	0.04423	1.61660	8/23/2024@11:47:28 AM	
R2407455-005	22	0.05136	1.87475	8/23/2024@11:48:51 AM	
R2407455-005 MS	23	0.51042	18.49474	8/23/2024@11:50:12 AM	
R2407455-005 MSD	24	0.51077	18.50733	8/23/2024@11:51:34 AM	
R2407455-007	25	-0.00145	-0.03730	8/23/2024@11:52:56 AM	
LCS	26	0.51060	18.50141	8/23/2024@11:54:18 AM	
R2407479-001	27	0.19494	7.07284	8/23/2024@11:55:39 AM	
R2407479-001 MS	28	0.65552	23.74802	8/23/2024@11:57:01 AM	
R2407479-001 MSD	29	0.65687	23.79676	8/23/2024@11:58:22 AM	
R2407479-003	30	0.00233	0.09971	8/23/2024@11:59:44 AM	

CCV	S1	0.95829	34.70961	8/23/2024@12:01:05 PM	
CCB	S10	-0.00076	-0.01219	8/23/2024@12:02:27 PM	
R2407505-001	31	0.02032	0.75085	8/23/2024@12:03:50 PM	
R2407505-001 MS	32	0.46965	17.01884	8/23/2024@12:05:13 PM	
R2407505-001 MSD	33	0.46918	17.00168	8/23/2024@12:06:36 PM	
R2407662-001	34	0.00115	0.05706	8/23/2024@12:07:58 PM	
R2407664-001	35	0.01416	0.52800	8/23/2024@12:09:20 PM	
R2407680-001	36	2.62646	95.10471	8/23/2024@12:10:43 PM	
R2407921-001	37	-0.00024	0.00661	8/23/2024@12:12:05 PM	
R2407922-001	38	0.00217	0.09389	8/23/2024@12:13:27 PM	
R2407923-001	39	3.59652	130.22510	8/23/2024@12:14:49 PM	
R2407924-001	40	0.15520	5.63435	8/23/2024@12:16:11 PM	
CCV	S1	0.96582	34.98232	8/23/2024@12:17:32 PM	
CCB	S10	-0.00066	-0.00863	8/23/2024@12:18:54 PM	
R2407925-001	41	0.00263	0.11061	8/23/2024@12:20:16 PM	
R2407926-001	42	0.00022	0.02313	8/23/2024@12:21:38 PM	
R2407927-001	43	0.47244	17.11957	8/23/2024@12:22:59 PM	
R2407761-001	44	0.28711	10.40987	8/23/2024@12:24:20 PM	
R2407763-001	45	0.01259	0.47110	8/23/2024@12:25:42 PM	
R2407786-001	46	0.15991	5.80462	8/23/2024@12:27:04 PM	
R2407786-002	47	8.05683	29.18453	8/23/2024@12:28:27 PM	10.00
R2407792-007	48	4.00636	145.06296	8/23/2024@12:29:50 PM	
R2407792-015	49	0.00251	0.10610	8/23/2024@12:31:12 PM	
R2407829-001	50	0.01288	0.48180	8/23/2024@12:33:41 PM	
CCV	S1	0.96901	35.09752	8/23/2024@12:35:02 PM	
CCB	S10	-0.00040	0.00076	8/23/2024@12:36:24 PM	
LCS	51	0.52766	19.11878	8/23/2024@12:37:47 PM	
R2407830-001	52	0.00764	0.29191	8/23/2024@12:39:09 PM	
R2407836-001	53	0.02025	0.74830	8/23/2024@12:40:31 PM	
R2407529-001	54	0.62611	22.68327	8/23/2024@12:41:53 PM	
R2407529-001 MS	55	1.07184	38.82075	8/23/2024@12:43:15 PM	
R2407529-001 MSD	56	1.07104	38.79178	8/23/2024@12:44:37 PM	
R2407529-003	57	0.23246	8.43156	8/23/2024@12:45:59 PM	
R2407529-005	58	0.25141	9.11742	8/23/2024@12:47:20 PM	
R2407547-001	59	0.00831	0.31610	8/23/2024@12:48:41 PM	
R2407547-003	60	0.08865	3.22479	8/23/2024@12:50:03 PM	
CCV	S1	0.96615	34.99410	8/23/2024@12:51:24 PM	
CCB	S10	-0.00067	-0.00900	8/23/2024@12:52:47 PM	
R2407552-001	61	0.35118	12.72965	8/23/2024@12:54:10 PM	
R2407552-001 MS	62	0.79995	28.97695	8/23/2024@12:55:32 PM	
R2407552-001 MSD	63	0.80029	28.98946	8/23/2024@12:56:55 PM	
R2407552-003	64	0.39765	14.41198	8/23/2024@12:58:17 PM	
R2407552-005	65	0.39545	14.33232	8/23/2024@12:59:40 PM	
R2407554-001	66	0.44087	15.97662	8/23/2024@1:01:02 PM	
R2407554-003	67	0.44223	16.02585	8/23/2024@1:02:24 PM	
R2407557-001	68	0.00051	0.03382	8/23/2024@1:03:46 PM	
R2407557-003	69	0.38303	13.88276	8/23/2024@1:05:08 PM	
R2407557-005	70	0.37053	13.43023	8/23/2024@1:06:30 PM	
CCV	S1	0.97386	35.27328	8/23/2024@1:07:51 PM	
CCB	S10	-0.00057	-0.00532	8/23/2024@1:09:13 PM	
R2407557-007	71	0.37664	13.65123	8/23/2024@1:10:35 PM	
R2407557-009	72	0.42960	15.56875	8/23/2024@1:11:57 PM	
R2407634-003	73	0.00164	0.07453	8/23/2024@1:13:18 PM	
R2407637-001	74	0.00652	0.25136	8/23/2024@1:14:40 PM	
R2407640-001	75	0.05018	1.83192	8/23/2024@1:16:01 PM	
LCS	76	0.52000	18.84141	8/23/2024@1:17:24 PM	
R2407634-005	77	0.00496	0.19485	8/23/2024@1:18:47 PM	
R2407634-005 MS	78	0.49645	17.98887	8/23/2024@1:20:10 PM	
R2407634-005 MSD	79	0.49593	17.97001	8/23/2024@1:21:33 PM	
R2407634-007	80	0.00139	0.06557	8/23/2024@1:22:55 PM	
CCV	S1	0.96088	34.80341	8/23/2024@1:24:16 PM	
CCB	S10	-0.00051	-0.00296	8/23/2024@1:25:39 PM	
R2407634-007 MS	81	0.47818	17.32753	8/23/2024@1:27:01 PM	
R2407634-007 MSD	82	0.47734	17.29693	8/23/2024@1:28:23 PM	
R2407640-003	83	0.44917	16.27734	8/23/2024@1:29:45 PM	
R2407643-001	84	0.45762	16.58321	8/23/2024@1:31:07 PM	
R2407643-003	85	0.47614	17.25378	8/23/2024@1:32:29 PM	
R2407643-005	86	0.49547	17.95348	8/23/2024@1:33:51 PM	

- RPT 1/5

- RPT 1/10

- RPT 1/100

- RPT STD

R2407643-007	87	0.45956	16.65322	8/23/2024@1:35:12 PM	
R2407643-009	88	0.46807	16.96137	8/23/2024@1:36:34 PM	
R2407643-011	89	0.47043	17.04700	8/23/2024@1:37:56 PM	
R2407643-013	90	0.39644	14.36815	8/23/2024@1:39:17 PM	
CCV	S1	0.96010	34.77504	8/23/2024@1:40:39 PM	
CCB	S10	-0.00071	-0.01046	8/23/2024@1:42:01 PM	
R2407643-015	91	5.82704e-6	0.01554	8/23/2024@1:43:24 PM	
R2407643-017	92	0.47141	17.08239	8/23/2024@1:44:47 PM	
R2407643-019	93	0.41439	15.01822	8/23/2024@1:46:09 PM	
R2407643-022	94	0.38858	14.08376	8/23/2024@1:47:32 PM	
R2407685-001	95	0.02137	0.78916	8/23/2024@1:48:54 PM	
R2407685-003	96	0.05432	1.98196	8/23/2024@1:50:16 PM	
R2407685-005	97	0.13876	5.03898	8/23/2024@1:51:38 PM	
R2407721-001	98	0.03370	0.02753	8/23/2024@1:53:00 PM	100.00
R2407721-003	99	3.44916	1.26407	8/23/2024@1:54:23 PM	100.00
R2407721-005	100	0.43910	0.17430	8/23/2024@1:55:45 PM	100.00
CCV	S1	0.96167	34.83210	8/23/2024@1:57:06 PM	
CCB	S10	-0.00074	-0.01155	8/23/2024@1:58:28 PM	
LCS	101	0.51766	18.75668	8/23/2024@1:59:50 PM	
R2407871-001 RPT	102	17.61107	63.77503	8/23/2024@2:01:12 PM	10.00
R2407872-001 RPT	103	3.72328	26.97507	8/23/2024@2:02:34 PM	5.00
R2407680-001 RPT	104	3.36495	24.38047	8/23/2024@2:03:55 PM	5.00
R2407923-001 RPT	105	6.96986	25.24925	8/23/2024@2:05:17 PM	10.00
R2407721-007	106	2.26617	0.83578	8/23/2024@2:06:40 PM	100.00
R2407729-001	107	0.00352	0.14277	8/23/2024@2:08:03 PM	
R2407729-001 MS	108	0.44012	15.94960	8/23/2024@2:09:25 PM	
R2407729-001 MSD	109	0.43882	15.90246	8/23/2024@2:10:48 PM	
R2407792-007 RPT	110	61.60480	22.31893	8/23/2024@2:12:11 PM	100.00
CCV	S1	0.96569	34.97732	8/23/2024@2:13:32 PM	
CCB	S10	-0.00063	-0.00747	8/23/2024@2:14:55 PM	
R2407792-015 RPT	111	0.07493	2.72828	8/23/2024@2:16:17 PM	
R2407734-001	112	0.50144	18.16950	8/23/2024@2:17:39 PM	
R2407734-003	113	0.44225	16.02658	8/23/2024@2:19:01 PM	
R2407734-005	114	0.41183	14.92528	8/23/2024@2:20:23 PM	
R2407734-007	115	0.43287	15.68705	8/23/2024@2:21:45 PM	
R2407734-009	116	0.43391	15.72477	8/23/2024@2:23:07 PM	
R2407734-011	117	0.43031	15.59434	8/23/2024@2:24:29 PM	
R2407734-013	118	0.45736	16.57380	8/23/2024@2:25:51 PM	
R2407734-015	119	0.49488	17.93230	8/23/2024@2:27:13 PM	
R2407909-001	120	1.13693	41.17709	8/23/2024@2:28:35 PM	
CCV	S1	0.95708	34.66568	8/23/2024@2:29:56 PM	
CCB	S10	-0.00066	-0.00842	8/23/2024@2:31:19 PM	
R2407734-017	121	0.38045	13.78944	8/23/2024@2:32:41 PM	
R2407734-017 MS	122	0.84434	30.58420	8/23/2024@2:34:04 PM	
R2407734-017 MSD	123	0.84362	30.55787	8/23/2024@2:35:27 PM	
R2407933-001	124	0.03251	1.19230	8/23/2024@2:36:49 PM	
R2407734-019	125	0.34303	12.43438	8/23/2024@2:38:12 PM	
CCV	S1	0.95881	34.72838	8/23/2024@2:39:33 PM	
CCB	S10	-0.00120	-0.02825	8/23/2024@2:40:56 PM	

Analyte Properties Table for : OM_8-23-2024_10-45-54AM.OMN

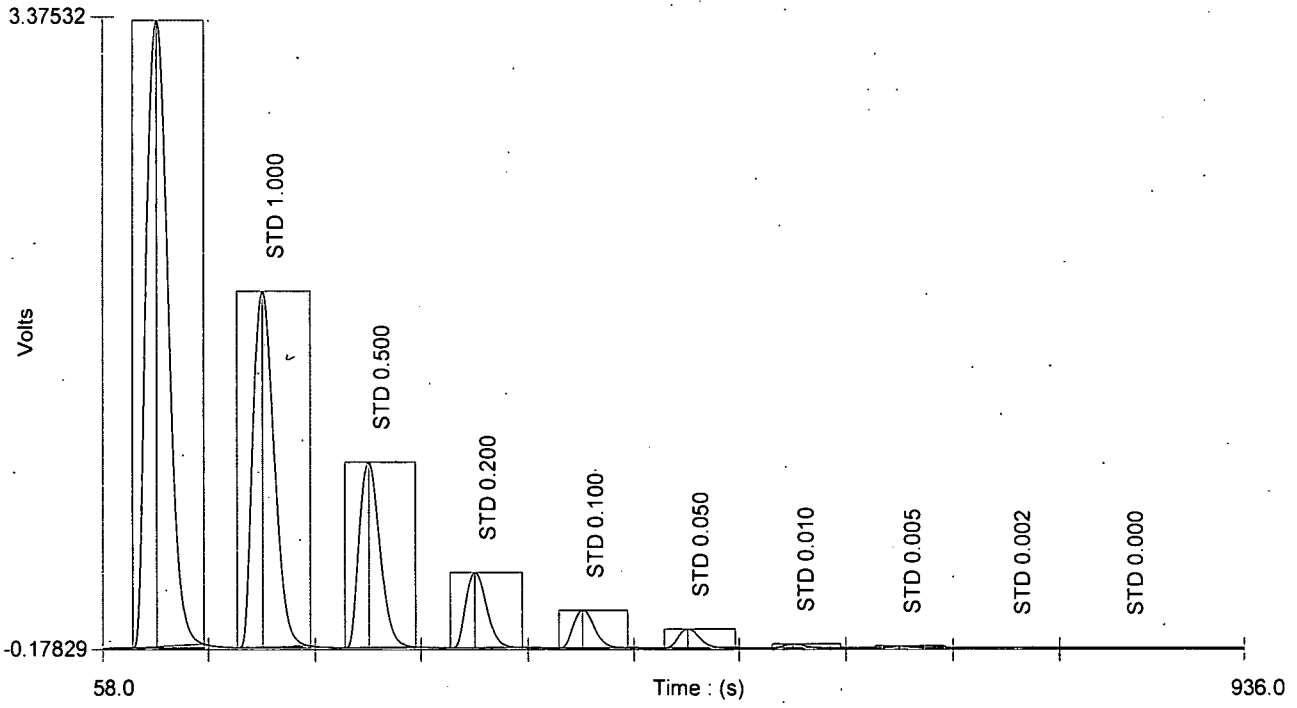
Property	Channel 2 QC8500 353.2 NO3+NO2 (TOTN)
Concentration Units	mg/L
Calibration Fit Type	First Order
Clear Calibration	Yes
Force through Zero	No
Calibration Weighting	1/x
Auto Dilution Trigger	No
% of High Standard	110
Quik Chem Method	10-107-04-1-C
Chemistry	Direct/Bipolar
Calibration by Height	No
Inject to Peak Start	20

Author: GABRIELA NITA-JOUPPI

Date : 8/23/2024

Peak Base Width	60

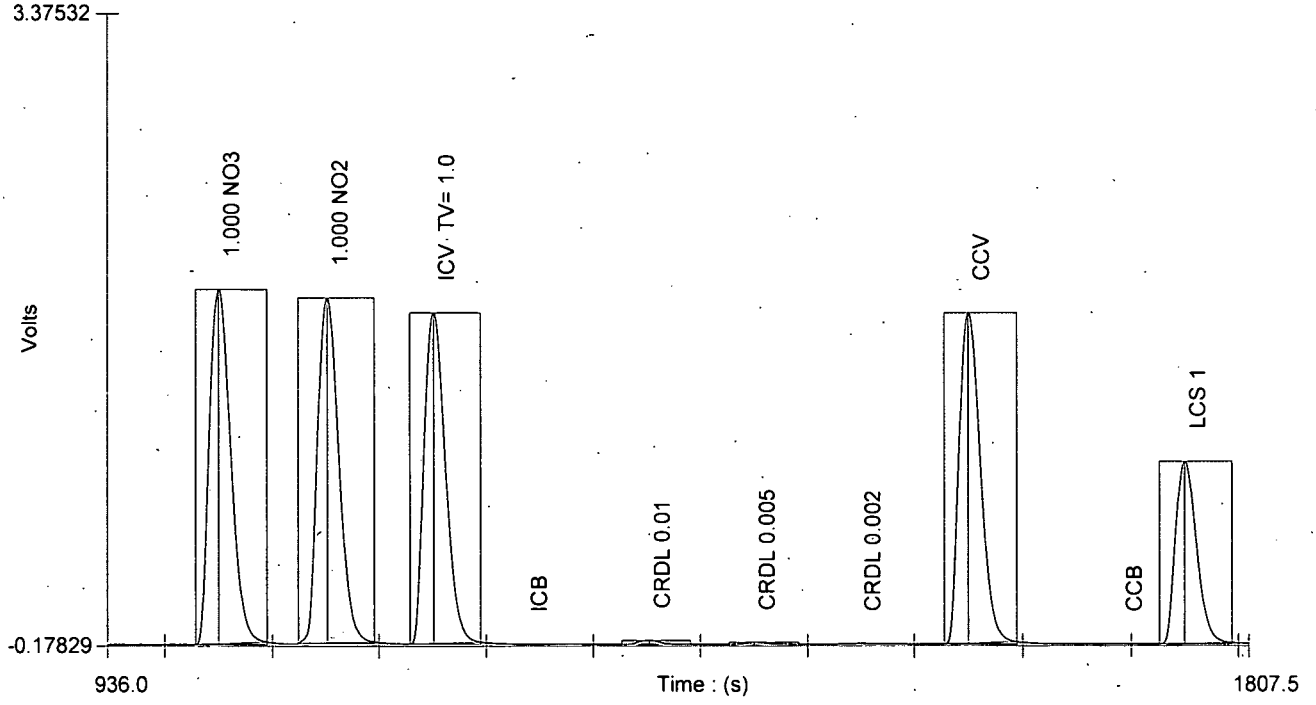
Channel 2 - Set: 1 / 17



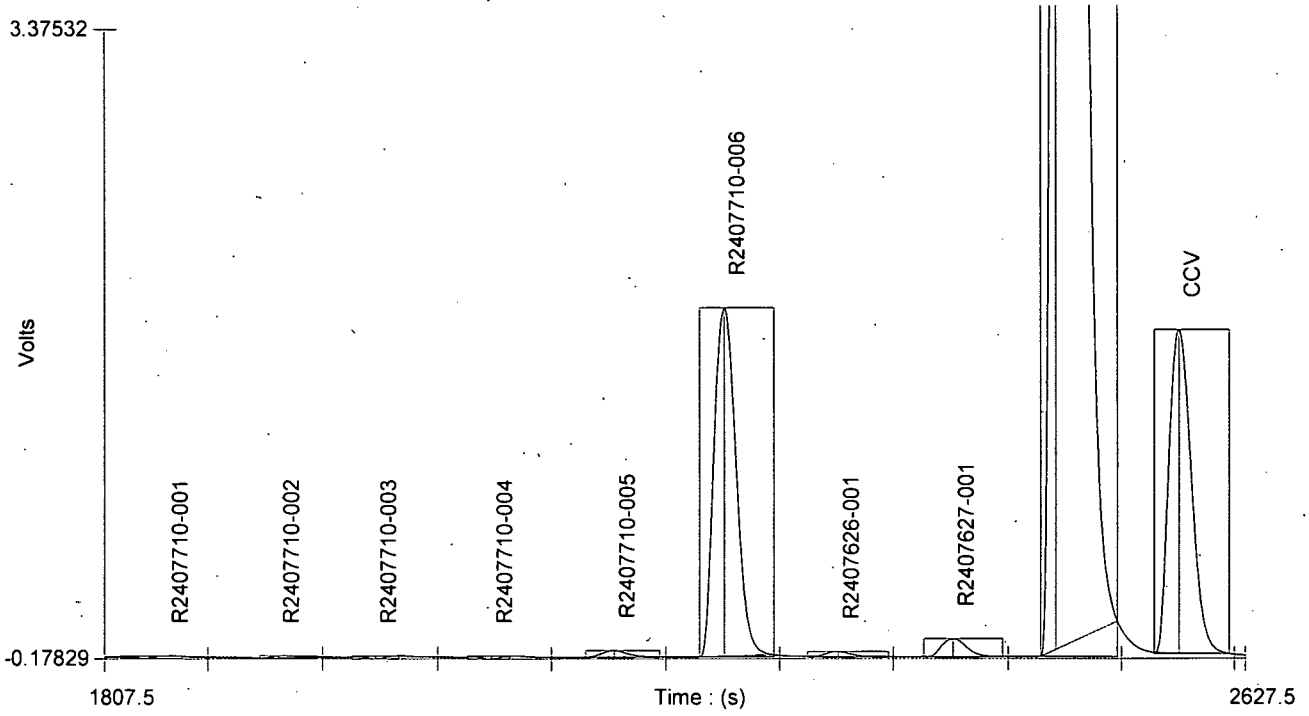
Author: GABRIELA NITA-JOUPPI

Date : 8/23/2024

Channel 2 - Set: 2 / 17



Channel 2 - Set: 3 / 17



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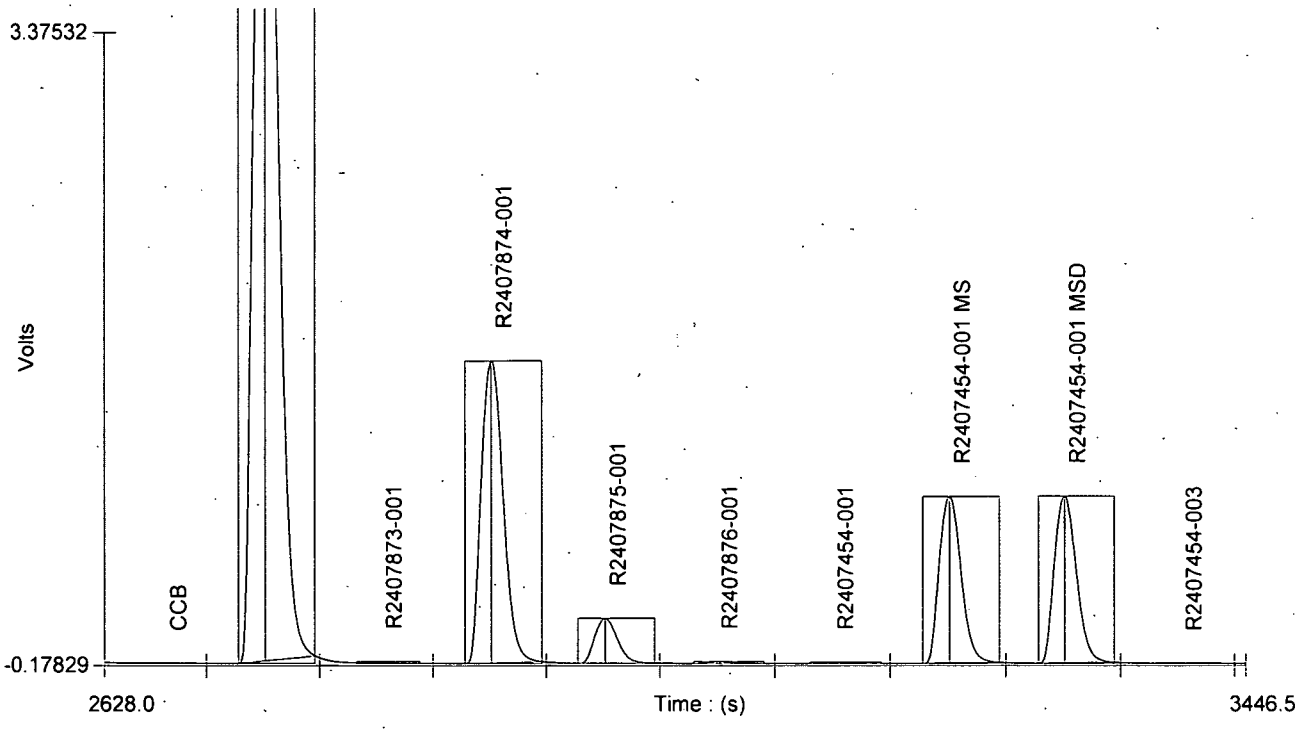
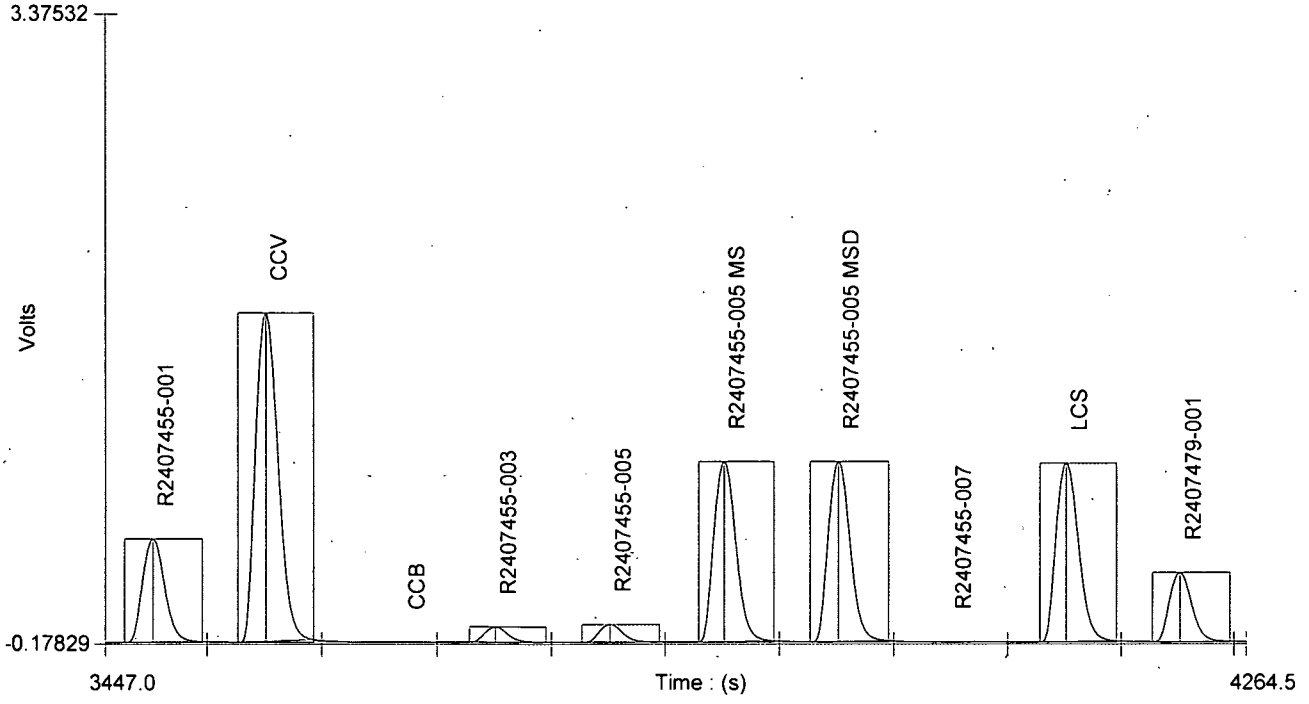
Author: GABRIELA NITA-JOUPPI Date : 8/23/2024

Channel 2 - Set: 4 / 17



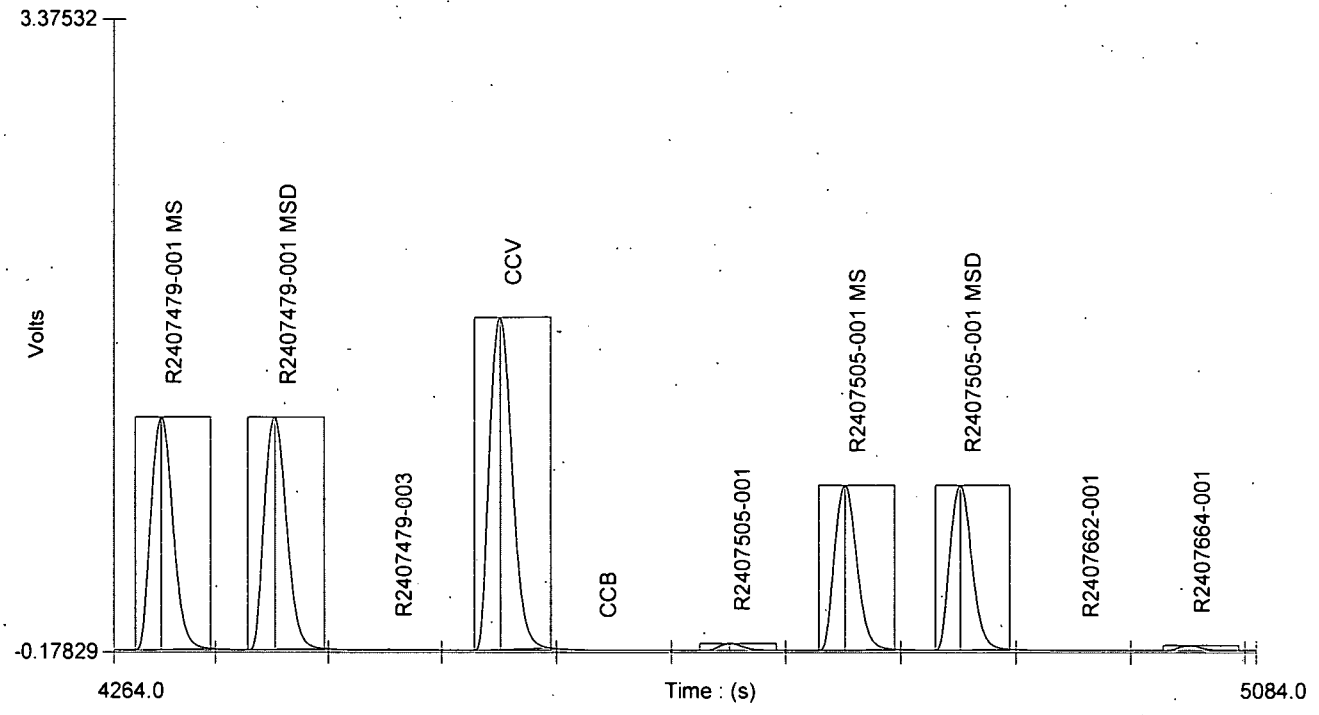
Channel 2 - Set: 5 / 17



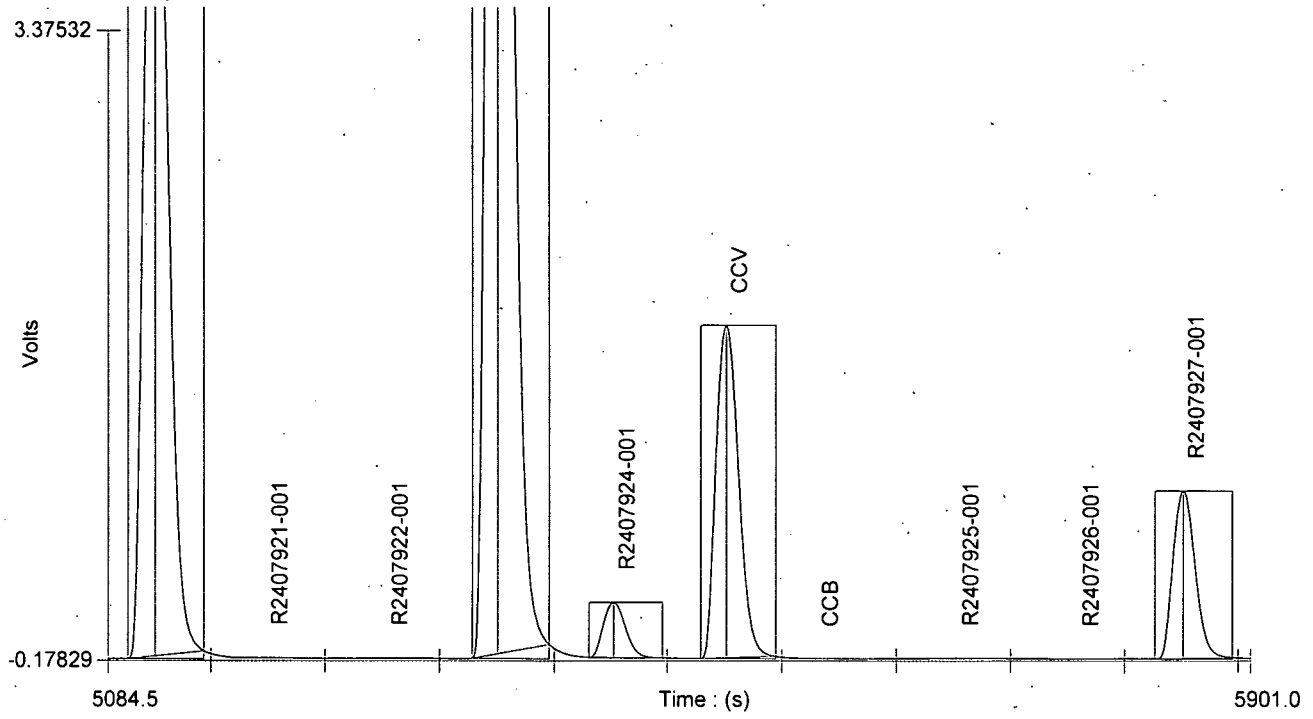
Author: GABRIELA NITA-JOUPPI

Date : 8/23/2024

Channel 2 - Set: 6 / 17



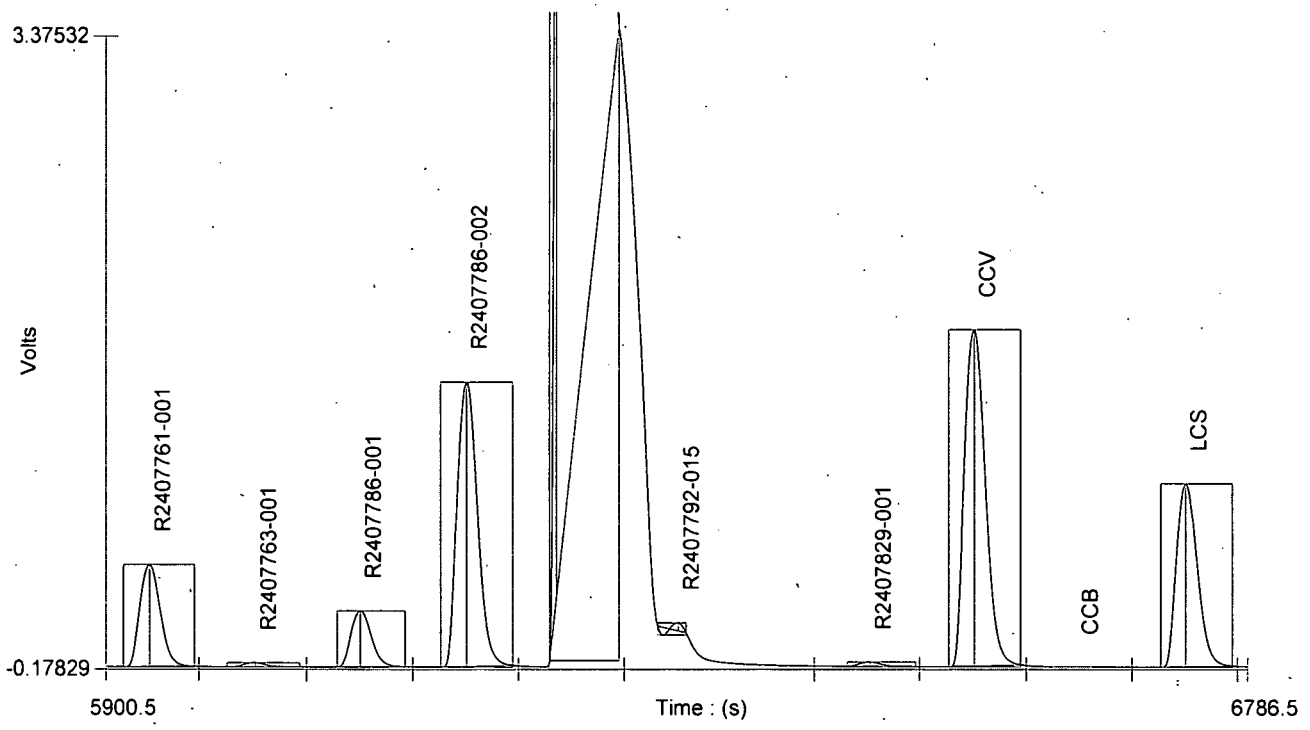
Channel 2 - Set: 7 / 17



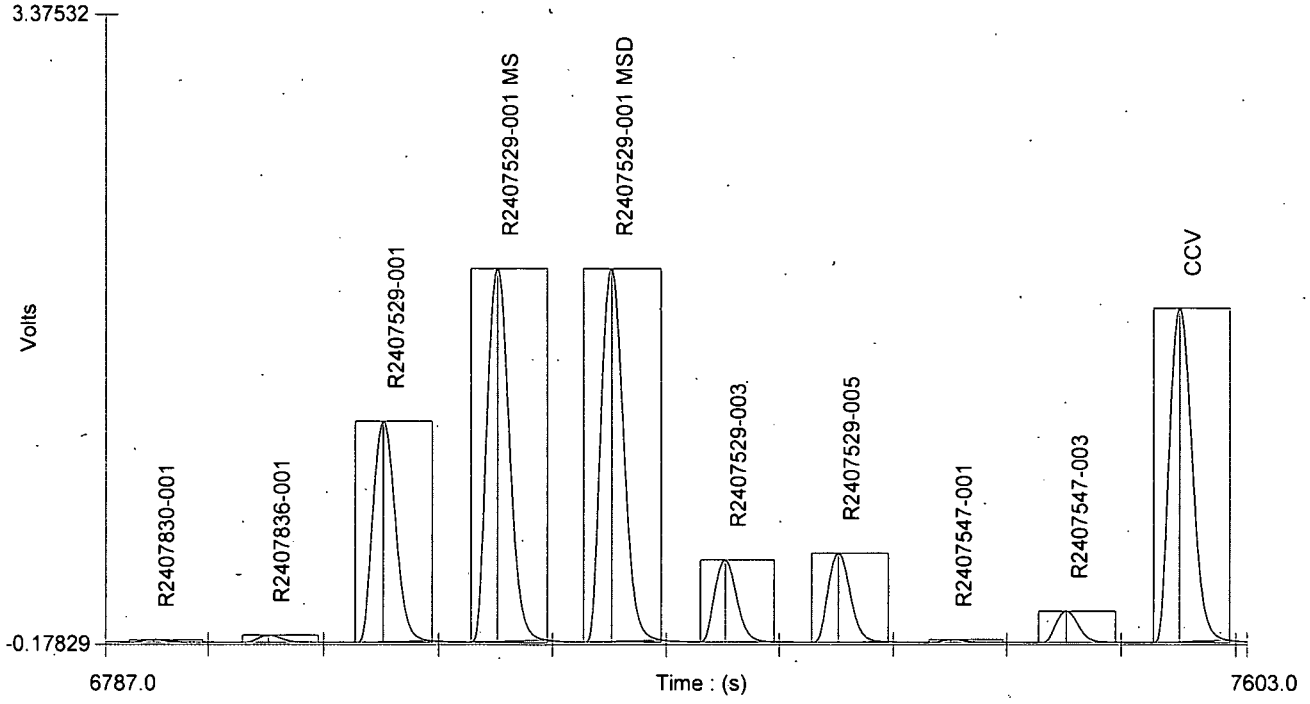
Author: GABRIELA NITA-JOUPPI

Date : 8/23/2024

Channel 2 - Set: 8 / 17



Channel 2 - Set: 9 / 17



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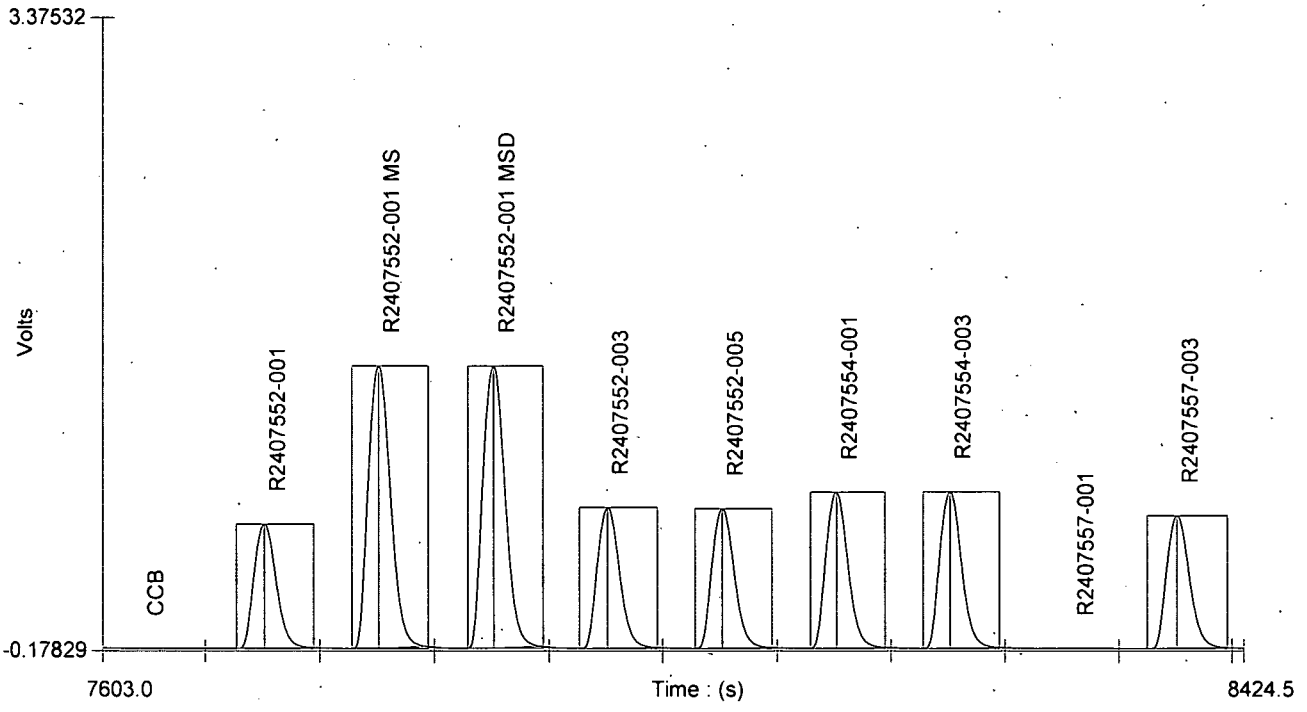
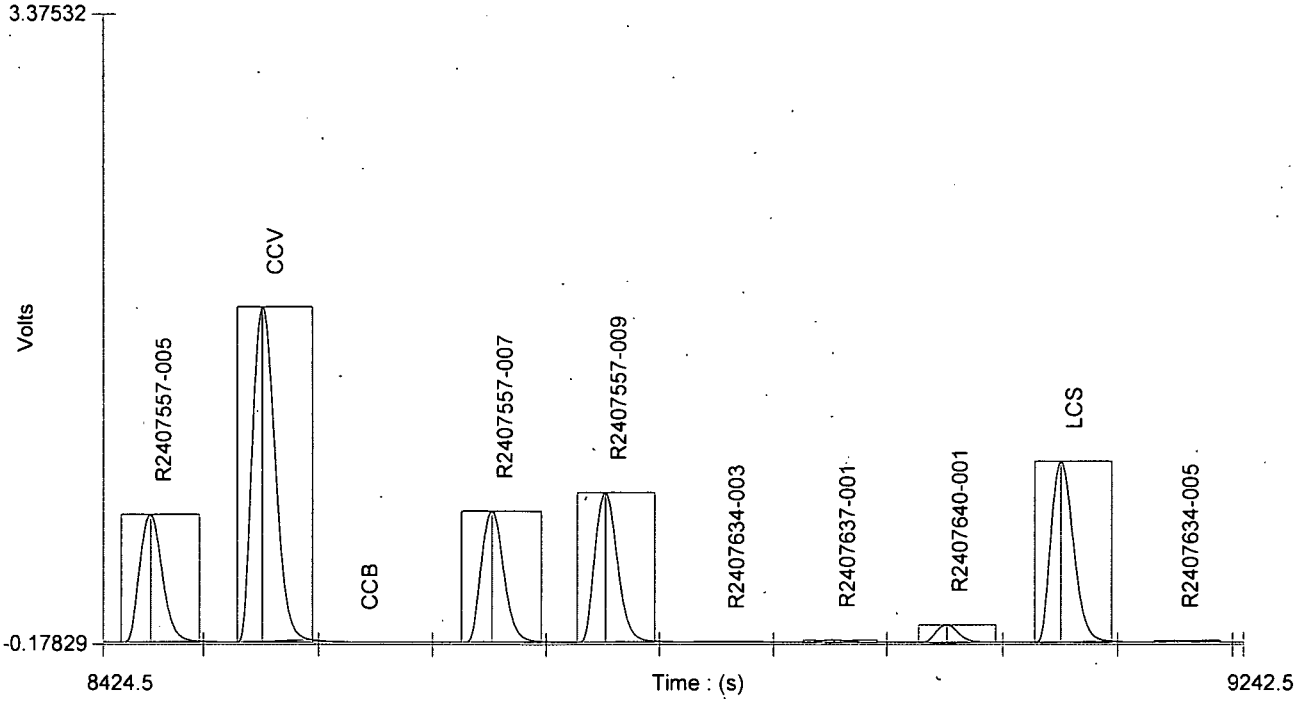
Author: GABRIELA NITA-JOUPPI Date : 8/23/2024

Channel 2 - Set: 10 / 17

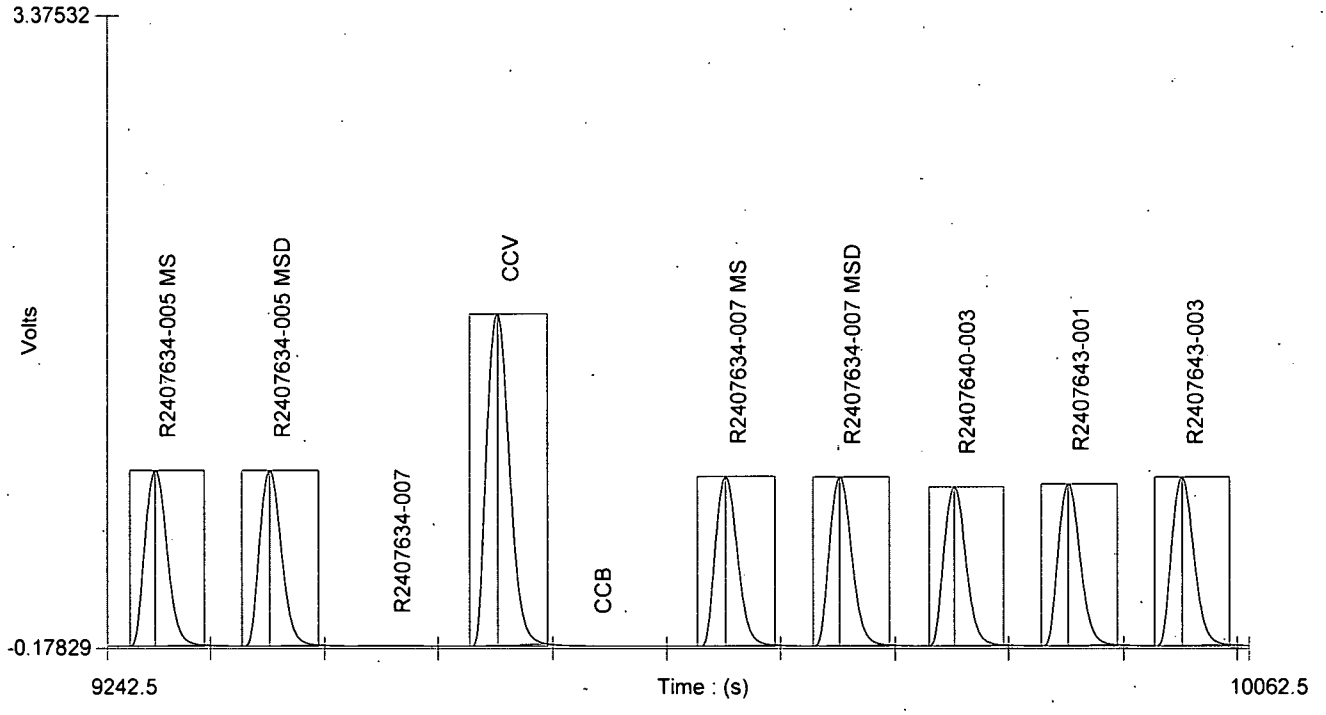


Channel 2 - Set: 11 / 17

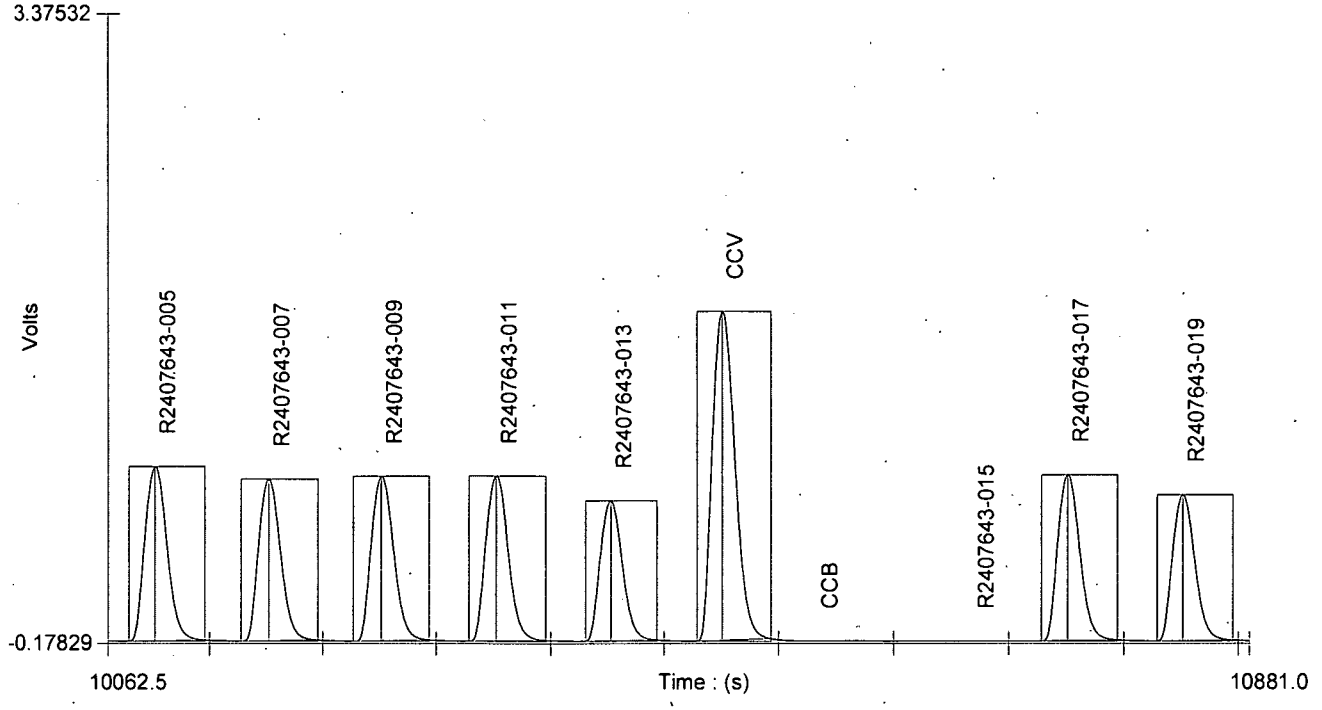


Author: GABRIELA NITA-JOUPPI Date : 8/23/2024

Channel 2 - Set: 12 / 17

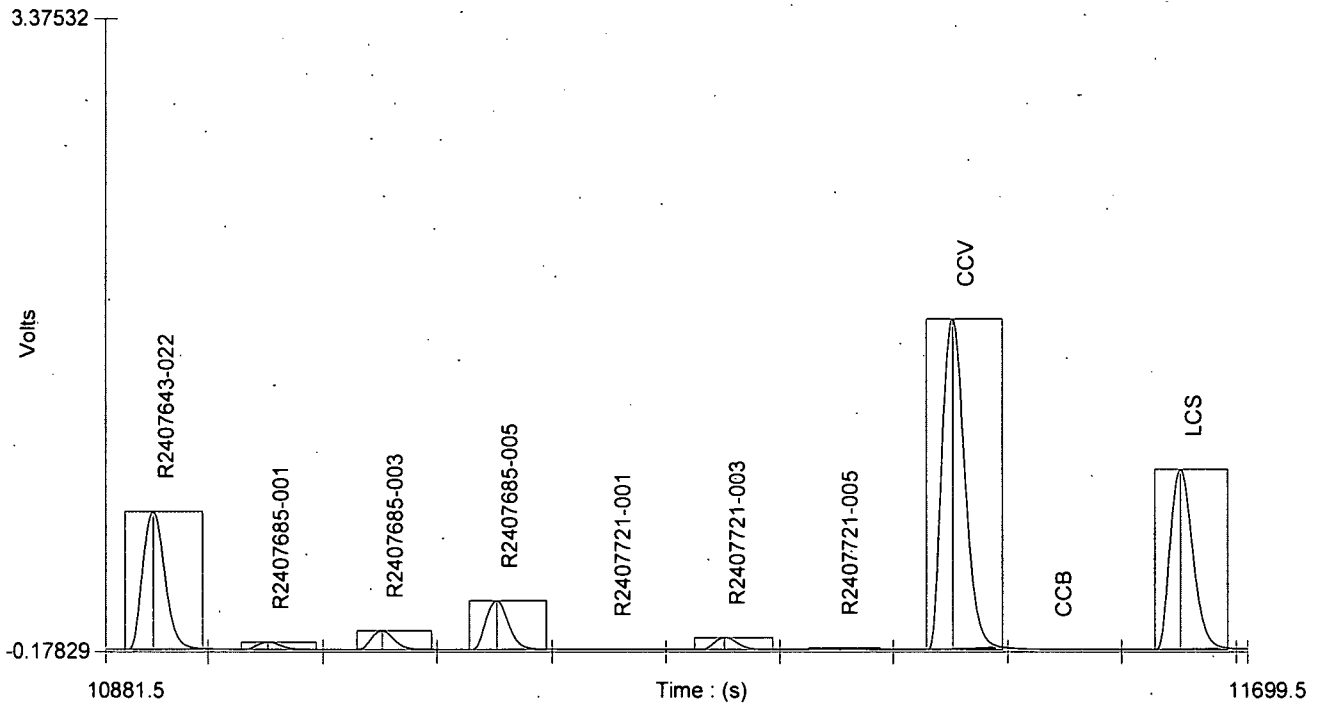


Channel 2 - Set: 13 / 17

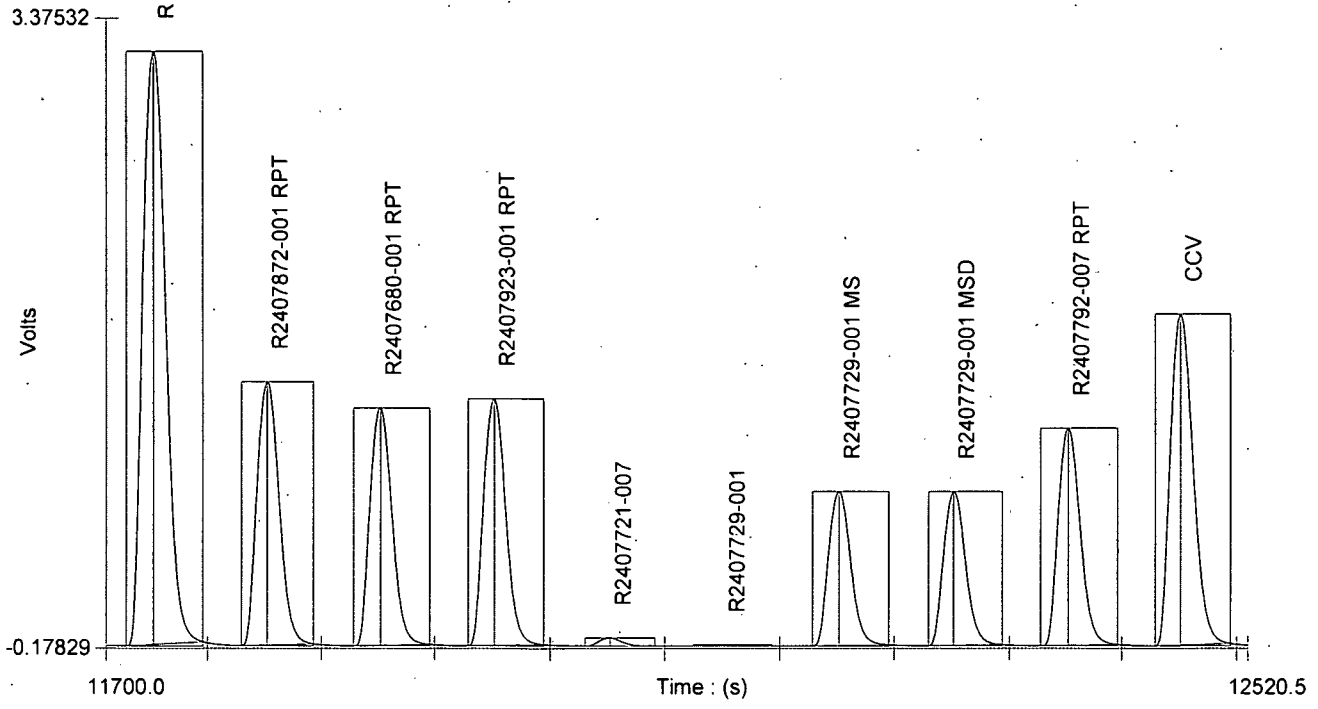


Author: GABRIELA NITA-JOUPPI Date : 8/23/2024

Channel 2 - Set: 14 / 17

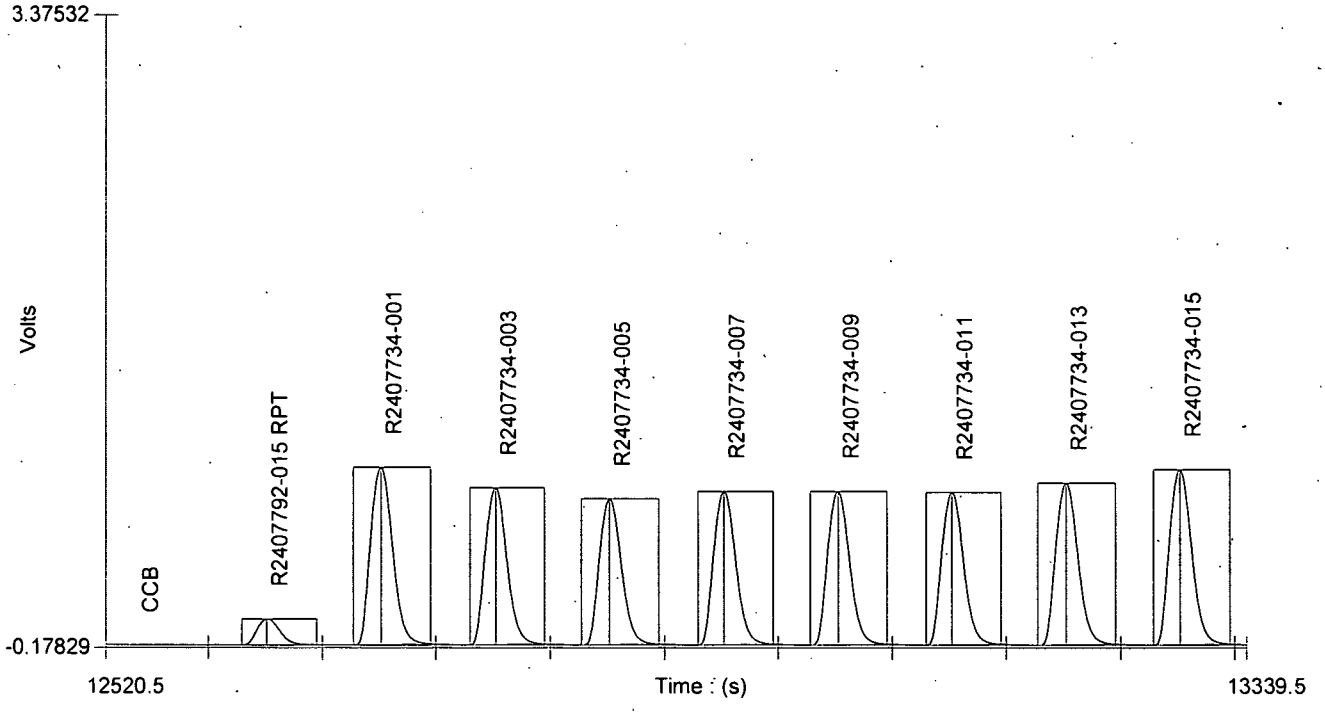


Channel 2 - Set: 15 / 17

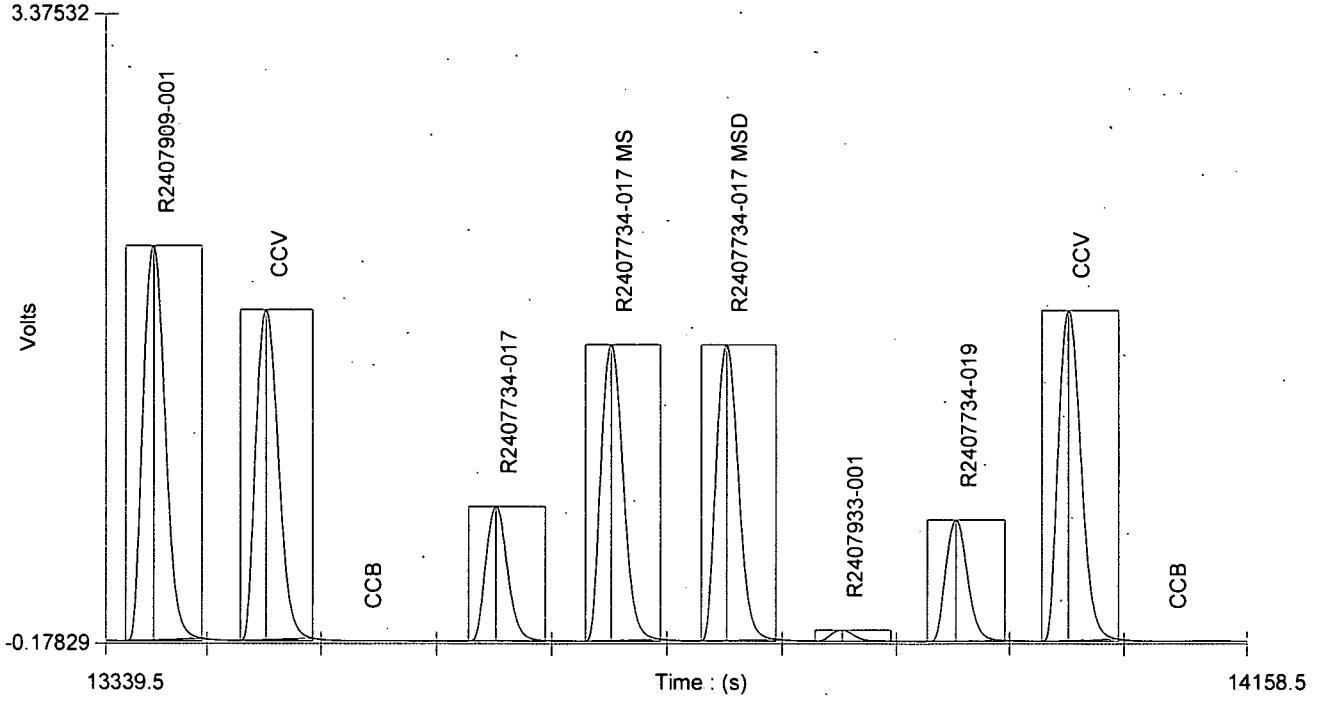


Author: GABRIELA NITA-JOUPPI Date : 8/23/2024

Channel 2 - Set: 16 / 17



Channel 2 - Set: 17 / 17

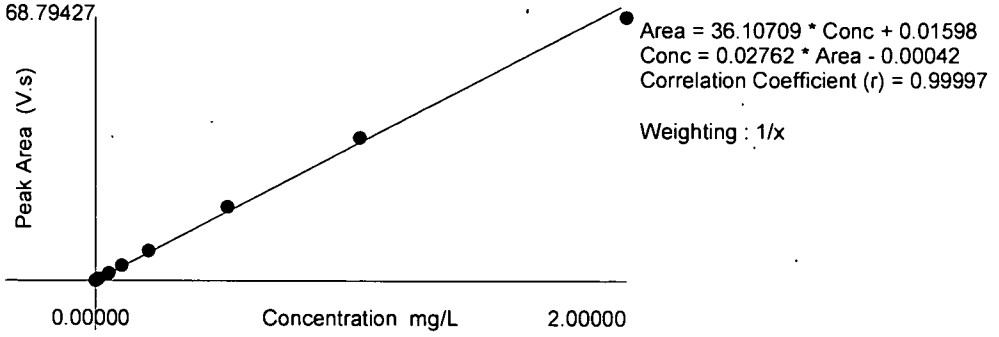


Author: GABRIELA NITA-JOUPPI Date : 8/23/2024

Table : 1 (QC8500 353.2 NO3+NO2 (TOTN))

	Known Conc. (mg/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg/L)	Detection Date	Detection Time
1	2.00000	1	68.79427	3.51855	0.0	4.8	1.89974	8/23/2024	10:46:54 AM
2	1.00000	1	37.39137	2.00201	0.0	-3.5	1.03236	8/23/2024	10:48:16 AM
3	0.50000	1	19.25667	1.04371	0.0	-6.6	0.53147	8/23/2024	10:49:38 AM
4	0.20000	1	7.77969	0.42362	0.0	-7.5	0.21446	8/23/2024	10:51:00 AM
5	0.10000	1	3.89829	0.21270	0.0	-7.5	0.10725	8/23/2024	10:52:22 AM
6	0.05000	1	1.95638	0.10634	0.0	-7.4	0.05361	8/23/2024	10:53:44 AM
7	0.01000	1	0.39782	0.02152	0.0	-5.5	0.01056	8/23/2024	10:55:05 AM
8	0.00500	1	0.20825	0.01082	0.0	-6.0	0.00533	8/23/2024	10:56:27 AM
9	0.00200	1	0.08720	0.00449	0.0	1.1	0.00199	8/23/2024	10:57:49 AM
10	0.00000	1	-0.01198	-0.00049			-0.00075	8/23/2024	10:59:12 AM

Figure : 1 (QC8500 353.2 NO3+NO2 (TOTN))



Pipets used: Alec
Daisy
strong

ALS Environmental
1565 Jefferson Rd., Rochester, NY 14623

General Chemistry Analytical Run Cover Sheet

Analyst: GN ITA Date: 08/23/24.

Analysis: **NO3 + NO2 (Combined Levels 0.002 - 2.0ppm)** **Instrument: QC8500 (R-FIA-05)**

		Working Stock Prep, Serial Dilutions			
PRIMARY STOCKS	**Log ID Receipt/Exp. Dates**	Stock Soln (mLs)	Stock Soln (mg/L)	Final Volume (mLs)	True Value (mg/L)
Standards	**ID: 232424**	1.0	1000	10	100 (A)
	Received: 11/22/2023	1.0	100	10	10 (B)
	Expires: 11/30/2024				
Reference	**ID: 229092**	1.0	1000	10	100
	Received: 05/04/2023	1.0	100	10	10 (C)
	Expires: 03/31/2027				
Column Check, NO2	**ID: 234066**	1.0	1000	10	100 (D)
	Received: 03/11/2024	1.0	100	10	10 (E)
	Expires: 03/31/2025				
Quality Control					
Column Check, NO3 (1.0 mg/L Std.)		1.0	10 (B)	10	1.00
Column Check, NO2 (1.0 mg/L Ref.)		1.0	10 (E)	10	1.00
I/CCV		1.00	10.0 (C)	10	1.00
LCS/MS		0.05	100 (A)	10	0.50

Standard Curve Prep

Concentration (mg/L)	mLs UPDI	mLs 10 mg/L Working Stock (B)
2.00	8.00	2.00
1.00	9.00	1.00
0.50	9.50	0.50
0.20	9.80	0.20
0.10	1/10 dil'n of 1.00	
0.050	1/10 dil'n of 0.50	
0.010	1/10 dil'n of 0.10	
0.005	1/10 dil'n of 0.050	
0.002	1/100 dil'n of 0.20	
0.000	10.00	0.00

REAGENTS		Log ID	Expiration Date	
	Ammonium Hydroxide Buff.	235857	5/31/2025	
	Sulfanilamide Color Rgt.	236516	8/29/2024	
Column	Column ID:	lot#3212c	Limits: 90-110%	
	Efficiency %:	1.01	Pass / Fail?	PASS

COMMENTS

Instrument Log filled in? (Y) (N)

Analytical Results Summary

Instrument Name: R-Balance-18 **Analyst:** HCASTROVINCI **Analysis Lot:** 851274 **Method/Testcode:** SM 2540 C-2015/TDS

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2410209-03	Solids, Total Dissolved (TDS)	MB		Water	4.00 mg/L	100 mL	10 mg/L U	1	9	10			8/20/24 13:30	N	II
KQ2410209-04	Solids, Total Dissolved (TDS)	LCS		Water	908.00 mg/L	50 mL	908 mg/L	1	18	20	99		8/20/24 13:30	N	II
K2407695-001	Solids, Total Dissolved (TDS)	N/A		Water	538.00 mg/L	100 mL	538 mg/L	1	9	10			8/20/24 13:30	N	II
K2407695-002	Solids, Total Dissolved (TDS)	N/A		Water	653.00 mg/L	100 mL	653 mg/L	1	9	10			8/20/24 13:30	N	II
KQ2410209-02	Solids, Total Dissolved (TDS)	DUP	R2407695-002	Water	649.00 mg/L	100 mL	649 mg/L	1	9	10		<1	8/20/24 13:30	N	II
K2407721-005	Solids, Total Dissolved (TDS)	N/A		Water	10069.23 mg/L	13 mL	10100 mg/L	1	70	77			8/20/24 13:30	N	IV
K2407721-007	Solids, Total Dissolved (TDS)	N/A		Water	2780.00 mg/L	50 mL	2780 mg/L	1	18	20			8/20/24 13:30	N	IV
KQ2410209-01	Solids, Total Dissolved (TDS)	DUP	R2407721-007	Water	2798.00 mg/L	50 mL	2800 mg/L	1	18	20		<1	8/20/24 13:30	N	IV
K2407723-001	Solids, Total Dissolved (TDS)	N/A		Water	286.00 mg/L	100 mL	286 mg/L	1	9	10			8/20/24 13:30	N	IV
K2407724-001	Solids, Total Dissolved (TDS)	N/A		Water	1123.00 mg/L	100 mL	1120 mg/L	1	9	10			8/20/24 13:30	N	II
K2407724-002	Solids, Total Dissolved (TDS)	N/A		Water	467.00 mg/L	100 mL	467 mg/L	1	9	10			8/20/24 13:30	N	II
K2407724-003	Solids, Total Dissolved (TDS)	N/A		Water	2025.56 mg/L	90 mL	2030 mg/L	1	10	11			8/20/24 13:30	N	II
K2407724-004	Solids, Total Dissolved (TDS)	N/A		Water	700.00 mg/L	100 mL	700 mg/L	1	9	10			8/20/24 13:30	N	II
K2407724-005	Solids, Total Dissolved (TDS)	N/A		Water	176.00 mg/L	100 mL	176 mg/L	1	9	10			8/20/24 13:30	N	II
K2407724-006	Solids, Total Dissolved (TDS)	N/A		Water	301.00 mg/L	100 mL	301 mg/L	1	9	10			8/20/24 13:30	N	II
K2407729-001	Solids, Total Dissolved (TDS)	N/A		Water	76.00 mg/L	100 mL	76 mg/L	1	9	10			8/20/24 13:30	N	IV
K2407734-001	Solids, Total Dissolved (TDS)	N/A		Water	130.00 mg/L	100 mL	130 mg/L	1	9	10			8/20/24 13:30	N	IV
K2407734-003	Solids, Total Dissolved (TDS)	N/A		Water	142.00 mg/L	100 mL	142 mg/L	1	9	10			8/20/24 13:30	N	IV
K2407734-005	Solids, Total Dissolved (TDS)	N/A		Water	141.00 mg/L	100 mL	141 mg/L	1	9	10			8/20/24 13:30	N	IV
K2407734-007	Solids, Total Dissolved (TDS)	N/A		Water	150.00 mg/L	100 mL	150 mg/L	1	9	10			8/20/24 13:30	N	IV
K2407734-009	Solids, Total Dissolved (TDS)	N/A		Water	152.00 mg/L	100 mL	152 mg/L	1	9	10			8/20/24 13:30	N	IV
K2407734-011	Solids, Total Dissolved (TDS)	N/A		Water	151.00 mg/L	100 mL	151 mg/L	1	9	10			8/20/24 13:30	N	IV
K2407734-013	Solids, Total Dissolved (TDS)	N/A		Water	157.00 mg/L	100 mL	157 mg/L	1	9	10			8/20/24 13:30	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-Balance-18 **Analyst:** HCASTROVINCI **Analysis Lot:** 851274 **Method/Testcode:** SM 2540 C-2015/TDS

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R2407734-015	Solids, Total Dissolved (TDS)	N/A		Water	145.00 mg/L	100 mL	145 mg/L	1	9	10			8/20/24 13:30	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-Balance-18 **Analyst:** HCASTROVINCI **Analysis Lot:** 851275 **Method/Testcode:** SM 2540 C-2015/TDS

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2410210-03	Solids, Total Dissolved (TDS)	MB		Water	2.00 mg/L	100 mL	10 mg/L U	1	9	10			8/20/24 13:30	N	IV
KQ2410210-04	Solids, Total Dissolved (TDS)	LCS		Water	890.00 mg/L	50 mL	890 mg/L	1	18	20	97		8/20/24 13:30	N	IV
R2407734-017	Solids, Total Dissolved (TDS)	N/A		Water	134.00 mg/L	100 mL	134 mg/L	1	9	10			8/20/24 13:30	N	IV
R2407734-019	Solids, Total Dissolved (TDS)	N/A		Water	133.00 mg/L	100 mL	133 mg/L	1	9	10			8/20/24 13:30	N	IV
R2407792-005	Solids, Total Dissolved (TDS)	N/A		Water	1350.59 mg/L	85 mL	1350 mg/L	1	11	12			8/20/24 13:30	N	IV
KQ2410210-01	Solids, Total Dissolved (TDS)	DUP	R2407792-005	Water	1357.65 mg/L	85 mL	1360 mg/L	1	11	12		<1	8/20/24 13:30	N	IV
R2407792-013	Solids, Total Dissolved (TDS)	N/A		Water	800.00 mg/L	100 mL	800 mg/L	1	9	10			8/20/24 13:30	N	IV
KQ2410210-02	Solids, Total Dissolved (TDS)	DUP	R2407792-013	Water	795.00 mg/L	100 mL	795 mg/L	1	9	10		<1	8/20/24 13:30	N	IV
R2407805-001	Solids, Total Dissolved (TDS)	N/A		Water	131.00 mg/L	100 mL	131 mg/L	1	9	10			8/20/24 13:30	N	IV
R2407805-003	Solids, Total Dissolved (TDS)	N/A		Water	156.00 mg/L	100 mL	156 mg/L	1	9	10			8/20/24 13:30	N	IV
R2407805-005	Solids, Total Dissolved (TDS)	N/A		Water	291.00 mg/L	100 mL	291 mg/L	1	9	10			8/20/24 13:30	N	IV
R2407805-007	Solids, Total Dissolved (TDS)	N/A		Water	298.00 mg/L	100 mL	298 mg/L	1	9	10			8/20/24 13:30	N	IV
R2407805-009	Solids, Total Dissolved (TDS)	N/A		Water	224.00 mg/L	100 mL	224 mg/L	1	9	10			8/20/24 13:30	N	IV
R2407807-001	Solids, Total Dissolved (TDS)	N/A		Water	-2.00 mg/L	100 mL	10 mg/L U	1	9	10			8/20/24 13:30	N	IV
R2407807-003	Solids, Total Dissolved (TDS)	N/A		Water	6.00 mg/L	100 mL	10 mg/L U	1	9	10			8/20/24 13:30	N	IV
R2407807-005	Solids, Total Dissolved (TDS)	N/A		Water	125.00 mg/L	100 mL	125 mg/L	1	9	10			8/20/24 13:30	N	IV
R2407807-007	Solids, Total Dissolved (TDS)	N/A		Water	120.00 mg/L	100 mL	120 mg/L	1	9	10			8/20/24 13:30	N	IV
R2407807-009	Solids, Total Dissolved (TDS)	N/A		Water	736.00 mg/L	100 mL	736 mg/L	1	9	10			8/20/24 13:30	N	IV
R2407825-001	Solids, Total Dissolved (TDS)	N/A		Water	2713.85 mg/L	65 mL	2710 mg/L	1	14	15			8/20/24 13:30	N	II
R2407825-002	Solids, Total Dissolved (TDS)	N/A		Water	2581.82 mg/L	55 mL	2580 mg/L	1	17	18			8/20/24 13:30	N	II
R2407825-005	Solids, Total Dissolved (TDS)	N/A		Water	1753.33 mg/L	75 mL	1750 mg/L	1	12	13			8/20/24 13:30	N	II
R2407867-001	Solids, Total Dissolved (TDS)	N/A		Water	496.00 mg/L	100 mL	496 mg/L	1	9	10			8/20/24 13:30	N	II
R2407868-001	Solids, Total Dissolved (TDS)	N/A		Water	615.00 mg/L	100 mL	615 mg/L	1	9	10			8/20/24 13:30	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-Balance-18 **Analyst:** HCASTROVINCI **Analysis Lot:** 851275 **Method/Testcode:** SM 2540 C-2015/TDS

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
2407869-001	Solids, Total Dissolved (TDS)	N/A		Water	644.00 mg/L	100 mL	644 mg/L	1	9	10			8/20/24 13:30	N	II

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analyte: Total Suspended Solids (TSS) Analyst: HC Date: 8/20/24
Method: SM 2540D-2015 Pipet: NA Time: 13:30
Analyte: Total Dissolved Solids (TDS)
Method: SM 2540C-1997, -2015 **TS** ____ **TDS** X **TSS** ____
Analyte: Total Solids (TS)
Method SM 2540B-2015 LCS Lot: 236388 TV: **914** Balance ID: **R-BALANCE-18**
Bag Lot: 202425001-4211-BV Filter: **115900** Oven ID: 9 *Lower tare weight used unless marked: ____

	Misc.	Order #	Dish/ Bag ID	Sample Vol. (mLs)	Used all	Vol. Conf.	mass (g)				Total Dissolved Solids (mg/L)
1		MB	B16272 38	100		X	Gross (A) 1:	3.8540	Gross (A) 3:		4.00
							Gross (A) 2:	3.8541			
							B)	3.8536	A-B=	0.0004	
2		LCS	B16272 41	50		X	Gross (A) 1:	4.0148	Gross (A) 3:		908.00
							Gross (A) 2:	4.0149			
							B)	3.9694	A-B=	0.0454	
3	500	R2407695-001	B16272 43	100		X	Gross (A) 1:	4.0100	Gross (A) 3:		538.00
							Gross (A) 2:	4.0101			
							B)	3.9562	A-B=	0.0538	
4	400	R2407695-002	B16272 44	100		X	Gross (A) 1:	3.9431	Gross (A) 3:		653.00
							Gross (A) 2:	3.9428			
							B)	3.8775	A-B=	0.0653	
5	400	R2407695-002 DUP	B16272 45	100		X	Gross (A) 1:	3.9273	Gross (A) 3:		649.00
							Gross (A) 2:	3.9276			
							B)	3.8624	A-B=	0.0649	
6	6,000	R2407721-005	B16272 46	13		X	Gross (A) 1:	3.6385	Gross (A) 3:		10069.23
							Gross (A) 2:	3.6388			
							B)	3.5076	A-B=	0.1309	
7	1,500	R2407721-007	B16272 47	50		X	Gross (A) 1:	3.7588	Gross (A) 3:	3.7569	2780.00
							Gross (A) 2:	3.7567			
							B)	3.6177	A-B=	0.1390	
8	1,500	R2407721-007 DUP	B16272 48	50		X	Gross (A) 1:	3.7004	Gross (A) 3:	3.6992	2798.00
							Gross (A) 2:	3.6989			
							B)	3.5590	A-B=	0.1399	
9	1,000 GAS	R2407723-001	B16272 49	100		X	Gross (A) 1:	3.5358	Gross (A) 3:		286.00
							Gross (A) 2:	3.5353			
							B)	3.5067	A-B=	0.0286	
10	600	R2407724-001	B16272 50	100		X	Gross (A) 1:	3.6932	Gross (A) 3:		1123.00
							Gross (A) 2:	3.6927			
							B)	3.5804	A-B=	0.1123	
11	400	R2407724-002	B16272 51	100		X	Gross (A) 1:	3.6893	Gross (A) 3:	3.6882	467.00
							Gross (A) 2:	3.6883			
							B)	3.6415	A-B=	0.0467	
12	700	R2407724-003	B16272 52	90		X	Gross (A) 1:	3.6873	Gross (A) 3:		2025.56
							Gross (A) 2:	3.6868			
							B)	3.5045	A-B=	0.1823	
13	400	R2407724-004	B16272 53	100		X	Gross (A) 1:	3.6650	Gross (A) 3:		700.00
							Gross (A) 2:	3.6651			
							B)	3.5950	A-B=	0.0700	

TS, TDS, TSS mg/L = (A-B)*1,000,000 /Sample Vol. (mls)
Where: A = wgt (g) of dried residue + dish
B = wgt (g) of tared dish

Analyte: Total Suspended Solids (TSS) Analyst: HC Date: 8/20/24
Method: SM 2540D-2015 Pipet: NA Time: 13:30
Analyte: Total Dissolved Solids (TDS)
Method: SM 2540C-1997, -2015 **TS** ____ **TDS** X **TSS** ____
Analyte: Total Solids (TS)
Method SM 2540B-2015 LCS Lot: 236388 TV: **914** Balance ID: **R-BALANCE-18**
Bag Lot: 202425001-4211-BV Filter: **115900** Oven ID: 9 *Lower tare weight used unless marked: ____

	Misc.	Order #	Dish/ Bag ID	Sample Vol. (mLs)	Used all	Vol. Conf.	mass (g)				Total Dissolved Solids (mg/L)
14	100	R2407724-005	B16272 55	100		X	Gross (A) 1:	3.5639	Gross (A) 3:		176.00
							Gross (A) 2:	3.5639			
							B)	3.5463	A-B=	0.0176	
15	300	R2407724-006	B16271 19	100		X	Gross (A) 1:	3.8877	Gross (A) 3:		301.00
							Gross (A) 2:	3.8873			
							B)	3.8572	A-B=	0.0301	
16	50	R2407729-001	B16271 20	100		X	Gross (A) 1:	3.9001	Gross (A) 3:		76.00
							Gross (A) 2:	3.8996			
							B)	3.8920	A-B=	0.0076	
17	100	R2407734-001	B16271 21	100		X	Gross (A) 1:	3.8747	Gross (A) 3:		130.00
							Gross (A) 2:	3.8752			
							B)	3.8617	A-B=	0.0130	
18	100	R2407734-003	B16271 22	100		X	Gross (A) 1:	3.8814	Gross (A) 3:		142.00
							Gross (A) 2:	3.8809			
							B)	3.8667	A-B=	0.0142	
19	100	R2407734-005	B16271 23	100		X	Gross (A) 1:	3.8546	Gross (A) 3:		141.00
							Gross (A) 2:	3.8543			
							B)	3.8402	A-B=	0.0141	
20	100	R2407734-007	B16271 24	100		X	Gross (A) 1:	3.9416	Gross (A) 3:		150.00
							Gross (A) 2:	3.9412			
							B)	3.9262	A-B=	0.0150	
21	100	R2407734-009	B16271 25	100		X	Gross (A) 1:	3.8094	Gross (A) 3:		152.00
							Gross (A) 2:	3.8093			
							B)	3.7941	A-B=	0.0152	
22	100	R2407734-011	B16271 26	100		X	Gross (A) 1:	3.9159	Gross (A) 3:		151.00
							Gross (A) 2:	3.9156			
							B)	3.9005	A-B=	0.0151	
23	100	R2407734-013	B16271 27	100		X	Gross (A) 1:	3.8849	Gross (A) 3:		157.00
							Gross (A) 2:	3.8849			
							B)	3.8692	A-B=	0.0157	
24	100	R2407734-015	B16271 28	100		X	Gross (A) 1:	3.6739	Gross (A) 3:		145.00
							Gross (A) 2:	3.6739			
							B)	3.6594	A-B=	0.0145	
25		MB	B16271 29	100		X	Gross (A) 1:	3.5894	Gross (A) 3:		2.00
							Gross (A) 2:	3.5894			
							B)	3.5892	A-B=	0.0002	
26		LCS	B16271 30	50		X	Gross (A) 1:	3.6044	Gross (A) 3:		890.00
							Gross (A) 2:	3.6043			
							B)	3.5598	A-B=	0.0445	

TS, TDS, TSS mg/L = (A-B)*1,000,000 /Sample Vol. (mls)
Where: A = wgt (g) of dried residue + dish
B = wgt (g) of tared dish

Analyte: Total Suspended Solids (TSS) Analyst: HC Date: 8/20/24
Method: SM 2540D-2015 Pipet: NA Time: 13:30
Analyte: Total Dissolved Solids (TDS)
Method: SM 2540C-1997, -2015 **TS** ____ **TDS** X **TSS** ____
Analyte: Total Solids (TS)
Method SM 2540B-2015 LCS Lot: 236388 TV: **914** Balance ID: **R-BALANCE-18**
Bag Lot: 202425001-4211-BV Filter: **115900** Oven ID: 9 *Lower tare weight used unless marked: ____

	Misc.	Order #	Dish/ Bag ID	Sample Vol. (mLs)	Used all	Vol. Conf.	mass (g)				Total Dissolved Solids (mg/L)
27	100	R2407734-017	B16271 32	100		X	Gross (A) 1:	3.6260	Gross (A) 3:		134.00
							Gross (A) 2:	3.6257			
							B)	3.6123	A-B=	0.0134	
28	100	R2407734-019	B16271 33	100		X	Gross (A) 1:	3.6245	Gross (A) 3:		133.00
							Gross (A) 2:	3.6243			
							B)	3.6110	A-B=	0.0133	
29	700	R2407792-005	B16271 44	85		X	Gross (A) 1:	3.6200	Gross (A) 3:		1350.59
							Gross (A) 2:	3.6195			
							B)	3.5047	A-B=	0.1148	
30	700	R2407792-005 DUP	B16271 45	85		X	Gross (A) 1:	3.6611	Gross (A) 3:		1357.65
							Gross (A) 2:	3.6611			
							B)	3.5457	A-B=	0.1154	
31	500	R2407792-013	B16271 46	100		X	Gross (A) 1:	3.6776	Gross (A) 3:		800.00
							Gross (A) 2:	3.6773			
							B)	3.5973	A-B=	0.0800	
32	500	R2407792-013 DUP	B16271 47	100		X	Gross (A) 1:	3.6002	Gross (A) 3:		795.00
							Gross (A) 2:	3.6005			
							B)	3.5207	A-B=	0.0795	
33	100	R2407805-001	B16311 59	100		X	Gross (A) 1:	3.8764	Gross (A) 3:		131.00
							Gross (A) 2:	3.8763			
							B)	3.8632	A-B=	0.0131	
34	100	R2407805-003	B16311 60	100		X	Gross (A) 1:	3.9177	Gross (A) 3:		156.00
							Gross (A) 2:	3.9172			
							B)	3.9016	A-B=	0.0156	
35	200	R2407805-005	B16311 61	100		X	Gross (A) 1:	3.9286	Gross (A) 3:		291.00
							Gross (A) 2:	3.9286			
							B)	3.8995	A-B=	0.0291	
36	200	R2407805-007	B16272 56	100		X	Gross (A) 1:	3.4982	Gross (A) 3:	3.4966	298.00
							Gross (A) 2:	3.4971			
							B)	3.4668	A-B=	0.0298	
37	200	R2407805-009	B16272 57	100		X	Gross (A) 1:	3.6745	Gross (A) 3:		224.00
							Gross (A) 2:	3.6748			
							B)	3.6521	A-B=	0.0224	
38	0	R2407807-001	B16272 58	100		X	Gross (A) 1:	3.6030	Gross (A) 3:		-2.00
							Gross (A) 2:	3.6031	TDSMin		
							B)	3.6032	A-B=	-0.0002	
39	0	R2407807-003	B16272 59	100		X	Gross (A) 1:	3.6114	Gross (A) 3:		6.00
							Gross (A) 2:	3.6110	TDSMin		
							B)	3.6104	A-B=	0.0006	

TS, TDS, TSS mg/L = (A-B)*1,000,000 /Sample Vol. (mls)
Where: A = wgt (g) of dried residue + dish
B = wgt (g) of tared dish

Analyte: Total Suspended Solids (TSS) Analyst: HC Date: 8/20/24
Method: SM 2540D-2015 Pipet: NA Time: 13:30
Analyte: Total Dissolved Solids (TDS)
Method: SM 2540C-1997, -2015 **TS** ____ **TDS** X **TSS** ____
Analyte: Total Solids (TS)
Method SM 2540B-2015 LCS Lot: 236388 TV: **914** Balance ID: **R-BALANCE-18**
Bag Lot: 202425001-4211-BV Filter: **115900** Oven ID: 9 *Lower tare weight used unless marked: ____

	Misc.	Order #	Dish/ Bag ID	Sample Vol. (mLs)	Used all	Vol. Conf.	mass (g)				Total Dissolved Solids (mg/L)
40	100	R2407807-005	B16272 60	100		X	Gross (A) 1:	3.6393	Gross (A) 3:	3.6369	125.00
							Gross (A) 2:	3.6364			
							B)	3.6239	A-B=	0.0125	
41	100	R2407807-007	B16272 61	100		X	Gross (A) 1:	3.6320	Gross (A) 3:	3.6302	120.00
							Gross (A) 2:	3.6301			
							B)	3.6181	A-B=	0.0120	
42	400	R2407807-009	B16272 62	100		X	Gross (A) 1:	3.6993	Gross (A) 3:	3.6982	736.00
							Gross (A) 2:	3.6977			
							B)	3.6241	A-B=	0.0736	
43	900	R2407825-001	B16272 63	65		X	Gross (A) 1:	3.7887	Gross (A) 3:	3.7867	2713.85
							Gross (A) 2:	3.7863			
							B)	3.6099	A-B=	0.1764	
44	1,000	R2407825-002	B16272 64	55		X	Gross (A) 1:	3.7161	Gross (A) 3:	3.7136	2581.82
							Gross (A) 2:	3.7139			
							B)	3.5716	A-B=	0.1420	
45	800	R2407825-005	B16272 65	75		X	Gross (A) 1:	3.7396	Gross (A) 3:	3.7378	1753.33
							Gross (A) 2:	3.7378			
							B)	3.6063	A-B=	0.1315	
46	400	R2407867-001	B16272 66	100		X	Gross (A) 1:	3.6763	Gross (A) 3:		496.00
							Gross (A) 2:	3.6758			
							B)	3.6262	A-B=	0.0496	
47	400	R2407868-001	B16272 67	100		X	Gross (A) 1:	3.6774	Gross (A) 3:		615.00
							Gross (A) 2:	3.6770			
							B)	3.6155	A-B=	0.0615	
48	400	R2407869-001	B16272 68	100		X	Gross (A) 1:	3.6567	Gross (A) 3:		644.00
							Gross (A) 2:	3.6565			
							B)	3.5921	A-B=	0.0644	

TS, TDS, TSS mg/L = (A-B)*1,000,000 /Sample Vol. (mls)
Where: A = wgt (g) of dried residue + dish
B = wgt (g) of tared dish

Tare Weights:

Instrument: __ R-Balance-18 Analyst: HC

__ R-Balance-

X Manufacturer Weight Date: 8/20/24

Drying Tins: _____ Dish 104°C: ___

Crucible 550°C: _____ Dish 550°C: ___

Bag/Dish 180°C: X S/O Dishes: ___

	Weight	Actual
Class 1 Weights (s):	1.0000 g	1.0001 g
	_____ g	_____ g

ID Number	Weight	
B1627238	3.8536	3.8536
B1627241	3.9694	3.9694
B1627243	3.9562	3.9562
B1627244	3.8775	3.8775
B1627245	3.8624	3.8624
B1627246	3.5076	3.5076
B1627247	3.6177	3.6177
B1627248	3.5590	3.5590
B1627249	3.5067	3.5067
B1627250	3.5804	3.5804
B1627251	3.6415	3.6415
B1627252	3.5045	3.5045
B1627253	3.5950	3.5950
B1627255	3.5463	3.5463
B1627119	3.8572	3.8572
B1627120	3.8920	3.8920
B1627121	3.8617	3.8617
B1627122	3.8667	3.8667
B1627123	3.8402	3.8402
B1627124	3.9262	3.9262
B1627125	3.7941	3.7941
B1627126	3.9005	3.9005
B1627127	3.8692	3.8692
B1627128	3.6594	3.6594

ID Number	Weight	
B1627129	3.5892	3.5892
B1627130	3.5598	3.5598
B1627132	3.6123	3.6123
B1627133	3.6110	3.6110
B1627144	3.5047	3.5047
B1627145	3.5457	3.5457
B1627146	3.5973	3.5973
B1627147	3.5207	3.5207
B1631159	3.8632	3.8632
B1631160	3.9016	3.9016
B1631161	3.8995	3.8995
B1627256	3.4668	3.4668
B1627257	3.6521	3.6521
B1627258	3.6032	3.6032
B1627259	3.6104	3.6104
B1627260	3.6239	3.6239
B1627261	3.6181	3.6181
B1627262	3.6241	3.6241
B1627263	3.6099	3.6099
B1627264	3.5716	3.5716
B1627265	3.6063	3.6063
B1627266	3.6262	3.6262
B1627267	3.6155	3.6155
B1627268	3.5921	3.5921

ALS Environmental
1565 Jefferson Rd., Rochester, NY 14623

General Chemistry Analytical Run Cover Sheet

Analyst: HC Date: 8/20/24

Analysis: Total Dissolved Solids Instrument: X R-Balance-18 Ohaus PA224C

_____ R-Balance-11 Mettler AG 204 Analytical Balance

Reference Solution	Log # Prep/Exp Dates	Reagent	Weight (g)	Final Vol, (mL)	Conc. (mg/L)
	236388 **Prep: 07/22/24** **Exp: 07/22/25**	**NaCl** ID: 219819 Exp: 09/08/25	0.914	1000	914

* Diluent is DI Water

Quality Control			True Value (mg/L)
LCS	Analyze as a sample	See Data Sheet	

Instrument log filled in? (Y) (N)

Comments:

The weight loss between successive gross dry weights should not exceed 4% or 1.0 mg, whichever is less.

For calculations, used: X lower ___ higher tare weight

As a rule, the lower of the successive dry weights is used to calculate the result.

Subcontracted Analytical Parameters

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report



Technical Report for

ALS Environmental

Perchlorate

SGS Job Number: FC18670

Sampling Date: 08/14/24

Report to:

ALS Environmental
1565 Jefferson Rd Bldg 300
Rochester, NY 14623
janice.jaeger@alsglobal.com

ATTN: Janice Jaeger

Total number of pages in report: 72

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

Norm Farmer
Technical Director

Client Service contact: Muna Mohammed 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AL, AK, AR, CT, IA, KY, MA, MI. MS, ND, NH, NV, OK, OR, IL, UT, VT, WA, WI, WV

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SGS North America Inc.

Sample Summary

ALS Environmental

Job No: FC18670

Perchlorate

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FC18670-1	08/14/24	00:00	ALSNY	09/10/24	AQ	Water	2408140837A 300-001-GSV
FC18670-2	08/14/24	00:00	ALSNY	09/10/24	AQ	Ground Water	2408160829A 300-002-GSV

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: ALS Environmental **Job No:** FC18670

Site: Perchlorate **Report Date** 9/20/2024 9:40:20 AM

On 09/10/2024, 2 Sample(s), 0 Trip Blank(s), 0 Equip. Blank(s) and 0 Field Blank(s) were received at SGS North America Inc - Orlando. at a maximum corrected temperature of 2.8 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. - Orlando Job Number of FC18670 was assigned to the project.

Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section. Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

MS Semi-volatiles By Method SW846 6850

Matrix: AQ **Batch ID:** OP5295

Sample(s) FC18670-1MSD, FC18670-1MS were used as the QC samples indicated.

Matrix Spike Recovery(s) for Perchlorate are outside control limits. Outside control limits due to high level in sample relative to spike amount.

FC18670-1: Sample analyzed beyond hold time.

FC18670-2: Sample analyzed beyond hold time.

SGS North America Inc. - Orlando certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted. Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria. SGS North America Inc.- Orlando is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety.

Narrative prepared by:

_____

Samuel Del Agua, Data Analyst *(Signature on File)*

Summary of Hits

Job Number: FC18670
Account: ALS Environmental
Project: Perchlorate
Collected: 08/14/24

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FC18670-1	**2408140837A 300-001-GSV**					
Perchlorate [a]		0.78	0.20	0.050	ug/l	SW846 6850
FC18670-2	**2408160829A 300-002-GSV**					
Perchlorate [a]		0.14 J	0.20	0.050	ug/l	SW846 6850

(a) Sample analyzed beyond hold time.

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID: 2408140837A 300-001-GSV
Lab Sample ID: FC18670-1
Matrix: AQ - Water
Method: SW846 6850 IN HOUSE
Project: Perchlorate

Date Sampled: 08/14/24
Date Received: 09/10/24
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	Q113304.D	1	09/18/24 16:46	AL	09/12/24 14:30	OP5295	SQ2373
Run #2							

	Initial Volume	Final Volume
Run #1	10.0 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
14797-73-0	Perchlorate	0.78	0.20	0.050	ug/l	

(a) Sample analyzed beyond hold time.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	2408160829A 300-002-GSV		
Lab Sample ID:	FC18670-2	**Date Sampled:**	08/14/24
Matrix:	AQ - Ground Water	**Date Received:**	09/10/24
Method:	SW846 6850 IN HOUSE	**Percent Solids:**	n/a
Project:	Perchlorate		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	Q113307.D	1	09/18/24 17:07	AL	09/12/24 14:30	OP5295	SQ2373
Run #2							

	Initial Volume	Final Volume
Run #1	10.0 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
14797-73-0	Perchlorate	0.14	0.20	0.050	ug/l	J

(a) Sample analyzed beyond hold time.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

ALS Environmental Chain of Custody

1565 Jefferson Rd, Building 300 • Rochester, NY 14623 • 585-288-5380 • FAX 585-288-8475

ALS Contact: Janice Jaeger

FC18670

E2400975 5

ALS Environmental - Rochester

R2407792

Project Number: R2407792
Project Manager: Janice Jaeger
QAP: LAB QAP

Lab Code	Sample ID	# of Cont.	Matrix	Sample Date	Sample Time	Lab ID	ClO4 6850
R2407792-006	2408140837A 300-001-GSV (1)	1	Water	8/14/24		Houston Full	X
R2407792-014	2408150829A 300-002-GSV (2)	1	Water	8/15/24		Houston Full	X

Folder Comments:
report NDU

INITIAL ASSESSMENT
LABEL VERIFICATION
3.0 FR#1

Temp 1.1c Dpm 3.4
Cooler in Red 4.3 CF 3.0

Special Instructions/Comments	Turnaround Requirements	Report Requirements	Invoice Information
H - Test is On Hold P - Test is Authorized for Prep Only	____RUSH (Surcharges Apply) PLEASE CIRCLE WORK DAYS 1 2 3 4 5 ____STANDARD Requested FAX Date: _____ Requested Report Date: 08/27/24	___ I. Results Only _X_ II. Results + QC Summaries ___ III. Results + QC and Calibration Summaries _X_ IV. Data Validation Report with Raw Data PQL/MDL/J _Y_ EDD _Y_ Honeywell WSTF	PO# 58R2407792 Bill to

Relinquished By: 8/19/24 1400 Received By: 08/20/24 11:45 Airbill Number:
9/9/24 1800 09/10/24 930

Page 1

FC18670: Chain of Custody
Page 1 of 2

SGS - Orlando Sample Receipt Summary

Job Number: fc18670 **Client:** ALS ENVIRONMENTAL **Project:** R2407792

Date / Time Received: 9/10/2024 9:30:00 AM **Delivery Method:** FED EX **Airbill #'s:** 7386 7926 1710

Cooler Temps (Raw Measured) °C: Cooler 1: (3.0);

Cooler Temps (Corrected) °C: Cooler 1: (2.8);

Cooler Information	Y	or	N
1. Custody Seals Present:	☑		☐
2. Custody Seals Intact:	☑		☐
3. Temp criteria achieved:	☑		☐
4. Cooler temp verification:	IR Gun		
5. Cooler media:	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☐	☑
2. Trip Blank listed on COC:	☐		☐	☑

	W	or	S	N/A
3. Type of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles:	☑		☐	
2. Samples presented properly	☑		☐	
3. Sufficient volume/containers recv'd for analysis	☑		☐	
4. Condition of sample:	Intact			
5. Sample recv'd within HT	☑		☐	
6. Dates/Times/IDs on COC match sample label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar Received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc Information

Number of Encores: 25 Gram 5 Gram

Number of Lab Filtered Metals:

Test Strip Lot #s: pH 0-3: 226422 pH 10-12: Other: (Specify) pH 1.0 - 12.0 222221

Residual Chlorine Test Strip Lot #

Comments

Sample Receipt Summary 112723 EK Technician: SHAYLAP Date: 9/10/2024 1:15:20 PM Reviewer: Date:

FC18670: Chain of Custody
Page 2 of 2

MS Semi-volatiles

6

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Instrument Blank

Job Number: FC18670
Account: ALSNYR ALS Environmental
Project: Perchlorate

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
SQ2373-IBLK	Q113326.D	1	09/18/24	AL	n/a	n/a	SQ2373

The QC reported here applies to the following samples: **Method:** SW846 6850

FC18670-1, FC18670-2

CAS No.	Compound	Result	RL	MDL	Units	Q
14797-73-0	Perchlorate	ND	0.20	0.050	ug/l	

Method Blank Summary

Job Number: FC18670
Account: ALSNYR ALS Environmental
Project: Perchlorate

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5295-MB	Q113303.D	1	09/18/24	AL	09/12/24	OP5295	SQ2373

The QC reported here applies to the following samples: **Method:** SW846 6850

FC18670-1, FC18670-2

CAS No.	Compound	Result	RL	MDL	Units	Q
14797-73-0	Perchlorate	ND	0.20	0.050	ug/l	

Blank Spike Summary

Job Number: FC18670
Account: ALSNYR ALS Environmental
Project: Perchlorate

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5295-BS	Q113302.D	1	09/18/24	AL	09/12/24	OP5295	SQ2373

The QC reported here applies to the following samples: **Method:** SW846 6850

FC18670-1, FC18670-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
14797-73-0	Perchlorate	0.2	0.20	100	80-120

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FC18670
Account: ALSNYR ALS Environmental
Project: Perchlorate

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5295-MS	Q113305.D	1	09/18/24	AL	09/12/24	OP5295	SQ2373
OP5295-MSD	Q113306.D	1	09/18/24	AL	09/12/24	OP5295	SQ2373
FC18670-1 [a]	Q113304.D	1	09/18/24	AL	09/12/24	OP5295	SQ2373

The QC reported here applies to the following samples: **Method:** SW846 6850

FC18670-1, FC18670-2

CAS No.	Compound	FC18670-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
14797-73-0	Perchlorate	0.78		0.2	1.1	160* [b]	0.2	1.0	110	10	80-120/15

(a) Sample analyzed beyond hold time.
(b) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Internal Standard Area Summary

Job Number: FC18670
Account: ALSNYR ALS Environmental
Project: Perchlorate

Check Std:	SQ2373-CC2373	**Injection Date:**	09/18/24
Lab File ID:	Q113299.D	**Injection Time:**	16:11
Instrument ID:	GCMSQ	**Method:**	SW846 6850

	IS 1 AREA	RT
Initial Cal [a]	3762	4.33
Check Std [b]	4714	4.30
Upper Limit [c]	5643	6.30
Lower Limit [d]	1881	2.30

Lab Sample ID	IS 1 AREA	RT
OP5295-BS	4408	4.35
OP5295-MB	4481	4.35
FC18670-1 [e]	4618	4.16
OP5295-MS	4321	4.17
OP5295-MSD	4617	4.17
FC18670-2 [e]	4471	4.19
ZZZZZZ	4594	4.20
ZZZZZZ	4575	4.20
ZZZZZZ	4549	4.17
ZZZZZZ	4820	4.21

IS 1 = Cl18O4 (ISTD)

(a) Initial Cal is: SQ2373-ICC2373 Q113272.D 09/18/24 12:08. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to + 50% of initial cal area.
(c) Upper Limit = + 50% of initial standard area; Retention time + 2 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -2 minutes of check standard.
(e) Sample analyzed beyond hold time.

Initial Calibration Summary

Job Number: FC18670
Account: ALSNYR ALS Environmental
Project: Perchlorate

Sample: SQ2373-ICC2373
Lab FileID: Q113272.D

Initial Calibration Report

Method Path	D:\MassHunter\Methods
Method File	6850_091824_SQ2373.quantmethod.xml
Batch Name	D:\MassHunter\Data\091824_6850_SQ2373\QuantResults\sq2373.batch.bin
Last Calib Update	9/19/2024 9:59:22 AM

Level Name	Calibration Files	Acq. Date-Time	Level Last Update Time
1	D:\MassHunter\Data\091824_6850_SQ2373\Q113269.d	9/18/2024 11:48:11 AM	9/19/2024 9:59:22 AM
2	D:\MassHunter\Data\091824_6850_SQ2373\Q113270.d	9/18/2024 11:55:04 AM	9/19/2024 9:59:22 AM
3	D:\MassHunter\Data\091824_6850_SQ2373\Q113271.d	9/18/2024 12:01:57 PM	9/19/2024 9:59:22 AM
4	D:\MassHunter\Data\091824_6850_SQ2373\Q113272.d	9/18/2024 12:08:50 PM	9/19/2024 9:59:22 AM
5	D:\MassHunter\Data\091824_6850_SQ2373\Q113273.d	9/18/2024 12:15:42 PM	9/19/2024 9:59:22 AM
6	D:\MassHunter\Data\091824_6850_SQ2373\Q113274.d	9/18/2024 12:22:34 PM	9/19/2024 9:59:22 AM
7	D:\MassHunter\Data\091824_6850_SQ2373\Q113275.d	9/18/2024 12:29:27 PM	9/19/2024 9:59:22 AM
8	D:\MassHunter\Data\091824_6850_SQ2373\Q113276.d	9/18/2024 12:36:19 PM	9/19/2024 9:59:22 AM

Compound	Curve Fit	1	2	3	4	5	6	7	8	Avg RF	%RSD
I Cl18O4	---------- ISTD ----------										
T Perchlorate	Quadratic	0.9251	1.0169	0.8912	1.0061	1.0000	1.0175	1.0733	1.1253	1.0069	7.392

(RedFont and #) = Outlier Flag; (I) = Internal Standard; (T) = Target; (S) = Surrogate; (M) = Matrix Spike

Generated at 9:59 AM on 9/19/2024

Initial Calibration Summary

Job Number: FC18670
Account: ALSNYR ALS Environmental
Project: Perchlorate

Sample: SQ2373-ICC2373
Lab FileID: Q113272.D

Initial Calibration Report

Compounds with Curve fitting not using Avg Response Factor:

Compound	Curve Fit	Curve Fit Formula	Curve Fit R2
T Perchlorate	Quadratic	y = 0.011676 * x ^ 2 + 1.009140 * x	0.999974

(RedFont and #) = Outlier Flag; (I) = Internal Standard; (T) = Target; (S) = Surrogate; (M) = Matrix Spike

Generated at 9:59 AM on 9/19/2024

Initial Calibration Verification

Job Number: FC18670
Account: ALSNYR ALS Environmental
Project: Perchlorate
Sample: SQ2373-ICV2373
Lab FileID: Q113277.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\091824_6850_SQ2373\sq2373.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\091824_6850_SQ2373\Q113269.d
2:D:\MassHunter\Data\091824_6850_SQ2373\Q113270.d
3:D:\MassHunter\Data\091824_6850_SQ2373\Q113271.d
4:D:\MassHunter\Data\091824_6850_SQ2373\Q113272.d
5:D:\MassHunter\Data\091824_6850_SQ2373\Q113273.d
6:D:\MassHunter\Data\091824_6850_SQ2373\Q113274.d
7:D:\MassHunter\Data\091824_6850_SQ2373\Q113275.d
8:D:\MassHunter\Data\091824_6850_SQ2373\Q113276.d

Data File: Q113277
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	1.796	-10.2	89.8

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FC18670
Account: ALSNYR ALS Environmental
Project: Perchlorate

Sample: SQ2373-CC2373
Lab FileID: Q113299.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\091824_6850_SQ2373\sq2373.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\091824_6850_SQ2373\Q113269.d
2:D:\MassHunter\Data\091824_6850_SQ2373\Q113270.d
3:D:\MassHunter\Data\091824_6850_SQ2373\Q113271.d
4:D:\MassHunter\Data\091824_6850_SQ2373\Q113272.d
5:D:\MassHunter\Data\091824_6850_SQ2373\Q113273.d
6:D:\MassHunter\Data\091824_6850_SQ2373\Q113274.d
7:D:\MassHunter\Data\091824_6850_SQ2373\Q113275.d
8:D:\MassHunter\Data\091824_6850_SQ2373\Q113276.d

Data File: Q113299
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	2.031	1.6	101.6

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FC18670
Account: ALSNYR ALS Environmental
Project: Perchlorate

Sample: SQ2373-CC2373
Lab FileID: Q113300.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\091824_6850_SQ2373\sq2373.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\091824_6850_SQ2373\Q113269.d
2:D:\MassHunter\Data\091824_6850_SQ2373\Q113270.d
3:D:\MassHunter\Data\091824_6850_SQ2373\Q113271.d
4:D:\MassHunter\Data\091824_6850_SQ2373\Q113272.d
5:D:\MassHunter\Data\091824_6850_SQ2373\Q113273.d
6:D:\MassHunter\Data\091824_6850_SQ2373\Q113274.d
7:D:\MassHunter\Data\091824_6850_SQ2373\Q113275.d
8:D:\MassHunter\Data\091824_6850_SQ2373\Q113276.d

Data File: Q113300
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	0.200	0.209	4.7	104.7

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FC18670
Account: ALSNYR ALS Environmental
Project: Perchlorate

Sample: SQ2373-CC2373
Lab FileID: Q113312.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\091824_6850_SQ2373\sq2373.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\091824_6850_SQ2373\Q113269.d
2:D:\MassHunter\Data\091824_6850_SQ2373\Q113270.d
3:D:\MassHunter\Data\091824_6850_SQ2373\Q113271.d
4:D:\MassHunter\Data\091824_6850_SQ2373\Q113272.d
5:D:\MassHunter\Data\091824_6850_SQ2373\Q113273.d
6:D:\MassHunter\Data\091824_6850_SQ2373\Q113274.d
7:D:\MassHunter\Data\091824_6850_SQ2373\Q113275.d
8:D:\MassHunter\Data\091824_6850_SQ2373\Q113276.d

Data File: Q113312
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	2.052	2.6	102.6

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FC18670
Account: ALSNYR ALS Environmental
Project: Perchlorate

Sample: SQ2373-CC2373
Lab FileID: Q113313.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\091824_6850_SQ2373\sq2373.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\091824_6850_SQ2373\Q113269.d
2:D:\MassHunter\Data\091824_6850_SQ2373\Q113270.d
3:D:\MassHunter\Data\091824_6850_SQ2373\Q113271.d
4:D:\MassHunter\Data\091824_6850_SQ2373\Q113272.d
5:D:\MassHunter\Data\091824_6850_SQ2373\Q113273.d
6:D:\MassHunter\Data\091824_6850_SQ2373\Q113274.d
7:D:\MassHunter\Data\091824_6850_SQ2373\Q113275.d
8:D:\MassHunter\Data\091824_6850_SQ2373\Q113276.d

Data File: Q113313
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	0.200	0.274	37.0	137.0

CC Criteria: +/- 50%

Run Sequence Report

Job Number: FC18670
Account: ALSNYR ALS Environmental
Project: Perchlorate

Run ID: SQ2373 **Method:** SW846 6850 **Instrument ID:** GCMSQ

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
SQ2373-IC2373	Q113268.D	09/18/24 11:41	n/a	Mass Calibration Verification
SQ2373-IC2373	Q113269.D	09/18/24 11:48	n/a	Initial cal 0.2
SQ2373-IC2373	Q113270.D	09/18/24 11:55	n/a	Initial cal 0.5
SQ2373-IC2373	Q113271.D	09/18/24 12:01	n/a	Initial cal 1
SQ2373-ICC2373	Q113272.D	09/18/24 12:08	n/a	Initial cal 2
SQ2373-IC2373	Q113273.D	09/18/24 12:15	n/a	Initial cal 5
SQ2373-IC2373	Q113274.D	09/18/24 12:22	n/a	Initial cal 10
SQ2373-IC2373	Q113275.D	09/18/24 12:29	n/a	Initial cal 25
SQ2373-IC2373	Q113276.D	09/18/24 12:36	n/a	Initial cal 50
SQ2373-ICV2373	Q113277.D	09/18/24 12:44	n/a	Initial cal verification 2
SQ2373-CC2373	Q113279.D	09/18/24 12:57	n/a	Continuing cal 2
SQ2373-CC2373	Q113280.D	09/18/24 13:04	n/a	Continuing cal 0.2
FC18224-1	Q113281.D	09/18/24 13:11	OP5296	(used for QC only; not part of job FC18670)
OP5296-MS	Q113282.D	09/18/24 13:18	OP5296	Matrix Spike
OP5296-MSD	Q113283.D	09/18/24 13:25	OP5296	Matrix Spike Duplicate
ZZZZZZ	Q113284.D	09/18/24 13:32	OP5296	(unrelated sample)
ZZZZZZ	Q113285.D	09/18/24 13:39	OP5296	(unrelated sample)
ZZZZZZ	Q113286.D	09/18/24 13:46	OP5296	(unrelated sample)
ZZZZZZ	Q113287.D	09/18/24 13:53	OP5296	(unrelated sample)
ZZZZZZ	Q113288.D	09/18/24 14:00	OP5296	(unrelated sample)
ZZZZZZ	Q113289.D	09/18/24 14:06	OP5296	(unrelated sample)
ZZZZZZ	Q113290.D	09/18/24 14:13	OP5296	(unrelated sample)
SQ2373-CC2373	Q113291.D	09/18/24 14:20	n/a	Continuing cal 2
SQ2373-CC2373	Q113292.D	09/18/24 15:23	n/a	Continuing cal 0.2
ZZZZZZ	Q113294.D	09/18/24 15:37	OP5296	(unrelated sample)
ZZZZZZ	Q113295.D	09/18/24 15:44	OP5296	(unrelated sample)
ZZZZZZ	Q113296.D	09/18/24 15:51	OP5296	(unrelated sample)
OP5297-MS	Q113297.D	09/18/24 15:58	OP5297	Matrix Spike
OP5297-MSD	Q113298.D	09/18/24 16:04	OP5297	Matrix Spike Duplicate
SQ2373-CC2373	Q113299.D	09/18/24 16:11	n/a	Continuing cal 2
SQ2373-CC2373	Q113300.D	09/18/24 16:18	n/a	Continuing cal 0.2
OP5295-BS	Q113302.D	09/18/24 16:32	OP5295	Blank Spike
OP5295-MB	Q113303.D	09/18/24 16:39	OP5295	Method Blank
FC18670-1	Q113304.D	09/18/24 16:46	OP5295	2408140837A 300-001-GSV
OP5295-MS	Q113305.D	09/18/24 16:53	OP5295	Matrix Spike
OP5295-MSD	Q113306.D	09/18/24 17:00	OP5295	Matrix Spike Duplicate
FC18670-2	Q113307.D	09/18/24 17:07	OP5295	2408160829A 300-002-GSV
ZZZZZZ	Q113308.D	09/18/24 17:13	OP5295	(unrelated sample)
ZZZZZZ	Q113309.D	09/18/24 17:20	OP5295	(unrelated sample)
ZZZZZZ	Q113310.D	09/18/24 17:27	OP5295	(unrelated sample)
ZZZZZZ	Q113311.D	09/18/24 17:34	OP5295	(unrelated sample)
SQ2373-CC2373	Q113312.D	09/18/24 17:41	n/a	Continuing cal 2
SQ2373-CC2373	Q113313.D	09/18/24 17:48	n/a	Continuing cal 0.2
ZZZZZZ	Q113315.D	09/18/24 18:02	OP5295	(unrelated sample)
ZZZZZZ	Q113316.D	09/18/24 18:09	OP5295	(unrelated sample)
ZZZZZZ	Q113317.D	09/18/24 18:15	OP5295	(unrelated sample)

Run Sequence Report

Job Number: FC18670
Account: ALSNYR ALS Environmental
Project: Perchlorate

Run ID: SQ2373	**Method:** SW846 6850	**Instrument ID:** GCMSQ

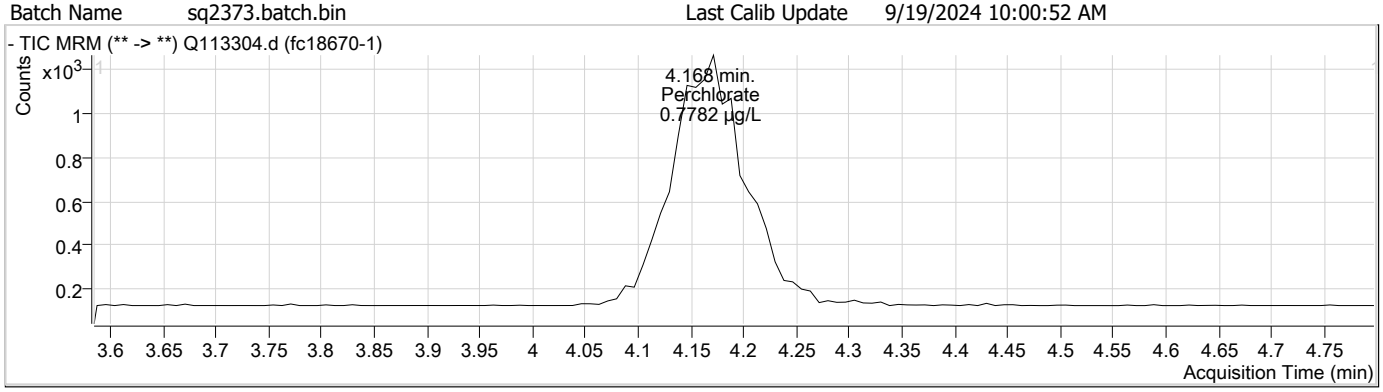
Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
ZZZZZZ	Q113318.D	09/18/24 18:22	OP5295	(unrelated sample)
ZZZZZZ	Q113319.D	09/18/24 18:29	OP5295	(unrelated sample)
ZZZZZZ	Q113320.D	09/18/24 18:36	OP5295	(unrelated sample)
ZZZZZZ	Q113321.D	09/18/24 18:43	OP5295	(unrelated sample)
ZZZZZZ	Q113322.D	09/18/24 18:50	OP5295	(unrelated sample)
ZZZZZZ	Q113323.D	09/18/24 18:57	OP5295	(unrelated sample)
SQ2373-CC2373	Q113324.D	09/18/24 19:04	n/a	Continuing cal 2
SQ2373-ECC2373	Q113325.D	09/18/24 19:11	n/a	Ending cal 0.2
SQ2373-IBLK	Q113326.D	09/18/24 19:17	n/a	Instrument Blank

MS Semi-volatiles

Raw Data

Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113304.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 4:46:19 PM
Sample Name	fc18670-1	Instrument	Instrument 1
Vial	P2-E3	Sample Information	OP5295,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

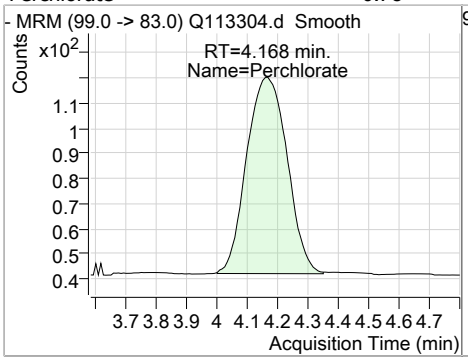


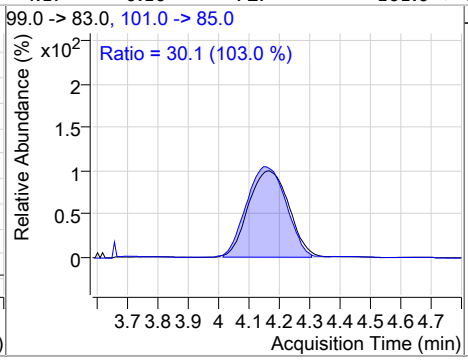
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.163	107.0 -> 89.0	4618	NoQ	5.00	µg/L	-0.167
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.168	99.0 -> 83.0	727	3.3	0.78	µg/L	98

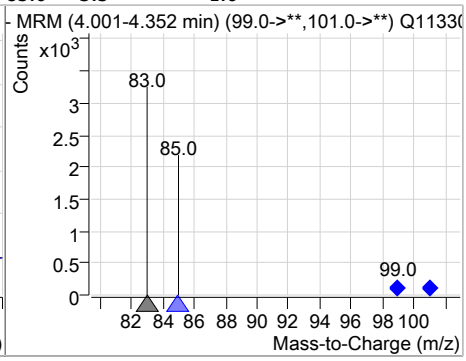
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	0.78	4.17	-0.16	727	101.0 -> 85.0	3.3	1.6	

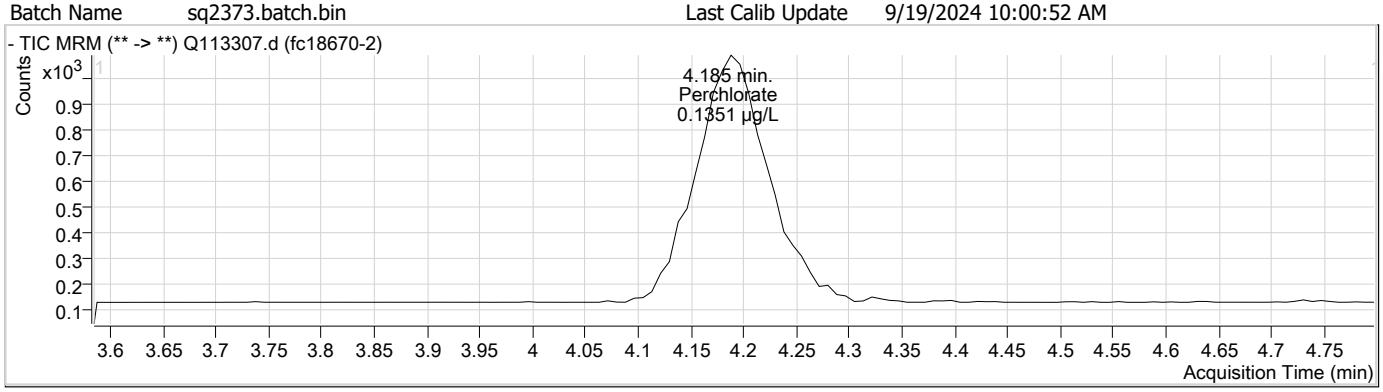






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113307.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 5:07:02 PM
Sample Name	fc18670-2	Instrument	Instrument 1
Vial	P2-E6	Sample Information	OP5295,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

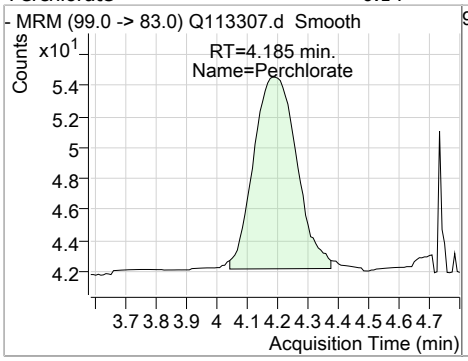


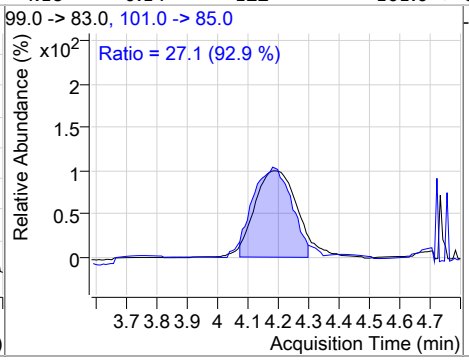
Compound	RT	QIon	Resp.	Q-ratio	Conc. Units	Dev(Min)
Internal Standards						
Cl18O4	4.188	107.0 -> 89.0	4471	NoQ	5.00 µg/L	-0.142
System Monitoring Compounds						
Target Compounds						**QValue**
Perchlorate	4.185	99.0 -> 83.0	122	3.7	0.14 µg/L	96

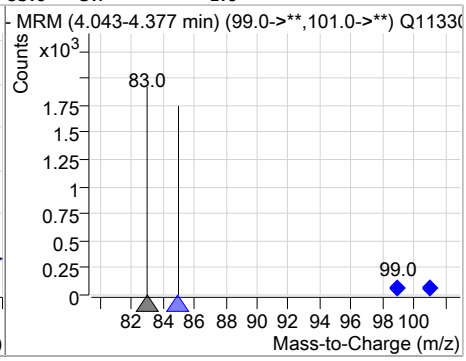
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	0.14	4.18	-0.14	122	101.0 -> 85.0	3.7	1.6	





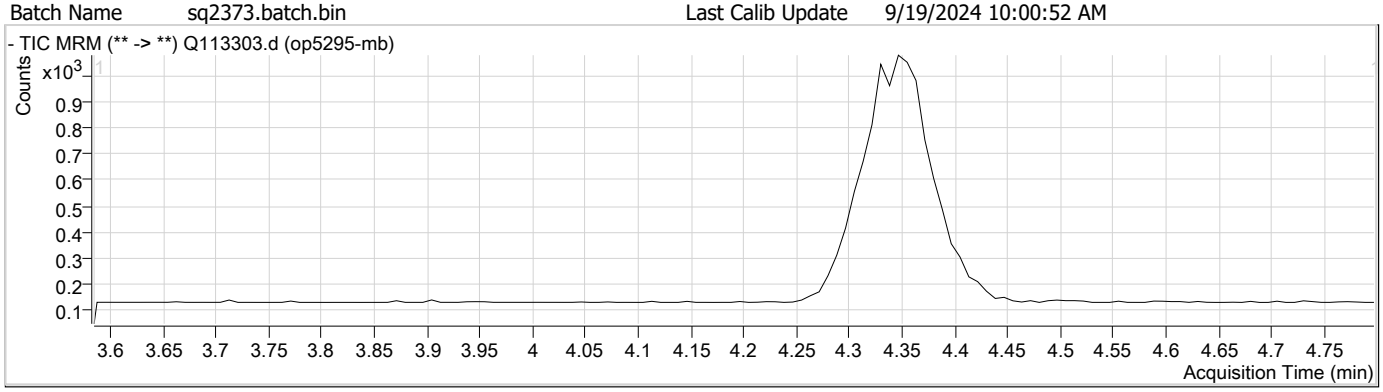


7.1.2

7

Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113303.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 4:39:25 PM
Sample Name	op5295-mb	Instrument	Instrument 1
Vial	P2-E2	Sample Information	OP5295,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

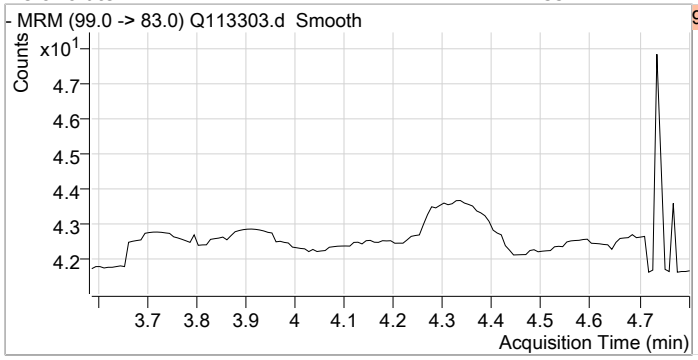


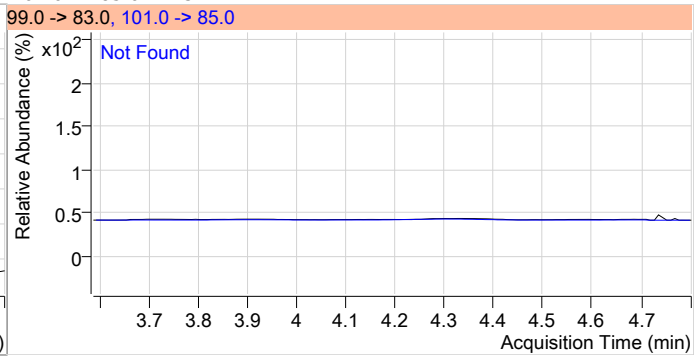
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.346	107.0 -> 89.0	4481	NoQ	5.00	µg/L	0.017
System Monitoring Compounds							
Target Compounds							**QValue**
Perchlorate	-	99.0 -> 83.0		-	N.D.		

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

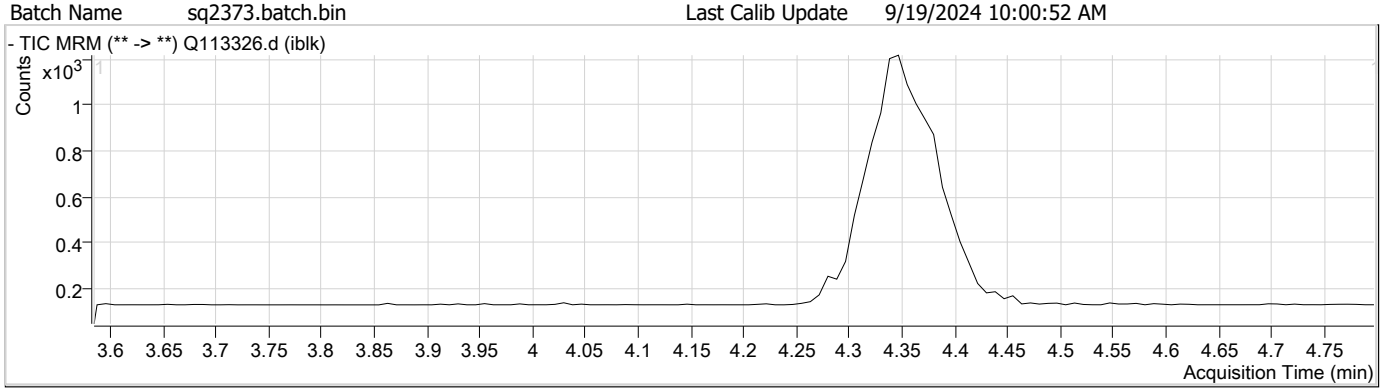
Compound	Conc.	Exp RT	QIon	Exp Ratio
Perchlorate	N.D.	4.33	101.0 -> 85.0	3.4





Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113326.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 7:17:59 PM
Sample Name	iblk	Instrument	Instrument 1
Vial	Vial 1	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

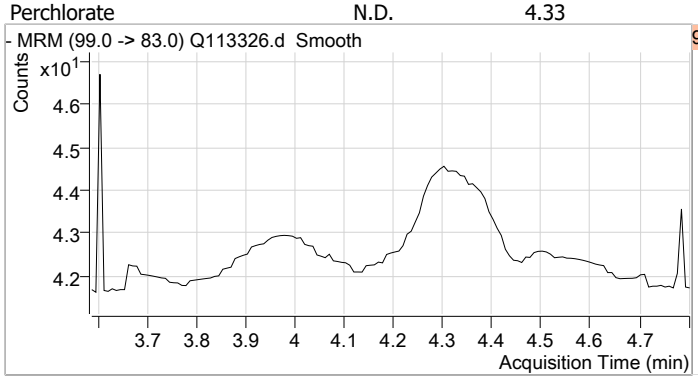


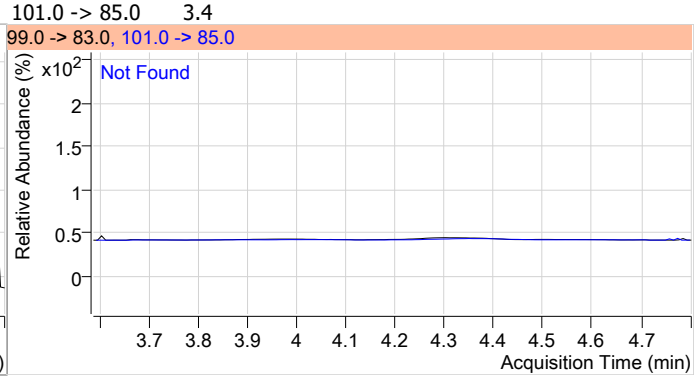
Compound	RT	QIon	Resp.	Q-ratio	Conc. Units	Dev(Min)
Internal Standards						
Cl18O4	4.346	107.0 -> 89.0	5099	NoQ	5.00 µg/L	0.017
System Monitoring Compounds						
Target Compounds						**QValue**
Perchlorate	-	99.0 -> 83.0		-	N.D.	

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

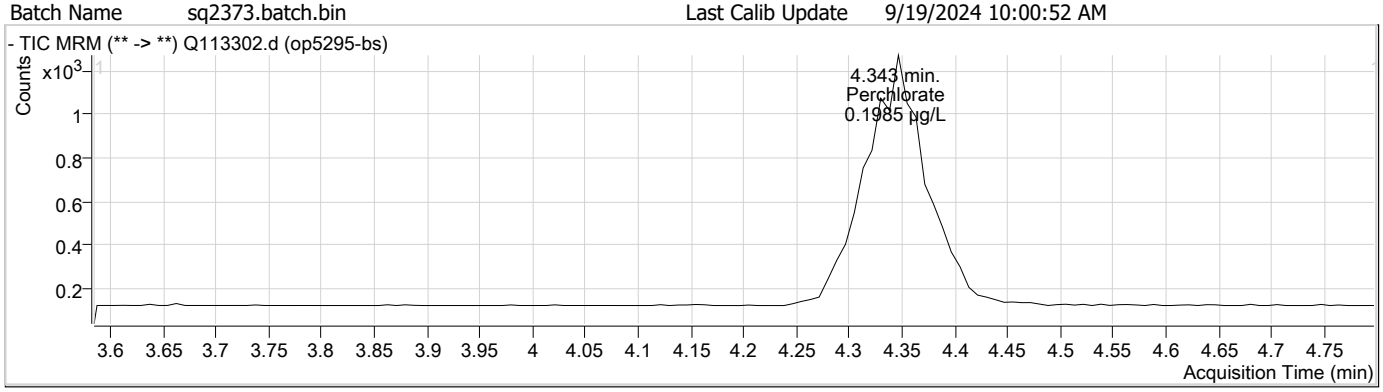
Compound	Conc.	Exp RT	QIon	Exp Ratio
Perchlorate	N.D.	4.33	101.0 -> 85.0	3.4





Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113302.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 4:32:30 PM
Sample Name	op5295-bs	Instrument	Instrument 1
Vial	P2-E1	Sample Information	OP5295,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

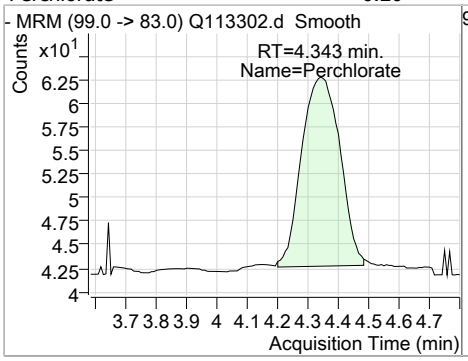


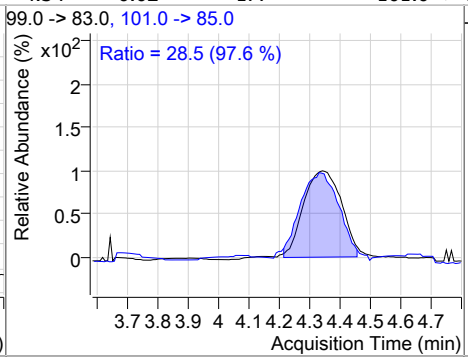
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.346	107.0 -> 89.0	4408	NoQ	5.00	µg/L	0.017
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.343	99.0 -> 83.0	177	3.5	0.20	µg/L	99

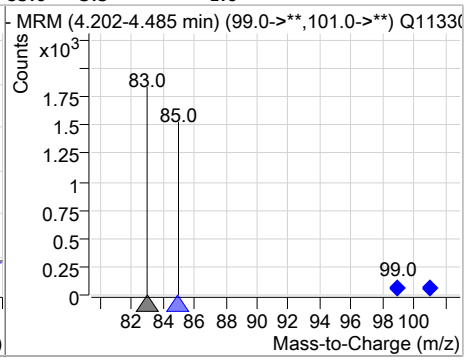
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	0.20	4.34	0.02	177	101.0 -> 85.0	3.5	1.6	

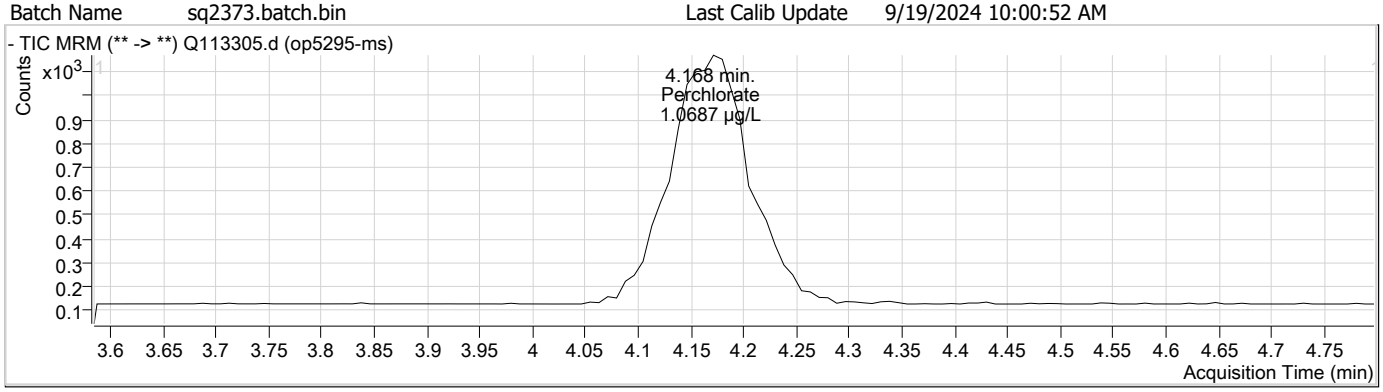






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113305.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 4:53:14 PM
Sample Name	op5295-ms	Instrument	Instrument 1
Vial	P2-E4	Sample Information	OP5295,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

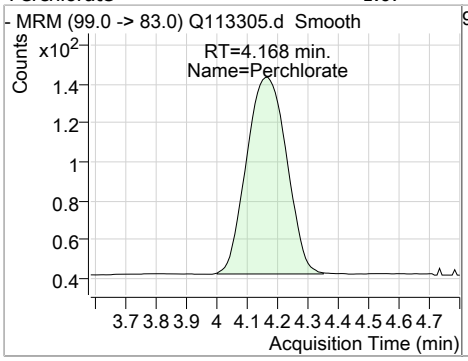


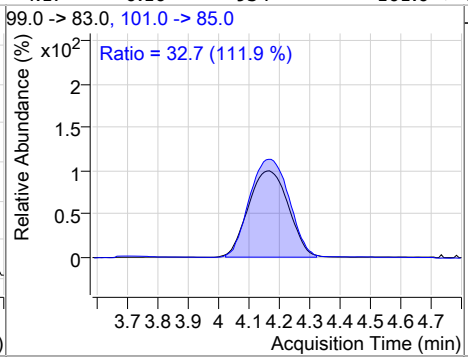
Compound	RT	QIon	Resp.	Q-ratio	Conc. Units	Dev(Min)
Internal Standards						
Cl18O4	4.171	107.0 -> 89.0	4321	NoQ	5.00 µg/L	-0.159
System Monitoring Compounds						
Target Compounds						QValue
Perchlorate	4.168	99.0 -> 83.0	934	3.1	1.07 µg/L	93

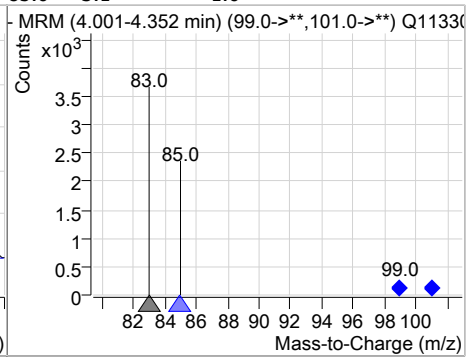
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	1.07	4.17	-0.16	934	101.0 -> 85.0	3.1	1.6	

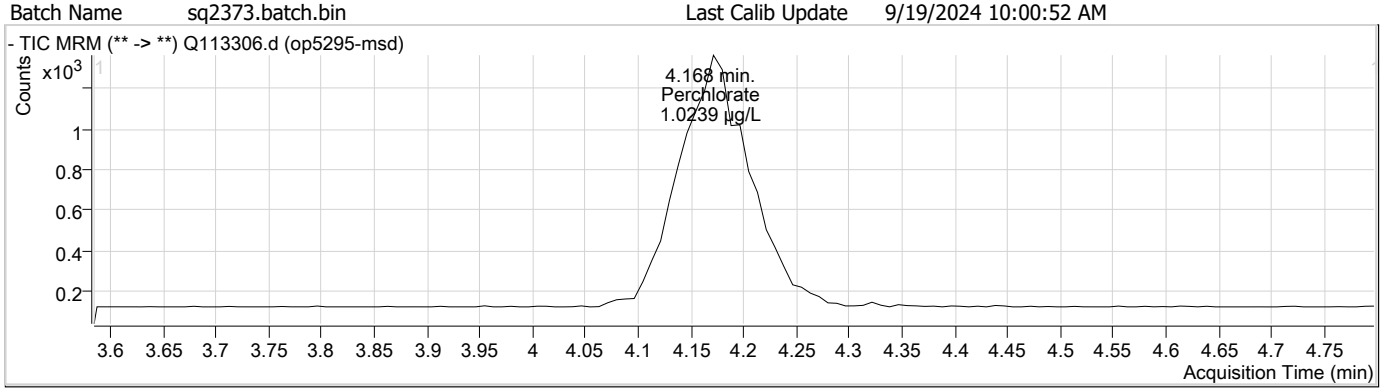






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113306.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 5:00:08 PM
Sample Name	op5295-msd	Instrument	Instrument 1
Vial	P2-E5	Sample Information	OP5295,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

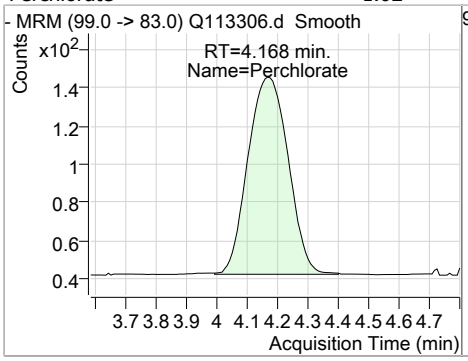


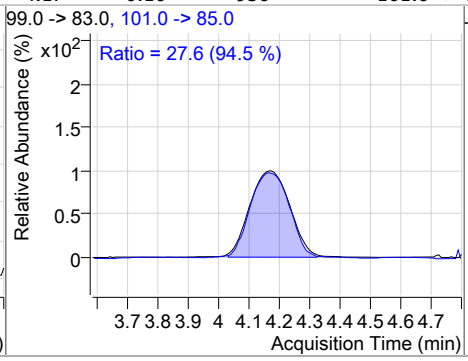
Compound	RT	QIon	Resp.	Q-ratio	Conc. Units	Dev(Min)
Internal Standards						
Cl18O4	4.171	107.0 -> 89.0	4617	NoQ	5.00 µg/L	-0.159
System Monitoring Compounds						
Target Compounds						**QValue**
Perchlorate	4.168	99.0 -> 83.0	956	3.6	1.02 µg/L	97

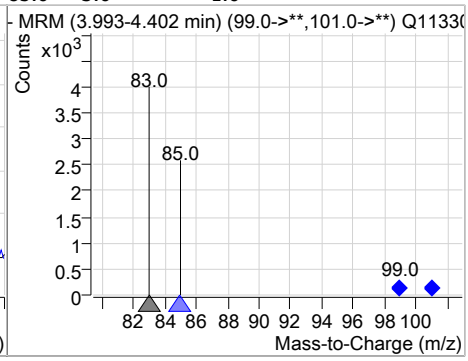
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	1.02	4.17	-0.16	956	101.0 -> 85.0	3.6	1.6	







QQQ Check Tune Report

Agilent Technologies

Instrument Name	Instrument 1
MS Model	G6460A
MS Instrument Serial	SG10447001
Software_Firmware Version	B.08.02.B8260.0, FW: A.00.08.62
Tune Date & Time	16 September 2024 10:38:43
Data Path	D:\MassHunter\Tune\QQQ\G6460A\atunes.TUNE.XML
Ion Source	AJS ESI
Ionization Mode	AJS ESI
Tuned Resolution	All
Vacuum Pressure	1.71E+0[R]; 2.08E-5[H]

Source Parameters

Parameter	Value
Gas Temp	300
Gas Flow	10
Nebulizer	15
Capillary	4000
Nozzle Voltage	1500
Sheath Gas Temp	250
Sheath Gas Flow	7

QQQ Check Tune Report

Agilent Technologies

Negative Results

Analyzer: MS1 Polarity: Negative Width: Unit

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
112.99	112.95	-0.04	Pass	0.70	0.68	-0.02	Pass	74837
302.00	302.01	0.01	Pass	0.70	0.71	0.01	Pass	12648
601.98	601.99	0.01	Pass	0.70	0.72	0.02	Pass	26512
1033.99	1033.99	0.00	Pass	0.70	0.72	0.02	Pass	27847
1633.95	1633.93	-0.02	Pass	0.70	0.70	0.00	Pass	19346
2233.91	2233.87	-0.04	Pass	0.70	0.84	0.14	Pass	3292

Analyzer: MS2 Polarity: Negative Width: Unit

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
69.00	69.03	0.03	Pass	0.70	0.72	0.02	Pass	24871
112.99	112.96	-0.03	Pass	0.70	0.74	0.04	Pass	169063
302.00	301.94	-0.06	Pass	0.70	0.78	0.08	Pass	19379
601.98	601.92	-0.06	Pass	0.70	0.73	0.03	Pass	49691
1033.99	1033.92	-0.07	Pass	0.70	0.71	0.01	Pass	62720
1633.95	1633.88	-0.07	Pass	0.70	0.69	-0.01	Pass	80551
2233.91	2233.76	-0.15	Pass	0.70	0.67	-0.03	Pass	9008

Analyzer: MS1 Polarity: Negative Width: Wide

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
112.99	112.89	-0.10	Pass	1.20	1.14	-0.06	Pass	98407
302.00	301.97	-0.03	Pass	1.20	1.31	0.11	Pass	17162
601.98	601.92	-0.06	Pass	1.20	1.34	0.14	Pass	37628
1033.99	1033.94	-0.05	Pass	1.20	1.41	0.21	Pass	48273
1633.95	1633.90	-0.05	Pass	1.20	1.31	0.11	Pass	56672
2233.91	2233.89	-0.02	Pass	1.20	1.28	0.08	Pass	13631

Analyzer: MS2 Polarity: Negative Width: Wide

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
69.00	69.05	0.05	Pass	1.20	1.19	-0.01	Pass	29855
112.99	112.98	-0.01	Pass	1.20	1.27	0.07	Pass	193969
302.00	301.90	-0.10	Pass	1.20	1.34	0.14	Pass	28342
601.98	601.90	-0.08	Pass	1.20	1.29	0.09	Pass	73089
1033.99	1033.89	-0.10	Pass	1.20	1.02	-0.18	Pass	99753
1633.95	1633.81	-0.14	Pass	1.20	1.05	-0.15	Pass	160059
2233.91	2233.72	-0.19	Pass	1.20	1.17	-0.03	Pass	58666

Analyzer: MS1 Polarity: Negative Width: Widest

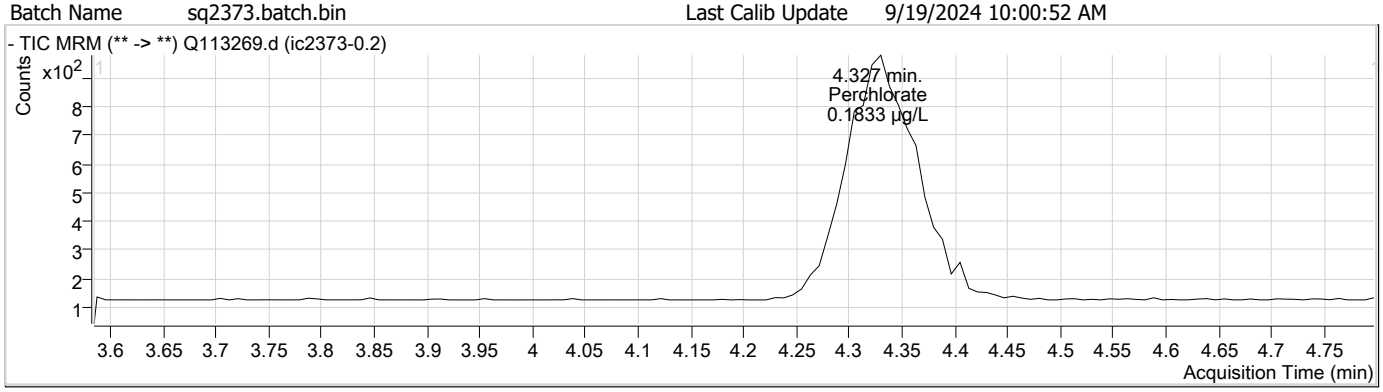
m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
112.99	112.82	-0.17	Pass	2.50	2.44	-0.06	Pass	136746
302.00	301.98	-0.02	Pass	2.50	2.64	0.14	Pass	21834
601.98	601.93	-0.05	Pass	2.50	2.72	0.22	Pass	53010
1033.99	1033.89	-0.10	Pass	2.50	2.86	0.36	Pass	84134
1633.95	1633.87	-0.08	Pass	2.50	2.82	0.32	Pass	118482
2233.91	2233.84	-0.07	Pass	2.50	2.92	0.42	Pass	36008

Analyzer: MS2 Polarity: Negative Width: Widest

m/z Expected	m/z Measured	Delta	Result	FWHM Expected	FWHM Measured	Delta	Result	Abundance
69.00	69.01	0.01	Pass	2.50	2.49	-0.01	Pass	36316
112.99	112.94	-0.05	Pass	2.50	2.60	0.10	Pass	230276
302.00	301.93	-0.07	Pass	2.50	2.69	0.19	Pass	34488
601.98	601.89	-0.09	Pass	2.50	2.66	0.16	Pass	100135
1033.99	1033.90	-0.09	Pass	2.50	2.38	-0.12	Pass	184883
1633.95	1633.79	-0.16	Pass	2.50	2.47	-0.03	Pass	386043
2233.91	2233.66	-0.25	Pass	2.50	2.56	0.06	Pass	163521

Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113269.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 11:48:11 AM
Sample Name	ic2373-0.2	Instrument	Instrument 1
Vial	Vial 2	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

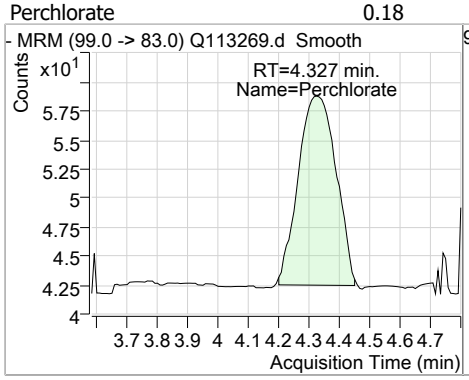


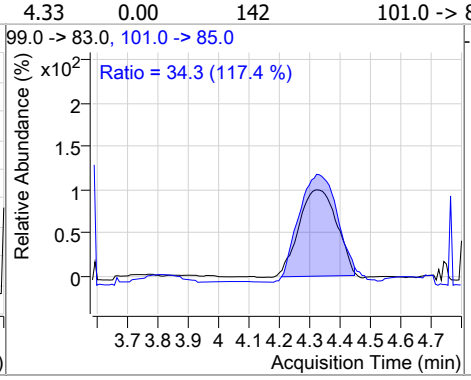
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.330	107.0 -> 89.0	3827	NoQ	5.00	µg/L	0.000
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.327	99.0 -> 83.0	142	2.9	0.18	µg/L	91

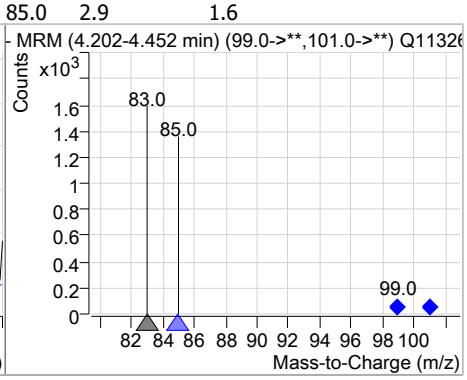
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	0.18	4.33	0.00	142	101.0 -> 85.0	2.9	1.6	

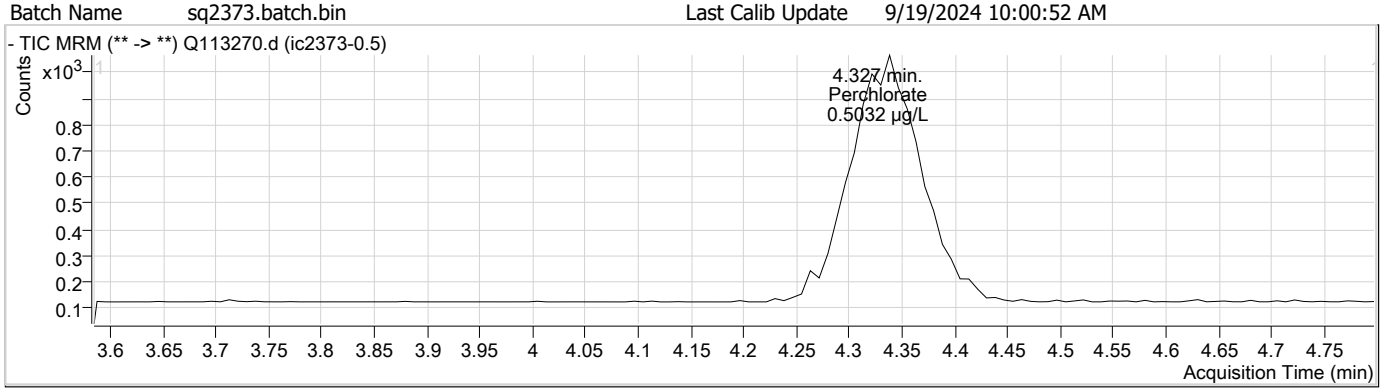






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113270.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 11:55:04 AM
Sample Name	ic2373-0.5	Instrument	Instrument 1
Vial	Vial 3	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

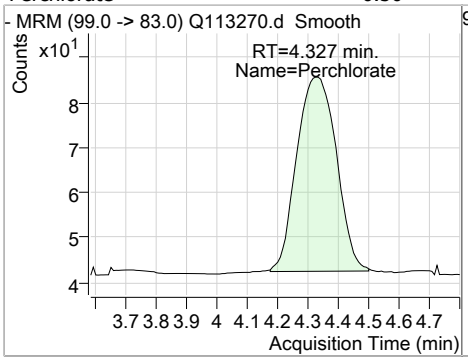


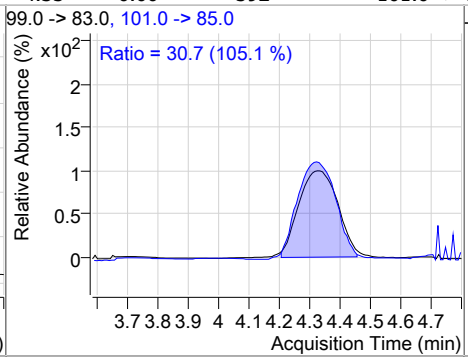
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.338	107.0 -> 89.0	3859	NoQ	5.00	µg/L	0.008
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.327	99.0 -> 83.0	392	3.3	0.50	µg/L	97

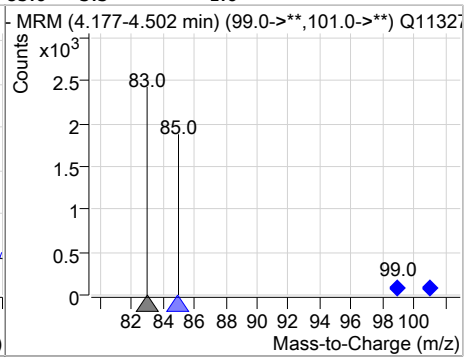
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	0.50	4.33	0.00	392	101.0 -> 85.0	3.3	1.6	

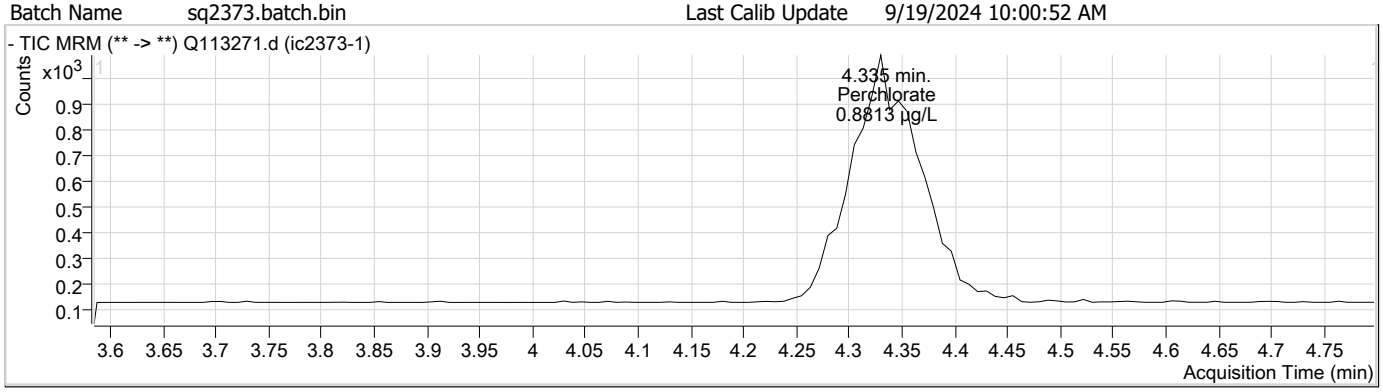






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113271.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 12:01:57 PM
Sample Name	ic2373-1	Instrument	Instrument 1
Vial	Vial 4	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

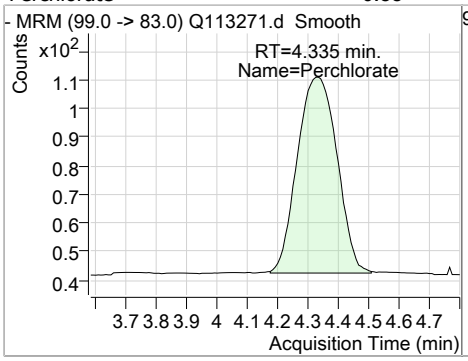


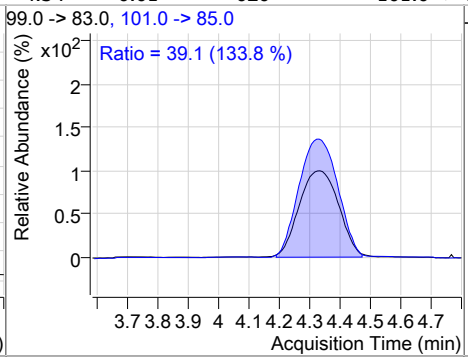
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.338	107.0 -> 89.0	3512	NoQ	5.00	µg/L	0.008
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.335	99.0 -> 83.0	626	2.6	0.88	µg/L	82

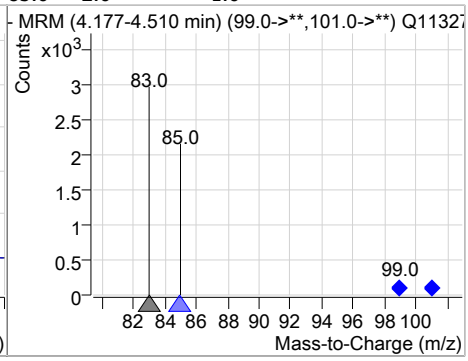
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	0.88	4.34	0.01	626	101.0 -> 85.0	2.6	1.6	

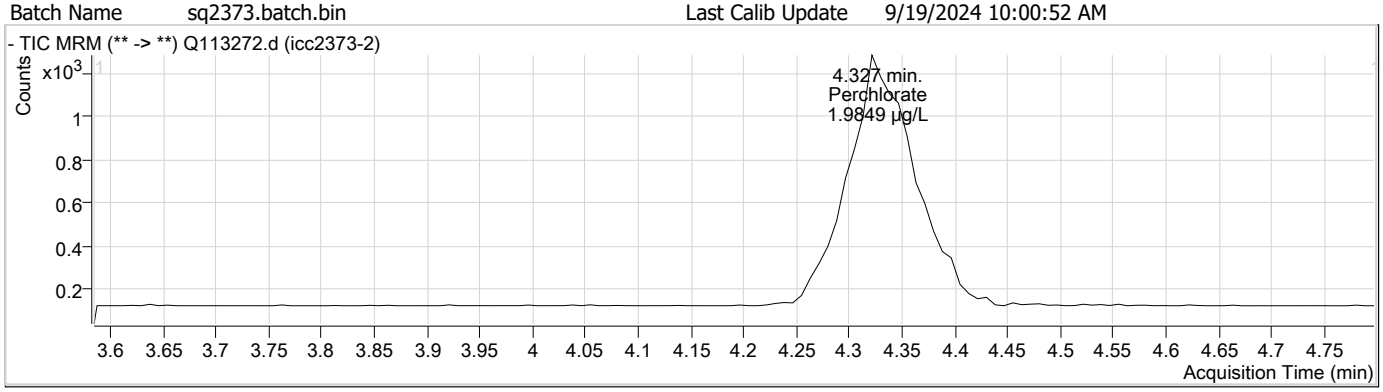






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113272.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 12:08:50 PM
Sample Name	icc2373-2	Instrument	Instrument 1
Vial	Vial 5	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

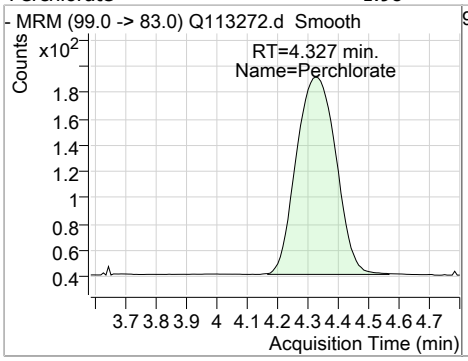


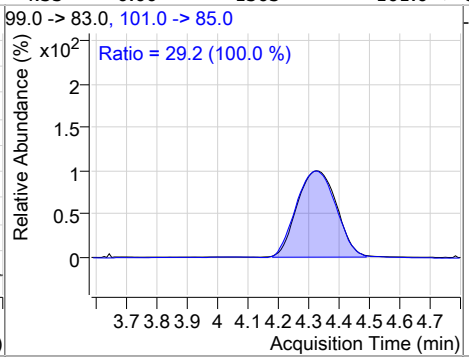
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.330	107.0 -> 89.0	3386	NoQ	5.00	µg/L	0.000
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.327	99.0 -> 83.0	1363	3.4	1.98	µg/L	100

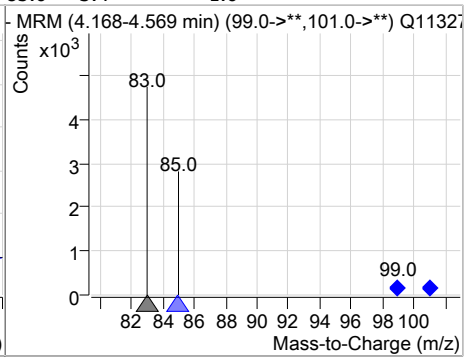
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	1.98	4.33	0.00	1363	101.0 -> 85.0	3.4	1.6	

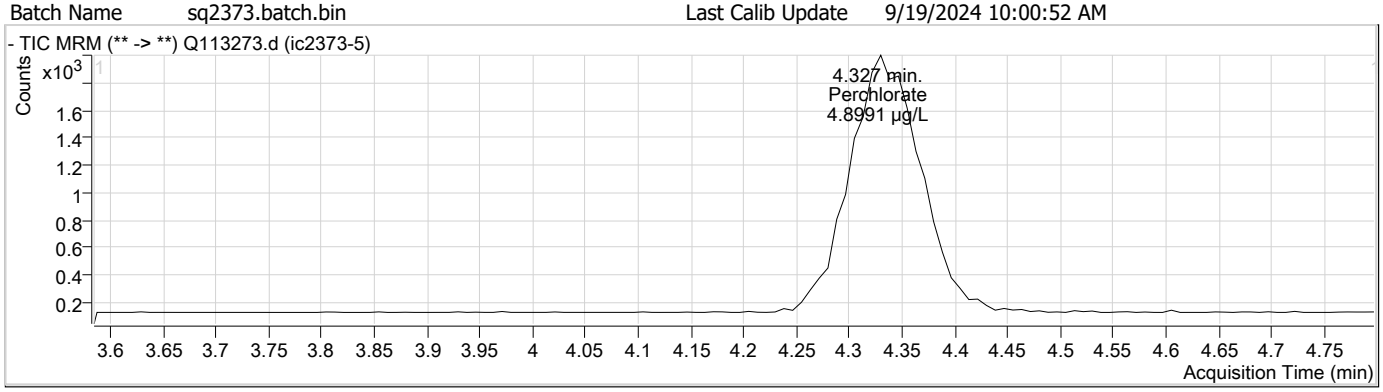






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113273.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 12:15:42 PM
Sample Name	ic2373-5	Instrument	Instrument 1
Vial	Vial 6	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

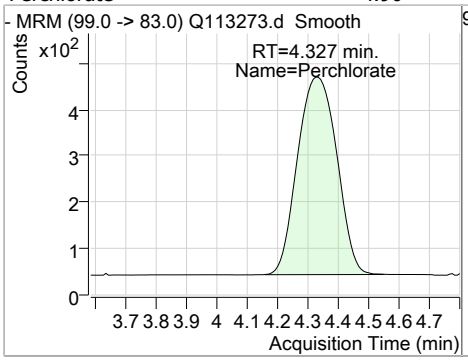


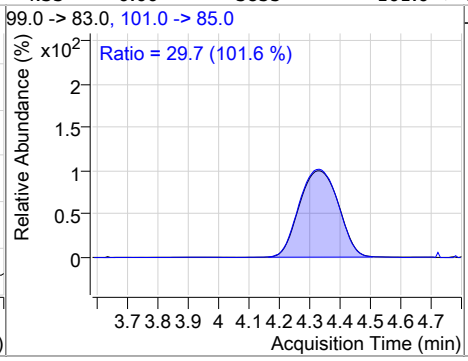
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.338	107.0 -> 89.0	3855	NoQ	5.00	µg/L	0.008
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.327	99.0 -> 83.0	3855	3.4	4.90	µg/L	99

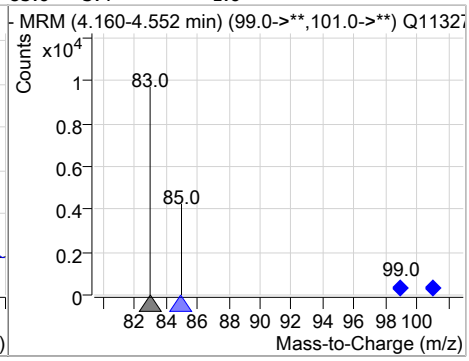
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	4.90	4.33	0.00	3855	101.0 -> 85.0	3.4	1.6	

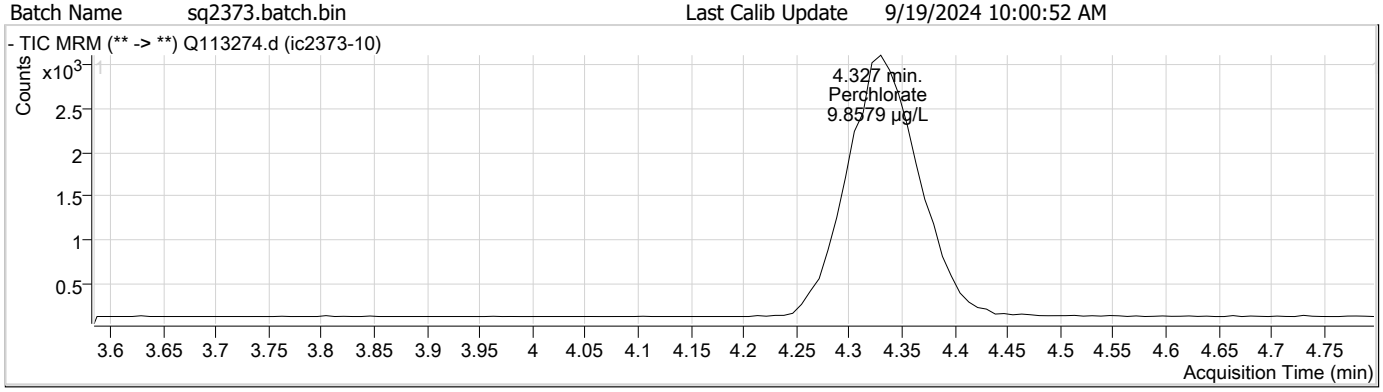






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113274.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 12:22:34 PM
Sample Name	ic2373-10	Instrument	Instrument 1
Vial	Vial 7	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

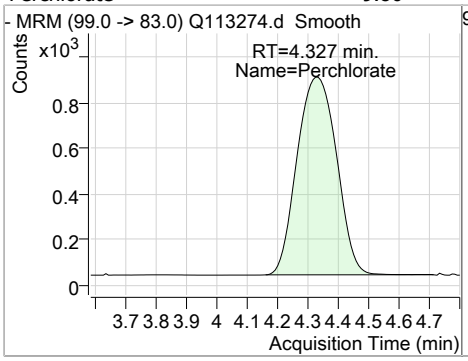


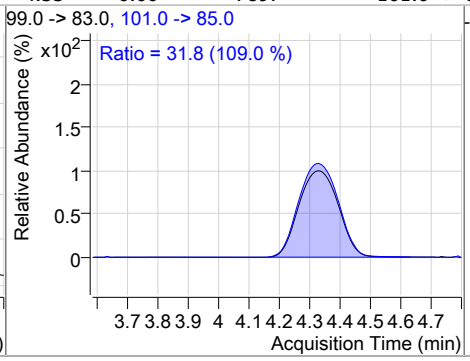
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.330	107.0 -> 89.0	3881	NoQ	5.00	µg/L	0.000
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.327	99.0 -> 83.0	7897	3.1	9.86	µg/L	95

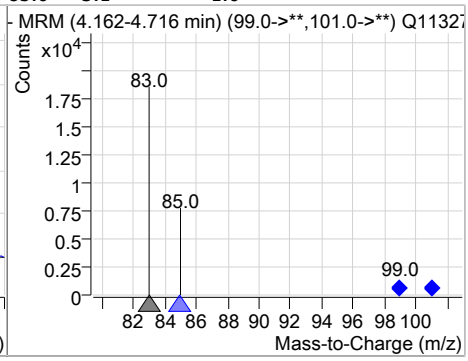
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	9.86	4.33	0.00	7897	101.0 -> 85.0	3.1	1.6	

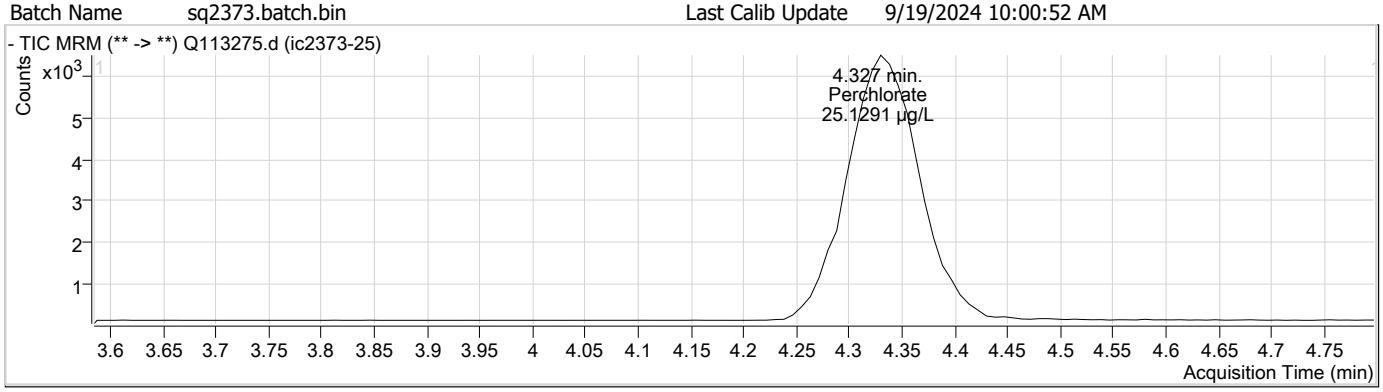






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113275.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 12:29:27 PM
Sample Name	ic2373-25	Instrument	Instrument 1
Vial	Vial 8	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

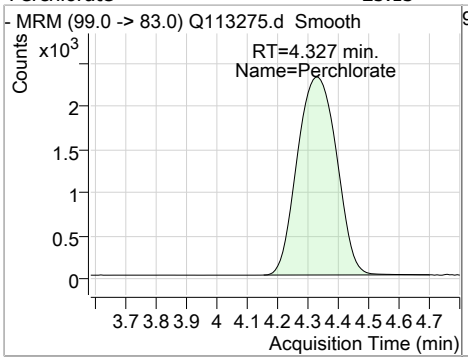


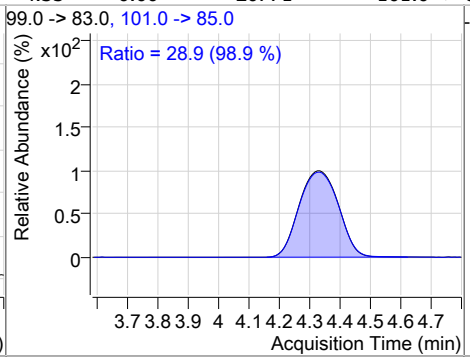
Compound	RT	QIon	Resp.	Q-ratio	Conc. Units	Dev(Min)
Internal Standards						
Cl18O4	4.338	107.0 -> 89.0	3870	NoQ	5.00 µg/L	0.008
System Monitoring Compounds						
Target Compounds						**QValue**
Perchlorate	4.327	99.0 -> 83.0	20771	3.5	25.13 µg/L	99

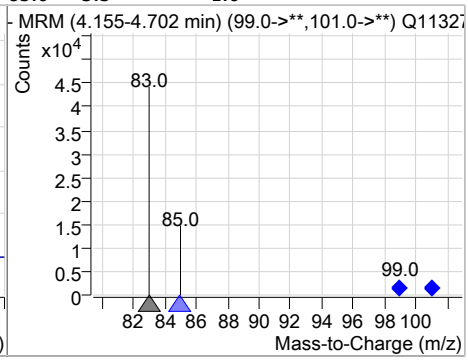
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	25.13	4.33	0.00	20771	101.0 -> 85.0	3.5	1.6	

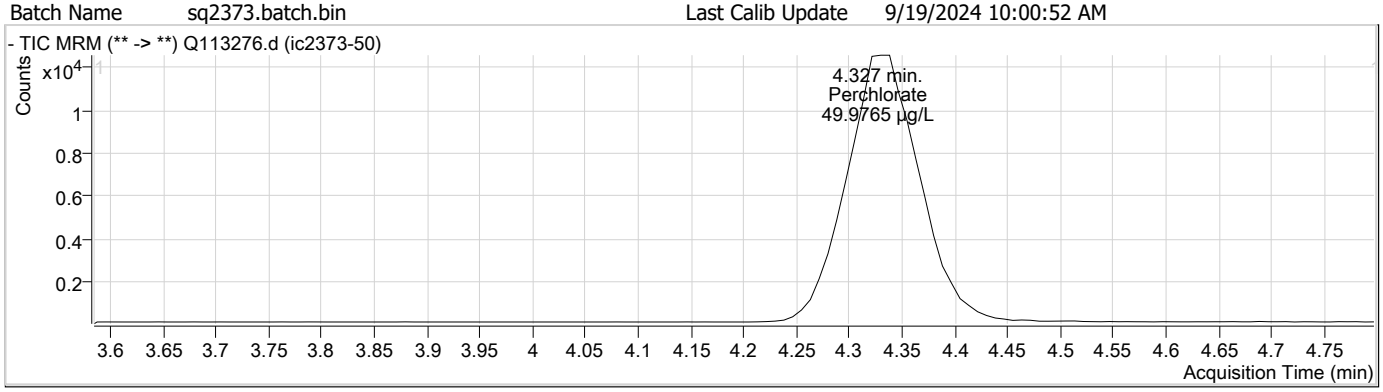






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113276.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 12:36:19 PM
Sample Name	ic2373-50	Instrument	Instrument 1
Vial	Vial 9	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

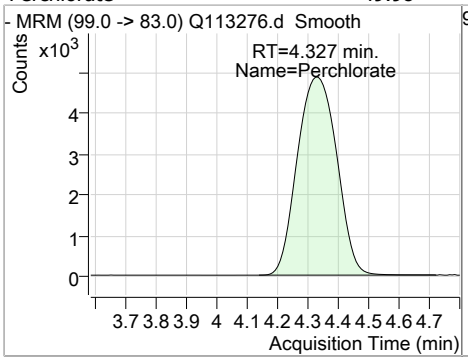


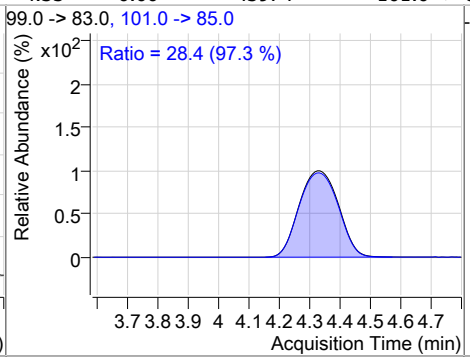
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.338	107.0 -> 89.0	3908	NoQ	5.00	µg/L	0.008
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.327	99.0 -> 83.0	43974	3.5	49.98	µg/L	99

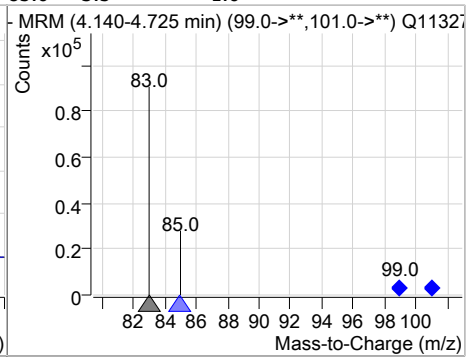
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	49.98	4.33	0.00	43974	101.0 -> 85.0	3.5	1.6	

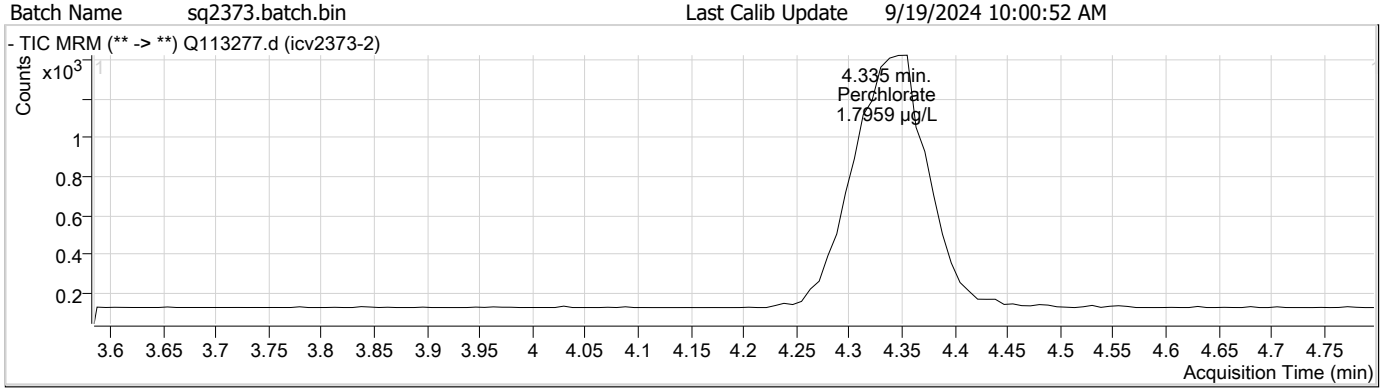






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113277.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 12:44:10 PM
Sample Name	icv2373-2	Instrument	Instrument 1
Vial	Vial 10	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

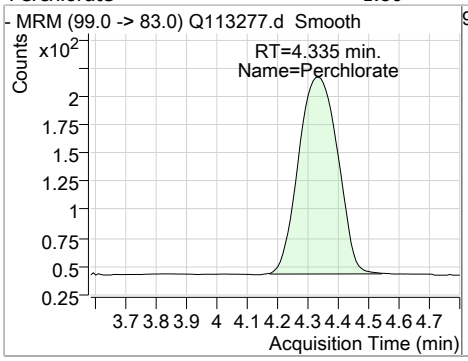


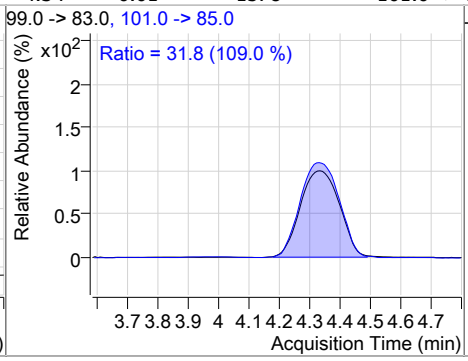
Compound	RT	QIon	Resp.	Q-ratio	Conc. Units	Dev(Min)
Internal Standards						
Cl18O4	4.338	107.0 -> 89.0	4336	NoQ	5.00 µg/L	0.008
System Monitoring Compounds						
Target Compounds						QValue
Perchlorate	4.335	99.0 -> 83.0	1578	3.1	1.80 µg/L	95

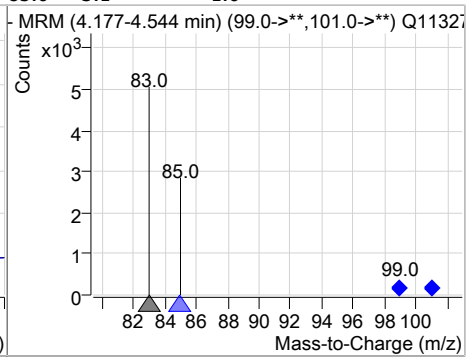
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	1.80	4.34	0.01	1578	101.0 -> 85.0	3.1	1.6	

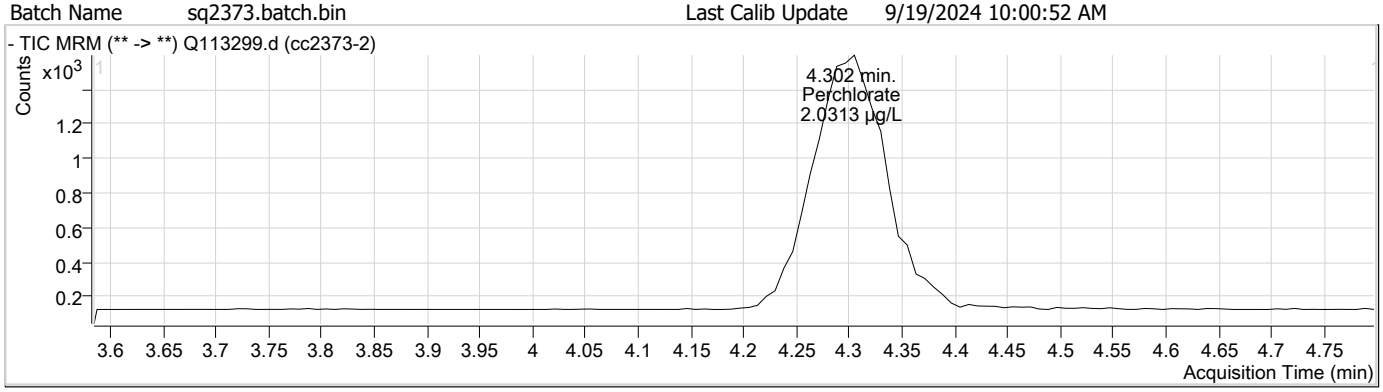






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113299.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 4:11:51 PM
Sample Name	cc2373-2	Instrument	Instrument 1
Vial	Vial 5	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

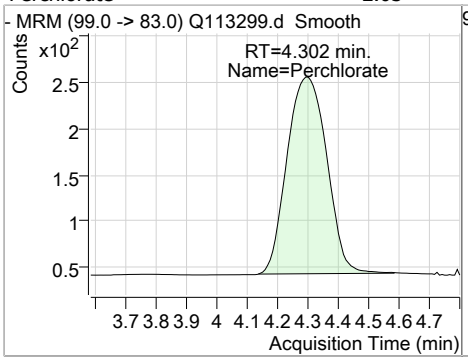


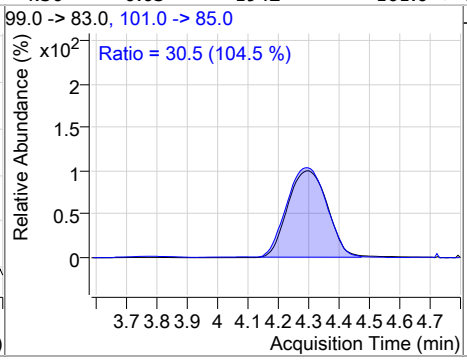
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.305	107.0 -> 89.0	4714	NoQ	5.00	µg/L	-0.025
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.302	99.0 -> 83.0	1942	3.3	2.03	µg/L	98

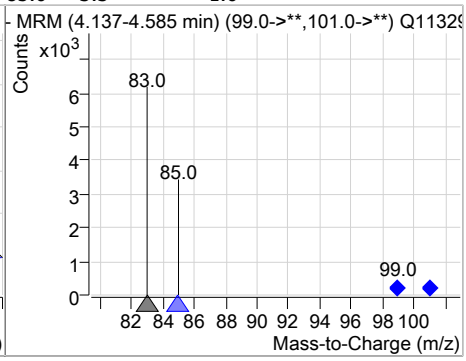
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	2.03	4.30	-0.03	1942	101.0 -> 85.0	3.3	1.6	

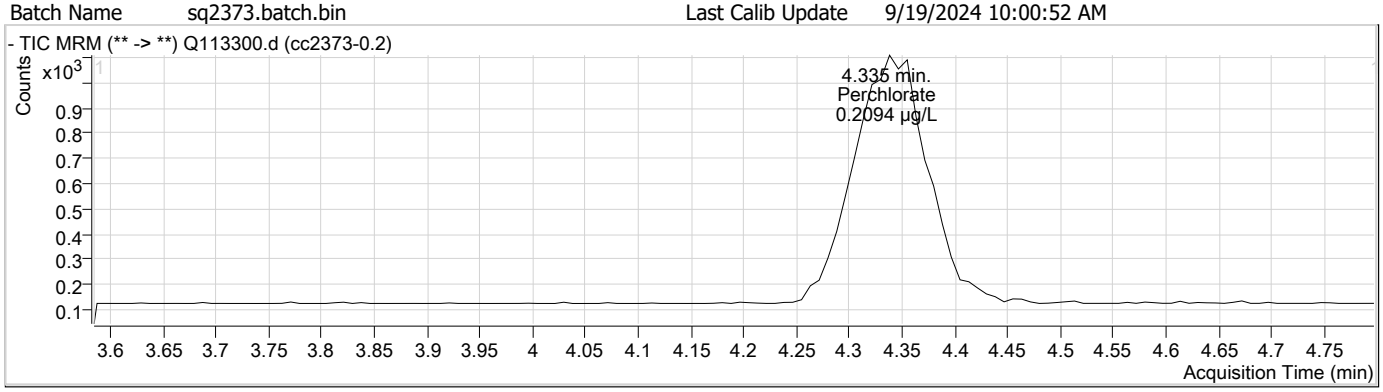






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113300.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 4:18:44 PM
Sample Name	cc2373-0.2	Instrument	Instrument 1
Vial	Vial 2	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

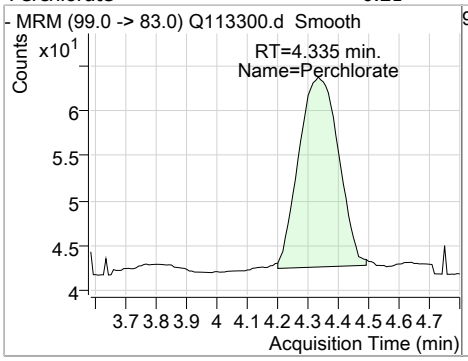


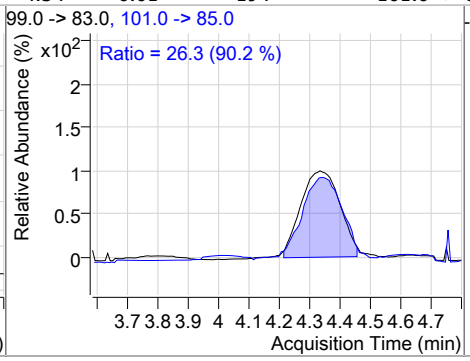
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.338	107.0 -> 89.0	4583	NoQ	5.00	µg/L	0.008
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.335	99.0 -> 83.0	194	3.8	0.21	µg/L	95

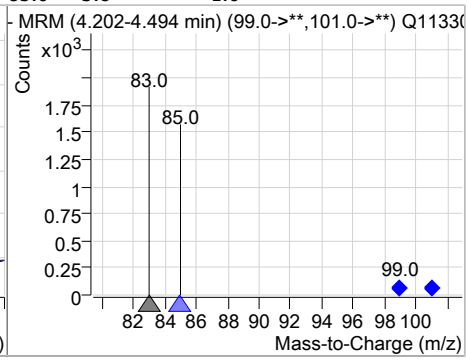
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	0.21	4.34	0.01	194	101.0 -> 85.0	3.8	1.6	

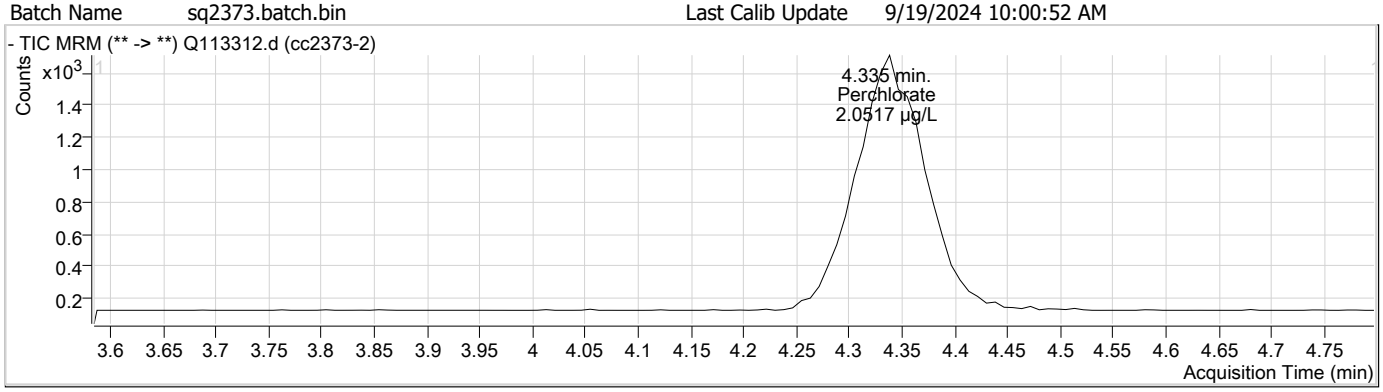






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113312.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 5:41:33 PM
Sample Name	cc2373-2	Instrument	Instrument 1
Vial	Vial 5	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:00:52 AM

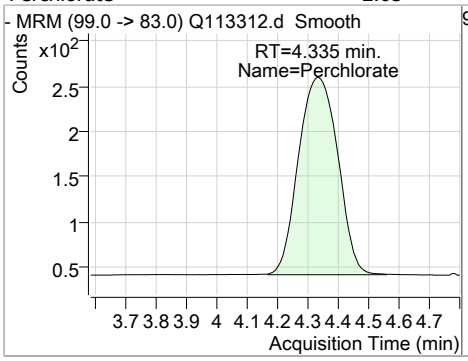


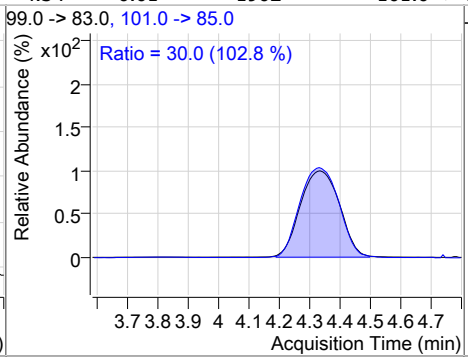
Compound	RT	QIon	Resp.	Q-ratio	Conc.	Units	Dev(Min)
Internal Standards							
Cl18O4	4.338	107.0 -> 89.0	4715	NoQ	5.00	µg/L	0.008
System Monitoring Compounds							
Target Compounds							QValue
Perchlorate	4.335	99.0 -> 83.0	1962	3.3	2.05	µg/L	98

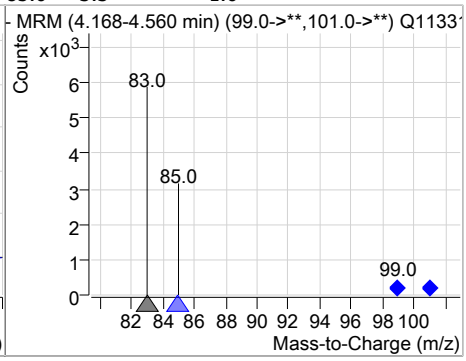
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	2.05	4.34	0.01	1962	101.0 -> 85.0	3.3	1.6	

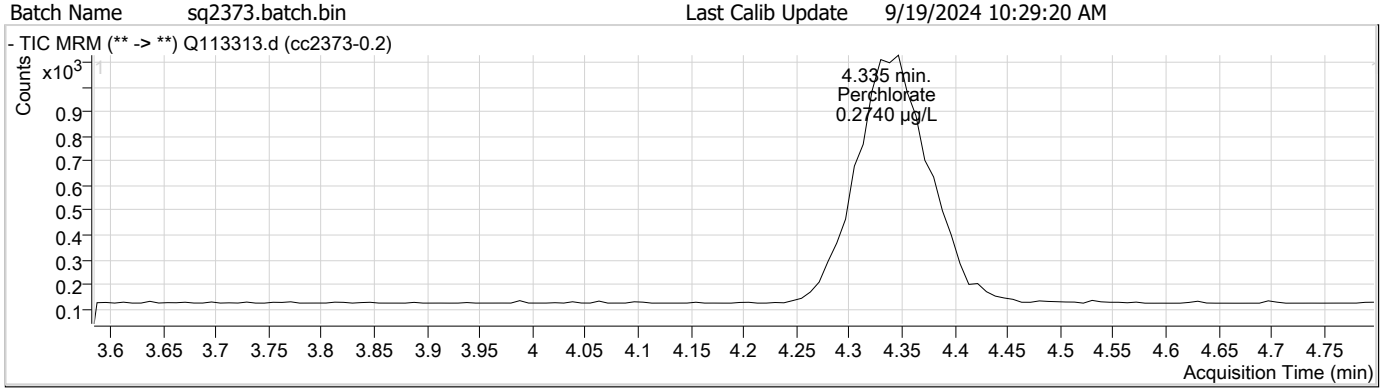






Quantitative Analysis Report for Perchlorate by 6850

Data File	: Q113313.d	Operator	annal
Acq. Method	Perchlorate_5.m	Acq. Date-Time	9/18/2024 5:48:25 PM
Sample Name	cc2373-0.2	Instrument	Instrument 1
Vial	Vial 2	Sample Information	OP5294,SQ2373,10,,,10,1,water
DA Method File	6850_091824_SQ2373.quantmethod.xml	Comment	pass within 50%
Batch Name	sq2373.batch.bin	Last Calib Update	9/19/2024 10:29:20 AM

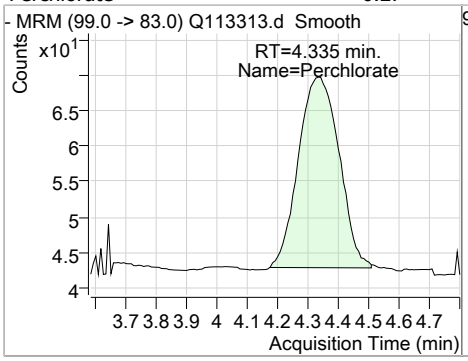


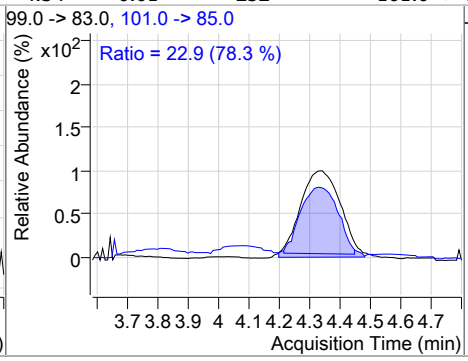
Compound	RT	QIon	Resp.	Q-ratio	Conc. Units	Dev(Min)
Internal Standards						
Cl18O4	4.338	107.0 -> 89.0	4558	NoQ	5.00 µg/L	0.008
System Monitoring Compounds						
Target Compounds						QValue
Perchlorate	4.335	99.0 -> 83.0	252	4.4	0.27 µg/L	88

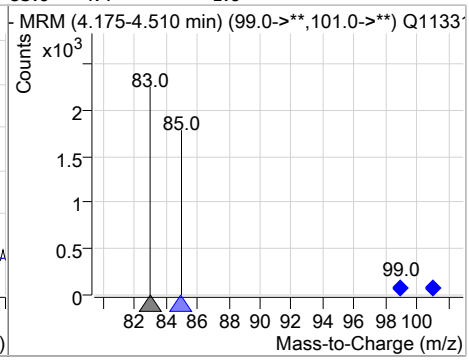
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitative Analysis Report for Perchlorate by 6850

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Min.	Max.
Perchlorate	0.27	4.34	0.01	252	101.0 -> 85.0	4.4	1.6	







SGS ORLANDO

LCMS1-Q ANALYSIS LOG

DATE:	09/18/24
COLUMN TYPE:	K-Prime
AMOUNT INJ:	5 ul
INSTRUMENT:	LCMS1-Q

METHODS:	6850
PROC. METH:	6850_091824_SQ2373
CAL DATE:	09/18/24
ANALYST:	AS
RUN BATCH:	SQ2373

ELUENT A LOT #:	240884 W/0.1% AA 224297
ELUENT B LOT #:	24516 W/0.1% AA 224297
IC/CC STD LOT #:	LCMS 2335
ICV STD LOT #:	LCMS 2329
ISTD/ID STD LOT #:	12457A

	Data File	Sample	Sample Name	Method	Sample Type	Level	Misc. Info	Comments
1	Q113264.d	Vial 9	cond std	Perchlorate_5.m	Sample		OP5294,SQ2373,10,,,10,1,water	ok
2	Q113265.d	Vial 9	cond std	Perchlorate_5.m	Sample		OP5294,SQ2373,10,,,10,1,water	ok
3	Q113266.d	Vial 1	ccb	Perchlorate_5.m	Sample		OP5294,SQ2373,10,,,10,1,water	nd
4	Q113267.d	Vial 1	ccb	Perchlorate_5.m	Sample		OP5294,SQ2373,10,,,10,1,water	nd
5	Q113268.d	Vial 1	ic2373-0	Perchlorate_5.m	Sample		OP5294,SQ2373,10,,,10,1,water	check tune file
6	Q113269.d	Vial 2	ic2373-0.2	Perchlorate_5.m	Calibration	500x	OP5294,SQ2373,10,,,10,1,water	pass
7	Q113270.d	Vial 3	ic2373-0.5	Perchlorate_5.m	Calibration	200x	OP5294,SQ2373,10,,,10,1,water	pass
8	Q113271.d	Vial 4	ic2373-1	Perchlorate_5.m	Calibration	100x	OP5294,SQ2373,10,,,10,1,water	pass
9	Q113272.d	Vial 5	icc2373-2	Perchlorate_5.m	Calibration	50x	OP5294,SQ2373,10,,,10,1,water	pass, +/-30% (2.4-4.4)
10	Q113273.d	Vial 6	ic2373-5	Perchlorate_5.m	Calibration	20x	OP5294,SQ2373,10,,,10,1,water	pass
11	Q113274.d	Vial 7	ic2373-10	Perchlorate_5.m	Calibration	10x	OP5294,SQ2373,10,,,10,1,water	pass
12	Q113275.d	Vial 8	ic2373-25	Perchlorate_5.m	Calibration	4x	OP5294,SQ2373,10,,,10,1,water	pass
13	Q113276.d	Vial 9	ic2373-50	Perchlorate_5.m	Calibration	2x	OP5294,SQ2373,10,,,10,1,water	pass
14	Q113277.d	Vial 10	icv2373-2	Perchlorate_5.m	QC	50x	OP5294,SQ2373,10,,,10,1,water	pass
15	Q113278.d	P1-A1	ics	Perchlorate_5.m	Sample	500x	OP5294,SQ2373,10,,,10,1,water	pass
16	Q113279.d	Vial 5	cc2373-2	Perchlorate_5.m	QC	50x	OP5294,SQ2373,10,,,10,1,water	pass
17	Q113280.d	Vial 2	cc2373-0.2	Perchlorate_5.m	QC	500x	OP5294,SQ2373,10,,,10,1,water	pass
18	Q113281.d	P2-C4	fc18224-1	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	✓
19	Q113282.d	P2-C5	op5296-ms	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	✓
20	Q113283.d	P2-C6	op5296-msd	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	✓
21	Q113284.d	P2-C7	fc18288-2	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	✓
22	Q113285.d	P2-C8	fc18288-3	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	✓
23	Q113286.d	P2-C9	fc18293-3	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	✓
24	Q113287.d	P2-D1	fc18300-1	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	✓
25	Q113288.d	P2-D2	fc18300-2	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	rr 1x, 5x, q-ratio failed
26	Q113289.d	P2-D3	fc18301-1	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	✓
27	Q113290.d	P2-D4	fc18301-2	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	rr 1x, 5x, q-ratio failed
28	Q113291.d	Vial 5	cc2373-2	Perchlorate_5.m	QC	50x	OP5294,SQ2373,10,,,10,1,water	pass
29	Q113292.d	Vial 2	cc2373-0.2	Perchlorate_5.m	QC	500x	OP5294,SQ2373,10,,,10,1,water	pass within 50%
30	Q113293.d	Vial 1	ccb	Perchlorate_5.m	Sample		OP5294,SQ2373,10,,,10,1,water	nd
31	Q113294.d	P2-D5	fc18303-1	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,1,water	rr 1x web with hit
32	Q113295.d	P2-D6	fc18303-1	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	rr 1x web with hit
33	Q113296.d	P2-D7	fc18303-2	Perchlorate_5.m	Sample		OP5296,SQ2373,10,,,10,5,water	✓
34	Q113297.d	P2-D8	op5297-ms	Perchlorate_5.m	Sample		OP5297,SQ2373,10,,,10,1,water	✓
35	Q113298.d	P2-D9	op5297-msd	Perchlorate_5.m	Sample		OP5297,SQ2373,10,,,10,1,water	✓

SGS ORLANDO **LCMS1-Q ANALYSIS LOG**

36	Q113299.d	Vial 5	cc2373-2	Perchlorate_5.m	QC	50x	OP5294,SQ2373,10,,,10,1,water	pass
37	Q113300.d	Vial 2	cc2373-0.2	Perchlorate_5.m	QC	500x	OP5294,SQ2373,10,,,10,1,water	pass
38	Q113301.d	Vial 1	ccb	Perchlorate_5.m	Sample		OP5294,SQ2373,10,,,10,1,water	nd
39	Q113302.d	P2-E1	op5295-bs	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
40	Q113303.d	P2-E2	op5295-mb	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
41	Q113304.d	P2-E3	fc18670-1	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
42	Q113305.d	P2-E4	op5295-ms	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
43	Q113306.d	P2-E5	op5295-msd	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
44	Q113307.d	P2-E6	fc18670-2	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
45	Q113308.d	P2-E7	fc18669-1	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
46	Q113309.d	P2-E8	fc18669-2	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
47	Q113310.d	P2-E9	fc18669-3	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
48	Q113311.d	P2-F1	fc18669-4	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
49	Q113312.d	Vial 5	cc2373-2	Perchlorate_5.m	QC	50x	OP5294,SQ2373,10,,,10,1,water	pass
50	Q113313.d	Vial 2	cc2373-0.2	Perchlorate_5.m	QC	500x	OP5294,SQ2373,10,,,10,1,water	pass within 50%
51	Q113314.d	Vial 1	ccb	Perchlorate_5.m	Sample		OP5294,SQ2373,10,,,10,1,water	nd
52	Q113315.d	P2-F2	fc18672-1	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
53	Q113316.d	P2-F3	fc18672-2	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
54	Q113317.d	P2-F4	fc18719-1	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	DOD sample - rr with ccv in 30%
55	Q113318.d	P2-F5	fc18719-2	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	DOD sample - rr with ccv in 30%
56	Q113319.d	P2-F6	fc18673-1	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
57	Q113320.d	P2-F7	fc18673-2	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
58	Q113321.d	P2-F8	fc18673-3	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
59	Q113322.d	P2-F9	fc18673-4	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
60	Q113323.d	P1-F9	fc18673-5	Perchlorate_5.m	Sample		OP5295,SQ2373,10,,,10,1,water	✓
61	Q113324.d	Vial 5	cc2373-2	Perchlorate_5.m	QC	50x	OP5294,SQ2373,10,,,10,1,water	pass
62	Q113325.d	Vial 2	ecc2373-0.2	Perchlorate_5.m	QC	500x	OP5294,SQ2373,10,,,10,1,water	pass
63	Q113326.d	Vial 1	iblk	Perchlorate_5.m	Sample		OP5294,SQ2373,10,,,10,1,water	nd

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PERCHLORATE PREP REPORT

Date/Time: 09/12/24 1430 Started {mm/dd/yy 24:00}

Date/Time: 09/12/24 1630 Finished {mm/dd/yy 24:00}

Prep Method: **6850**

Analytical Method: **6850**

Batch#: OP5295 Ext. By: — Conc. By: — Vialed By: AS

Sample ID	Bottle Number	Amount extracted (ml) g (circle one)	Initial pH	Adjusted pH	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP 5295 MB		10.0					10.0	
OP 5295 BS						20µl		
FC18670-1	1							MS | MSD
↓ -2	↓							
FC18669-1								
-2								
-3								
-4								
FC18672-1								
↓ -2								
FC18719-1								
↓ -2								
FC18673-1								
↓ -2	↓							
-3	1							
-4	↓							
-5	↓	↓					↓	
OP5295 MS	1	10.0				20µl	10.0	FC18670-1
OP5295 MSD	↓	↓				↓	↓	↓
DUP								

N/A 09/12/24 AS

Comments:

~~DSTD~~ Surr. ID: 12472 B Conc: 1.0mg/L Exp. Date: 06/01/25 Inj. By: AS Ver. By NG

Spk. ID: LCMS2329 Conc: 100 ppb Exp. Date: 12/05/24 Inj. By: AS Ver. By NG

Pipette ID LC30 Pipette ID LC31 Pipette ID LC32

Acetonitrile Lot # — Sonicator ID — Time In: — {mm/dd/yy 24:00} Time Out: — {mm/dd/yy 24:00}

Syringe Filter Lot# — pH Paper # — HPLC Water # 2420608

Relinquished By: Ann Sullen Date: 09/12/24

Accepted By: Ann Sullen Date: 09/12/24

Perchlorate Prep Report 091823 SI.xls

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Appendix G Soil Vapor Analytical Data